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The Merck Group

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<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
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<td>Total revenues</td>
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<tr>
<td>Margin (% of sales)</td>
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Group sales

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<td>2011</td>
<td>9,905.9</td>
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<tr>
<td>2010</td>
<td>8,928.9</td>
<td></td>
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<tr>
<td>2009</td>
<td>7,377.7</td>
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EBITDA pre one-time items

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<th>€ million</th>
<th>2013</th>
<th>2012</th>
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<tr>
<td>2013</td>
<td>3,253.3</td>
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<tr>
<td>2012</td>
<td>2,964.9</td>
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<td>2011</td>
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<tr>
<td>2010</td>
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<td>2009</td>
<td>1,652.6</td>
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Emanuel Merck (1794–1855) established the world’s oldest pharmaceutical and chemical company out of the Engel-Apotheke (Angel Pharmacy), which was founded in 1668. Today we are carrying this tradition into the future with pioneering spirit and innovative strength.
Transformation on track

Merck is a leading company for innovative and top-quality high-tech products in the pharmaceutical and chemical sectors.

Around 38,000 employees work in 66 countries to improve the quality of life for patients, to further the success of our customers, and to help meet global challenges. In 2013, we generated total revenues of € 11.1 billion with our four divisions: Merck Serono, Consumer Health, Performance Materials and Merck Millipore.

Merck is changing. We are on track with our transformation and growth program known as “Fit for 2018”. In 2007, we started with the realignment of our portfolio, refilled key management positions, fundamentally refocused our organization, and then implemented an efficiency program across all divisions and regions. The success achieved to date shows that our strategy is working. We have considerably improved not only our sales and earnings, but also our profitability.

At the same time, we remain true to our roots and tradition. Merck is the world’s oldest pharmaceutical and chemical company. Since 1668 our name has stood for innovation, business success and responsible entrepreneurship. The founding family remains the majority owner of the company to this day.

We are Merck, the original, and hold the global rights to the Merck name and brand. The only exceptions are Canada and the United States, where we are known as EMD.
Karl-Ludwig Kley
Chairman of the Executive Board
In 2013 we again delivered what we promised. We further developed our businesses with innovative and highly specialized products and services. We expanded our presence in global growth markets. And through numerous development partnerships, we honed our ability to meet the needs and wishes of patients and our customers.

The numbers reflect this development. Merck is in a strong financial position, despite a consistently challenging market environment. Thanks to solid organic growth of 4.2%, which nearly offset negative exchange rate effects in full, we maintained our sales at €10.7 billion. EBITDA pre one-time items, our most important earnings figure, increased by 9.7% to a record level of €3.3 billion. At €1.2 billion, profit after tax more than doubled.

As in 2012, our organic growth was particularly fueled by the dynamic business performance in the growth markets of Asia and Latin America. In the Emerging Markets region, sales increased organically by 9.3%. Accordingly, the share of Group sales generated by the Emerging Markets region rose to 36%.

We also continued to reduce our debt in 2013, lowering net financial debt by 84.1% to €306.6 million. At the same time, business free cash flow was €3.0 billion, reaching the high level of 2012. We thus have a solid financial foundation for the coming years and enough room to grow, also through bigger acquisitions.

We will propose to the Annual General Meeting to increase the dividend by €0.20 to €1.90 per share. This is in keeping with our aim to continually raise the dividend in line with increases in net income. However, in our deliberations on the dividend proposal, we also took into account that we are in a period of transformation.

In 2013, we made good progress with our transformation and growth program known as “Fit for 2018”. We even reached some of our objectives faster than planned, for instance those aimed at lowering costs. Yet “Fit for 2018” extends well beyond efficiency improvements. The program also encompasses the strategic expansion of our product portfolio and the establishment of more productive structures and processes within the company. Our goal is clear: We want to achieve profitable growth with innovative products and strict customer focus.
“Fit for 2018” also applies to our divisional strategies:

→ In the Merck Serono division, we are working to improve our pipeline and to fully exploit the potential of the existing portfolio. Our regional focus will be on the United States and on growth markets in Asia and Latin America. The aim is to establish Merck Serono globally as a preferred biopharmaceutical partner that offers innovative specialty medicines, leading brands and high-value solutions.

→ We have successfully raised the profitability of Consumer Health and generated new growth by focusing on key brands and markets, bringing costs under control and recruiting new employees. The aim now is to ensure sustainable growth through innovations and convincing marketing of our strategic brands in rapidly growing markets.

→ In Performance Materials, we intend to defend our position as the market and technology leader in liquid crystals. Through the steady development of our products and our strong positioning in OLED technology, we want to continue setting innovation standards for display technologies. In the Pigments business, we are focusing on strengthening and expanding our leading market positions for high-quality effect pigments.

To strengthen our materials business, we want to acquire AZ Electronic Materials, a leading premium supplier of high-tech materials for the electronics industry. The acquisition would enable Merck to access additional growth areas in the electronics industry, allowing us to benefit even more from the increasing demand for electronic devices beyond displays, such as smartphones and tablet PCs. The successful completion of the transaction is, however, conditional upon antitrust clearance, among other things.

→ In the Merck Millipore division, our efforts will concentrate on expanding and strategically aligning the portfolio in order to meet customer needs even better. The key focus regions are North America, Asia and Latin America. We are resolutely pursuing the goal of bringing further innovative products to market.

Above and beyond the divisional strategies, we have defined four capability initiatives. They address fundamental topics that are of utmost importance to the performance of the entire company:

→ We want to strengthen the Merck brand in order to further increase our global visibility as an innovative company and as “Merck – the original”.

→ To raise our appeal as an employer, we want to better foster talent and performance. We are aiming to further develop the capabilities of our employees and increase workforce diversity.

→ We want to further harmonize and streamline processes in order to make Merck faster, more flexible and more powerful.
In order to be open and accessible to customers, business associates and the community, and to add more room for creativity, we are revamping our global headquarters in Darmstadt. An Innovation Center will be at the heart of this development, serving as a hub to advance cutting-edge projects at Merck.

Customers and patients are at the center of all our efforts. After all, meeting their wishes and needs with the best products and highest quality standards is essential in order for us to achieve our own objectives. True to our mission statement: “Our aspiration is to make great things happen. With our research-driven specialty businesses, we help patients, customers, partners and our communities around the world to live a better life. We deliver entrepreneurial success through innovation.”

For this we need the right team – and we have it. Our workforce of around 38,000 men and women in 66 countries is focused each and every day on finding innovative solutions for customers, patients and partners. They clearly show that at Merck, we are living innovation. I owe all Merck employees a debt of gratitude for their commitment and expertise.

We have set ambitious goals that we at Merck want to achieve by our 350th anniversary in 2018. These goals have been condensed into nine aspirations. We want to be globally known for innovation, quality, as well as performance and efficiency. We want to be liked for our customer orientation, the career opportunities we offer, and the entrepreneurial spirit at Merck. And lastly, we want to be respected for our values, our entrepreneurial responsibility and commitment to sustainability, as well as for our corporate culture of thinking beyond generations instead of only in quarters.

Merck is well-positioned to achieve these objectives. We will continue to work hard to create long-lasting success and a sustainable future for Merck. And we will work to deliver on our promises in 2014 and 2015 as well.

I thank you for your trust in Merck and hope that you will continue this journey with us.
Matthias Zachert  
Member of the Executive Board  
Chief Financial Officer  
- Born in 1967, university degree in business administration  
- Joined Merck in June 2011 as a Member of the Executive Board  
Responsibility for Group functions:  
Group Accounting & Subsidiaries; Group Controlling & Risk Management; Corporate Finance; Group Tax; Group Procurement; Group Insurance; Investor Relations

Stefan Oschmann  
Member of the Executive Board  
CEO Pharmaceuticals  
- Born in 1957, veterinarian  
- Joined Merck in January 2011 as a Member of the Executive Board  
Responsibility for Group functions: Patents & Scientific Services

Bernd Reckmann  
Member of the Executive Board  
CEO Chemicals  
- Born in 1955, biochemist  
- Joined Merck in 1986, member of the Executive Board since January 2007  
Responsibility for Group functions: Environment, Health, Safety, Security & Quality
Kai Beckmann  
Member of the Executive Board  
- Born in 1965, university degree in computer science  
- Joined Merck in 1989, member of the Executive Board since April 2011  

Responsibility for Group functions:  
Group Human Resources; Group Information Services; Site Operations; Inhouse Consulting

Karl-Ludwig Kley  
Chairman of the Executive Board  
- Born in 1951, lawyer  
- Member of the Supervisory Board and Board of Partners of Merck from March 2004 to June 2006; Member of the Executive Board since September 2006, Chairman since April 2007  

Responsibility for Group functions:  
Group Strategy; Group Communications; Group Legal & Compliance; Group Internal Auditing
We want to make great things happen

Merck is a successful, global and diversified pharmaceutical and chemical company with a focus on innovation and research.

1. We want to make great things happen
   Our mission is to make great things happen. With our research-driven specialty businesses, we help patients, customers, partners and the communities in which we operate around the world to live a better life. We are not aiming to manage the status quo. We want to achieve more – each and every day. And we want to continuously improve and achieve sustainable, profitable growth with superb, innovative products and services. This objective is not something that we simply communicate externally, but rather what we work toward each and every day within the company. We aim to offer our employees excellent development and career opportunities. That’s because we can only develop further if we attract the best people to work for us.

Merck is focusing on markets that need and reward innovation. For this, we invest around €1.5 billion in research and development every year. Whether medicines, high-tech materials or life science technologies: we focus on profitable, high-margin products that meet special requirements.

All our products and services have two things in common: Firstly, they help to improve quality of life for patients and customers. And secondly, they consistently meet the highest quality standards on which our customers around the world can rely.
Courage, Achievement, Responsibility
Respect, Integrity, Transparency

Our aspiration is to make great things happen. With our research-driven specialty businesses, we help patients, customers, partners and our communities around the world to live a better life.

We deliver entrepreneurial success through innovation.

Merck will be ...

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<tr>
<th>known for</th>
<th>liked for</th>
<th>respected for</th>
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<td>Innovation</td>
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<td>Values</td>
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<td>Quality</td>
<td>Entrepreneurial spirit</td>
<td>Responsibility &amp;</td>
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<td>Performance &amp; Efficiency</td>
<td>Career opportunities</td>
<td>Sustainability</td>
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<td>Thinking</td>
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We set the highest standards for ourselves
It is our ambition for Merck to be known throughout the world for innovation, quality, performance and efficiency. At the same time, we want to be liked for the way we do business, namely for our entrepreneurial spirit, the career opportunities that we offer, and our customer orientation, which we prove each and every day. We want to be respected by all our stakeholders for demonstrating value-driven behavior, thinking beyond generations, and living up to our responsibility for society.

Our principles have guided us well for centuries
The pursuit of these aspirations has been a driving force of our company for generations. And we are doing everything we can to sustain our success for future generations. Therefore, it’s essential to maintain a good balance between opportunity and risk. The diversification of our portfolio across sectors and geographies ensures that this risk is diversified by very different product life cycles and business areas. The careful balance has guaranteed the sustainable development of the company for nearly 350 years.

Since we think in longer time frames, we are keenly aware of not only the importance of economic success, but also of our obligations to future generations. Merck therefore couples the pursuit of economic success with social responsibility and environmental protection.

Our values are our compass
In a world in which the only constant is change, a robust framework of values is vital to provide orientation for entrepreneurial decisions. We at Merck are united by strong values that offer all employees orientation for their daily actions. Entrepreneurial courage is elementary since it creates new opportunities. Yet economic success is only possible in conjunction with exceptional achievement. We want our daily actions to consistently reflect a strong sense of responsibility and we want to treat each other with respect. To us, integrity is an absolute must and transparency makes our actions understandable. This is the only way for us to maintain the trust and the credibility of our stakeholders over the long term. The Merck family owns the majority interest in Merck and is committed to the Merck values and the company’s guiding principles. The sustainable development of the company and its employees is of primary concern to the Merck family.

2. The best of two worlds: tradition and progress
Had continuous change not remained a constant throughout the long history of Merck, the company would not be as healthy as it is today. In 2007, we started refocusing our portfolio and successively introducing a change in management. This is also the historical context for our “Fit for 2018” transformation and growth program, which we launched in 2012 and are using to shape the next phase of our company’s development.
Founded in 1668 with the purchase of the "Engel-Apotheke" (Angel Pharmacy) in Darmstadt, today Merck is a German blue-chip company with sales of over €11 billion and around 38,000 employees in 66 countries. Merck ranks among the world’s leading suppliers in its specialty businesses. Innovations have always been a main driver of our business. Today, Merck enjoys market leadership with its multiple sclerosis therapy in the main European markets and is a world leader in fertility and colorectal cancer treatment. Merck ranks first in Europe with its probiotic multivitamins (Bion®3) and pregnancy vitamins (Femibion®). Our Performance Materials division is the undisputed world leader in liquid crystals. The same applies to pearl-luster pigments. And in products and services for the biotech industry we are growing faster than our key competitors. Merck combines the best of two worlds: the tradition and values of a German family-owned company with the earning power, efficiency and state-of-the-art features of a leading global corporate group. Our success is attributable to the fact that we never become complacent. With the two major acquisitions of Serono SA in 2007 and the Millipore Corporation in 2010, we elevated our pharmaceutical business to a new platform and established an internationally competitive life science business. After extensive management changes, we focused on developing and establishing a new leadership organization (NLO), in order to make the considerably larger Group more modern, faster and efficient. We launched a transformation and growth program known as “Fit for 2018” that covers all businesses, functions and regions. We have leveraged synergies, eliminated duplication, and made the organization fit for the future. We have optimized the research process at Merck Serono and focused ourselves on the further development of highly promising projects. And in October 2013, we marked the opening of the new Merck Serono headquarters in Darmstadt. Our efforts have meanwhile really started to pay off. We have become faster, more innovative and, last but not least, far more profitable. In 2013, we already achieved the goals we had set ourselves for 2014. We are proud of what we have achieved; and we are well prepared for the future. But we cannot rest on our laurels. In a world that is constantly changing, we cannot stand still. Therefore, we will continue to resolutely pursue our successful strategy of sustainable growth.

3. Reaping the rewards
Today, Merck already generates the majority of its sales in high-tech sectors such as biotechnology and performance materials. Our profitability reflects this. Overall, with its products and services Merck is very well positioned to benefit from long-term, global megatrends. Global population growth and an expanding middle class in emerging markets are leading to increasing demand for smartphones and televisions, and consequently for our liquid crystals. An aging population and an associated rise in chronic disease will bolster demand for our biopharmaceutical products in the long term. Higher government spending on health care around the world is leading to sustainably positive sales expectations for both pharmaceuticals and life science tools. In order to fully exploit the potential of these trends, Merck has launched a range of business initiatives.
We are systematically implementing our “Fit for 2018” program and have already made excellent progress.

Merck Serono
To further raise the efficiency of pharmaceutical research, we have realigned Research & Development in a targeted manner. We introduced a more entrepreneurial model – the Translational Innovation Platforms (TIPs) – to elevate the performance dynamics of our research and early development activities. The TIPs will have three years to achieve their business plans. The TIPs are supported by Enabling Expert Functions (EEFs). These EEFs comprise specialists from fields such as medicinal chemistry and toxicology. Additionally, we have launched a range of life-cycle initiatives, mainly in emerging markets, for our products that have been succeeding in the market for many years now. We are also benefiting from global megatrends such as economic growth, worldwide population expansion and generally higher life expectancy. We are endeavoring to develop new formulations, new combinations and new dosage forms. At Merck we know that the success of therapies often depends not only on the drug, but also on the way in which it is administered. Merck Serono benefits here from its many years of experience in developing user-friendly injection devices for its biotechnological medicines, for example in the therapeutic areas of multiple sclerosis, infertility and endocrinology.

Apart from internal Research & Development activities, the Merck Serono division is also counting on long-term cooperation with partner companies and scientific institutions. To enable Merck Serono to invest more in early innovation, in 2013 the size of the corporate venture capital fund MS Ventures was increased to €100 million. MS Ventures also manages the €10 million MS Israel Bioincubator Fund as well as the investment framework for spin-off companies funded through the €30 million Entrepreneur Partnership Program. Moreover, Merck Serono is continuously working to strengthen its core therapeutic areas by in-licensing medicines.

Performance Materials
With its specialty chemicals and high-tech materials business, the Performance Materials division is aiming to deliver a steady flow of innovations. This applies in particular to the liquid crystals business, where Merck has been the market and technology leader for many years now.
with a market share of over 60%. Here, Merck is working to identify new application areas for liquid crystal mixtures, also beyond displays. The Advanced Technologies unit is driving forward research-intensive topics such as organic light-emitting diodes (OLEDs), materials for LEDs, and organic electronics. We expect OLEDs to become a second pillar besides liquid crystals. Against this backdrop, we want to forge ahead with the development of a comprehensive OLED portfolio. We have already achieved initial success by cooperating with the printing manufacturer Seiko Epson. Together we have developed a technology that makes it possible to print OLED displays. The aim is to lower the costs of OLED display production, which is still time-consuming and expensive. In addition, we are working to continually expand our effect pigment portfolio. The metal effect pigments in the Meoxal® product family are the result of continuous research into new pigment technologies at Merck. They have a special additional coating and owing to this surface treatment, they are particularly suited for automotive and plastic coatings. With the planned acquisition of AZ Electronic Materials, we want to further strengthen the portfolio of our Performance Materials division. AZ superbly complements our existing activities in the display industry. Moreover, we will win new customer groups in the electronics industry, for which AZ produces high-value, ultrapure process chemicals.

**Merck Millipore**

By offering products and services for the life science tools market, which has a volume of around €30 billion, Merck Millipore delivers solid financial performance and above-average market growth. It focuses on two important customer groups: life science research and laboratories as well as pharmaceutical and biotech manufacturers. Merck Millipore is one of the world’s leading suppliers in this market with more than 60,000 products, continually delivering new and differentiated products for customers. For this reason, around 6% of sales are invested in research and development. In addition, acquisitions are expanding the product portfolio. The acquisition of Biochrom in November 2012 has expanded Merck Millipore’s range of cell culture media, buffer solutions and single-use packaging. By acquiring CellASIC, we also strengthened our cell biology platform.

**Sustainable success – beyond 2018**

We made considerable progress on our transformation journey in 2013. We are systematically implementing our “Fit for 2018” transformation and growth program and are well on track. Yet success is not making us complacent. We want to achieve continuous improvements in all our businesses and operations. We want to further develop existing competencies to benefit customers. We want to continue to differentiate ourselves from the competition and to secure our businesses through sustainably profitable growth by our anniversary year in 2018 and well beyond.

**In brief, we make great things happen.**
Full speed ahead.
In China, growth is also compromising people’s health. With high-quality medicines, Merck is capturing the Chinese market and fighting diseases of affluence.
China is a country in transition, which is leading to new health care challenges. In order to stop diabetes from becoming an epidemic in China, Merck is responding to the needs there, and aims to support the Chinese government’s efforts to increase patient access to quality care by bringing high-quality, cost-effective medicines to a broader population.
100 million people with type 2 diabetes in China are too many – far too many, and Belén Garijo is keenly aware of it. “As a biopharmaceutical company, we exist to help people. This is our raison d’être – in China like anywhere else in the world.” One out of four people with diabetes worldwide lives in China, which means there is much to be done there. Economic power, population, demand, consumption – there is hardly anything in China that is not growing at an astonishing rate. This upward trend applies to health care needs as well, in particular diabetes.

Medicines that hit the target
As the President and CEO of Merck Serono, Belén Garijo intends to play a key role in facilitating access to antidiabetic agents in places where they used to be hard to obtain. One example is Glucophage®, an established standard of care for treating type 2 diabetes that has been utilized in China for 14 years: Until recently, Bristol-
At Merck Serono, the biopharmaceutical division of Merck, the focus is on making a lasting difference in the lives of patients. Science and research form the basis for our innovative medical therapies. People and their quality of life are always at the center of everything we do.

The brands

Rebif®
Erbitux®
Glucophage®
Gonal-f®
Concor®

These selected brands are among the key products of Merck Serono, the Group’s largest division in terms of sales. The two leading products Rebif® and Erbitux® generate nearly one-half of sales.

Business figures

Sales € 5,953,594,110
EBITDA pre € 1,954,981,681

Sales by region

<table>
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<th>Region</th>
<th>Sales</th>
<th>Percentage</th>
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<td>Europe</td>
<td>€ 2,482 million</td>
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<tr>
<td>North America</td>
<td>€ 1,280 million</td>
<td>21%</td>
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<tr>
<td>Emerging Markets</td>
<td>€ 1,785 million</td>
<td>30%</td>
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<tr>
<td>Rest of World</td>
<td>€ 407 million</td>
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</table>
Glucophage® (active ingredient: metformin hydrochloride) is a prescription medicine from Merck. It is the first-line drug of choice for the treatment of type 2 diabetes.

01 Formula → Metformin hydrochloride is a member of the biguanide class for the treatment of diabetes mellitus. It suppresses glucose production by the liver and promotes glucose uptake in the muscles.

02 Active ingredient → Metformin hydrochloride is present as white, virtually odorless and bitter-tasting crystals that are readily soluble in water.

03 Tablet → The classical dosage form of Glucophage® is a tablet. Further developments are taking patient needs into account such as extended release (XR) formulations to reduce dosing to once daily and thus increase convenience.

Myers Squibb (BMS) was the product’s sole distributor there, but since the beginning of 2013 Merck Serono and BMS have joined forces to expand the geographic distribution of Glucophage®, as well as to provide diabetes-related health and medical information, including education for health professionals. A collaboration in which Garijo has played a decisive role.

“I believe that Merck Serono’s historical role in the discovery and development of this first-line treatment in China brings credibility to our role in the partnership,” she says.

Today, Garijo says, significantly more hospitals in China have access to the drug – even in remote regions – thanks to the joint efforts of Merck and BMS. Does this make her proud? "Of course," she replies, “What drives us at Merck Serono is our commitment to transforming patients’ lives.” According to Garijo, this also means viewing the markets from a different perspective, learning to think and act with an eye for the long term, not merely in quarters. “Our long-term ‘Merck thinking’ fits particularly well with the Chinese culture,” she says.

China – Part of Merck’s history

Merck intends to rank among the top ten multinational pharmaceutical companies in China, one of Merck’s three focus markets along with Brazil and the United States, by 2020. For Merck, this means building for the future in China by investing across the value chain. In addition to its existing pharmaceutical research center, development capabilities and commercial presence, Merck recently announced an €80 million investment for a new pharmaceutical manufacturing facility in China. “We are very proud to be one of the first multinational companies investing in the manufacturing of medicines referenced in China’s essential drug list,” said Garijo while attending the signing ceremony with local authorities in November 2013 in Nantong, in the greater Shanghai area. “The medicines produced at the Nantong manufacturing site, our international leading brands Glucophage®, Concor® and Euthyrox®, will serve the country’s expanding health care needs in the areas of diabetes, cardiovascular diseases and thyroid disorders,” she says.

Merck Serono also aims to help address critical health care needs of the Chinese population in the areas of oncology and fertility with its innovative biotech specialty medicines Erbitux® and Gonal-f®, respectively.

Already on her way to her next meeting, Garijo looks up and says, “You know, we have been active in China for 80 years now. The country is already part of our history. That is why we really see ourselves playing a key role in promoting the health of the people there.”
Breathing easy thanks to Nasivin®.
A clever direct-to-consumer strategy is getting the message out there – even in the hectic environment of rush hour in India.
In India, a nasal spray is more than just medicine. It is also a fast way to get back to work. Thanks to innovative ideas and a clever marketing strategy, Merck is benefiting from a new degree of health awareness on the subcontinent.
Interview with Udit Batra

Udit Batra discusses the growing degree of health awareness among the middle class in India.

And how taxis and pharmacists are playing a key role in the success of a nasal spray.

“In India, people want quick relief so that they can get back to enjoying life.”
The Consumer Health division offers high-quality over-the-counter pharmaceuticals to enhance well-being. Our brands are marketed in many countries of Europe, Latin America, Asia and Africa. With our innovative health protection products, we want to improve the quality of life of people everywhere.

The names of some of the many successful brands in Consumer Health. Our product Bion® is the world’s leading probiotic multivitamin.

Sales € 476,915,464
EBITDA pre € 72,450,063

Europe € 328 million 69%
Emerging Markets € 132 million 28%
Rest of World € 16 million 3%
In the early 1960s, Merck launched Nasivin®, the first nasal decongestant containing the active ingredient oxymetazoline. In the following decades, Nasivin® came to stand for cold treatments.

Formula ➔ Oxymetazoline is a chemical compound, specifically an imidazole derivative. It is used as a nasal decongestant.

Substance ➔ Small drops, big effect: the blood vessels of the nose constrict, swelling of the nasal mucosa recedes. Thanks to oxymetazoline, the duration of an acute cold is shortened by a third.

Acts in 25 seconds ➔ lasts for 12 hours

Dosage system ➔ High ergonomic quality thanks to the large push button on the base, the antislip ridges on the shoulder, and the user-friendly applicator.

Nasivin® ➔ Acts in 25 seconds and lasts for up to 12 hours. Normally, administration two to three times per day suffices.
Mr. Batra, isn’t a head cold the same everywhere, whether in India or Iceland? That may be the case from a medical perspective, but patients have a different view. When an Indian and an Icelander are suffering from a cold, they have two completely different ways of handling it. After all, a cold impacts everyone differently. And that applies to all patients in the more than 20 countries in which we successfully market Nasivin®.

Patients in India are increasingly arming themselves with Nasivin® – why? In India, people want quick relief so that they can get back to enjoying life, which is why they are looking for fast-acting, easy-to-use medicines. Consumers in India are also inquisitive and open to innovative ideas and are becoming increasingly health-conscious...

... which, thanks to a growing middle class and higher purchasing power, makes India a more and more attractive market for Merck. Precisely, although we are not exactly newcomers to the market in India. We have been marketing Nasivin® on the subcontinent since 1969, first with the nasal spray for adults. In the 1980s and 1990s, we then expanded our portfolio and launched sprays for babies and small children. This is how we became the second biggest brand in the topical nasal decongestants category, and since 2010 we have been taking the direct-to-consumer approach: clear key messages and revamped packaging so as to appeal to consumers and drive clear and targeted messages at various consumers touch points.

Is that why 50 “Nasivin® taxis” are plying the route between Delhi Airport and downtown Delhi, and two double-decker Nasivin® buses are driving around Mumbai? Exactly so. These are both examples of our Metro Campaign for our new product Nasivin® Advanced, which is highly innovative and is focused on consumer needs. This is a nasal spray that, apart from acting quickly, also soothes thanks to the addition of aloe vera, menthol and eucalyptol. Moreover, the buses and taxis are also good examples of our rainbow strategy in India.

Rainbow strategy?
With this strategy, we are additionally addressing health care professionals such as physicians and pharmacists, who prescribe or recommend Nasivin® to our consumers. For us, it goes beyond merely prescribing the medicine; it’s also about convincing doctors and pharmacists to act as brand ambassadors as well as increasing point-of-sale visibility – always based on an entirely unique, individual positioning, which of course reflects Consumer Health’s overall strategy in India.

What does that actually mean for point-of-sale activities? In India, pharmacist recommendations play a key role in the marketing mix. They do not just sell medicine, but are also people whom consumers trust and are often considered friends. If you want to be successful, you must therefore convince the pharmacist of your product.

In the Indian market, 30 products are generating strong growth for Merck. These include Nasivion® (known as Nasivin® in Germany), which is being supported by a comprehensive advertising strategy.
An era of endless opportunities. Whether it comes to printable electronics or labels that communicate, Merck is on a journey to understand new needs – and is therefore taking its customers along with it.
We make the world more colorful

They’re becoming increasingly flatter, more powerful and ubiquitous. Displays are already playing a key role in communication today. And that is just the beginning of a dynamic process that is fundamentally changing the way we communicate. With our innovations, we are driving this development in close cooperation with our customers.
Interview with Walter Galinat and Roman Maisch

“The future is flat.”

Passive viewing is a thing of the past – the future is about interaction. Thanks to innovative liquid crystals from Merck, displays are capable of far more than simply glowing in a rainbow of colors.

Mr. Galinat, Mr. Maisch: The earth may be round, but your world is flat, isn’t it?
Galinat: If you’re referring to what I do professionally, then yes.
Maisch: And if I may add, it’s getting flatter all the time (laughs).

Why is that?
Galinat: Because displays are flat and increasingly becoming our number one communication tool. We live in an age of ubiquitous interaction, which is both a tremendous opportunity and an enormous challenge. With materials for printed electronics, organic LEDs and organic photovoltaics, we have the possibility to create new applications and new benefits. But we need to take our customers with us on this journey.

And where is the journey heading?
Maisch: Toward the cities of tomorrow with smart windows or facades that speak, for instance. Toward autonomous driving or yoghurt cup labels that communicate.
So far, we’ve mainly been talking to our customers about the technical aspects of displays, discussing topics such as curvature, flexibility or switching times. But technical feasibility is just one side of the coin. Together with our customers, we also need to look into the future so as to understand new needs even better than before.
Division

Performance Materials

The division consists of the Liquid Crystals, Pigments & Cosmetics and Advanced Technologies business units. Its market-leading products include liquid crystals for LCD televisions and other displays as well as functional fillers and effect pigments.

The business units

Pigments & Cosmetics
- Pigments and additives for the printing, plastics and coatings industries
- Cosmetics, food and pharmaceuticals

Liquid Crystals
- Display materials

Advanced Technologies
- OLED
- Lighting & Photovoltaics
- Electronic Materials
- Performance Solutions

With the broadest offering in the industry, the product portfolio of our Liquid Crystals business unit is tailored to match the individual requirements of the full range of LCDs, from small displays in smartphones to ultra-large televisions.

Business figures

Sales € 1,642,092,500
EBITDA pre € 779,704,313

Sales by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Sales</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Europe</td>
<td>€ 164 million</td>
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<tr>
<td>North America</td>
<td>€ 86 million</td>
<td>5%</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>€ 1,237 million</td>
<td>75%</td>
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<tr>
<td>Rest of World</td>
<td>€ 156 million</td>
<td>10%</td>
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</tbody>
</table>
With its livilux® range, Merck offers innovative materials for organic light-emitting diodes (OLEDs). In displays, OLEDs are responsible for brilliant colors, good contrast, fast switching times and low power consumption.

01 **Structure** → OLEDs consist of organic, semiconductive small molecules, which are deposited onto a glass substrate between conductive electrodes.

02 **livilux®** → The livilux® range includes small molecules for evaporation processes and soluble material systems for printing processes.

03 **How an OLED works** → When voltage is applied, electrons and electron holes recombine to form excitons. The molecular structure of the emitter materials determines the color.

04 **Display** → Since OLEDs consist of thin organic layers of only a few hundred nanometers, they can be used in not only rigid, but also flexible displays.
In other words, working with customers to achieve advances?
Galinat: Yes. As the market and technology leader, we are expected to think further down the line and to launch new products onto the market. This starts with innovative products, but does not stop there. The aim is also always to expand our knowledge of both technology and society.

So the Performance Materials division is becoming a type of think tank?
Galinat: The right way to put it is: we’re thinking ahead. But that’s something we always do, keeping an eye on what is technically feasible and what will benefit our customers. We’re constantly tapping into greater and deeper expertise and sharing this knowledge with our customers. This is precisely the principle behind our Displaying Futures symposium, which took place in South Korea in 2013: using unexpected benefits to surprise and then work with customers to develop exactly what they’re looking for. For this purpose, we’re bringing display manufacturers together with architects, designers and trend researchers, an approach that enables us to look at the entire value chain.

Is that how you’re creating new markets?
Maisch: Well, it’s how we’re helping to shape the markets that are so important to us. Here’s an example: The question as to how we’ll be able to apply organic light-emitting diodes, or OLEDs, in the future can no longer be answered in the laboratory alone. For this purpose we need to get out and talk to our customers, think outside the box, and offer inspirational new ideas.

Galinat: Markets don’t fall from heaven; they are created. This requires patience, sometimes for years or even decades. To us it’s clear that the future is flat – and it will entail applications that we can’t even begin to imagine today.

“"We need to get out, talk to our customers and think outside the box."
(Roman Maisch)
Customers take center stage. Sometimes a single drop leads to a breakthrough. Yet until reaching this point, a company has to trust in its own abilities – and in those of its partners and customers, too.
We make cutting-edge research a reality

Lab Solutions, Bioscience, Process Solutions – can these three areas be served equally well? Certainly, says Merck Millipore CEO Yates, “By thinking critically and having the courage to listen to customers.”
“Critical thinking is vital in our business.”

Three business units, one global team, one clear objective: Enabling science for life science researchers and manufacturers with tools that increase the efficiency and impact of their work.

“This calls for trusting relationships with our partners,” says Merck Millipore CEO Robert Yates. And the courage to listen to customers.

Customers are our compass
According to Yates, “Critical thinking is vital in our business.” That’s what helps the President and CEO of Merck Millipore most in his work. Far more than hierarchical structures, and far more than entrenched routines. “I’m trying to reduce bureaucratic processes to an absolute minimum,” says Yates. “In exchange, I expect my teams to show leadership and accountability. That’s something I build and rely on.” This is the precondition for exploiting the full potential of the life science tools division and generating above-average growth in the future as well. He says this without any hyperbole and with clear determination to walk the talk by managing, acting and making decisions in this way. After all, Yates and his teams operate in a constantly changing environment where clients are always upfront and center. “We align ourselves with clients, they are our compass and
The Merck Millipore division offers solutions that help scientists to conduct life science research more easily, efficiently and economically. Merck Millipore is one of the leading suppliers of tools for the life science industry.

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### The business units

**Lab Solutions**
- Lab Water
- BioMonitoring
- Lab Essentials

**Bioscience**
- Life Science
- Discovery and Development Solutions

**Process Solutions**
- BioPharm Process Solutions
- Pharm Chemicals Solutions

A reliable partner: Process Solutions offers more than 400 pharmaceutical raw materials worldwide.

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### Business figures

**Sales**
€ 2,627,506,602

**EBITDA pre**
€ 642,821,732

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### Sales by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Sales</th>
<th>%</th>
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<tbody>
<tr>
<td>Europe</td>
<td>€ 1,011 million</td>
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<tr>
<td>North America</td>
<td>€ 712 million</td>
<td>27%</td>
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<tr>
<td>Emerging Markets</td>
<td>€ 642 million</td>
<td>24%</td>
</tr>
<tr>
<td>Rest of World</td>
<td>€ 263 million</td>
<td>10%</td>
</tr>
</tbody>
</table>
The EZ-product family is designed to facilitate microbiology workflows in quality assurance and quality control laboratories. The EZ-Pak® Dispenser Curve launched in 2013 makes membrane dispensing faster and easier and completes the product line.

**01 Identification** → Identify unmet client needs and workflow pain points in close collaboration with the client and define requirements.

**02 Development** → Innovation team develops solution approaches. Alpha-testing: prototype is tested in a simulated environment in close cooperation with the client.

**03 Verification** → Back to the application lab: optimization based on results from alpha-testing. Beta-testing of optimized prototype with customer optimization based on feedback. Final comprehensive testing of product requirements.

**04 Product Launch** → In combination, the products of the EZ-family provide optimal performance and streamline the bioburden analysis workflow.
indicate the direction in which we can work together to enable science, offering beneficial solutions.”

For example, in the Bioscience business unit these are life science researchers, who study complex biological systems in order to discover new therapies and develop better medicines. “We are of course also following the trend toward automation and miniaturization in research,” Yates says. “We’ve got to meet this trend while fulfilling the sustainability requirements of our customers at the same time.” A customer once summed this up as follows: “To us, it’s crucial for Merck Millipore to understand the complexity of our work.”

And it’s crucial for Merck to reduce this complexity while increasing efficiency across all three of its business units. The continuous further development of the EZ-product family, for example valves and filtration heads with quick-fit connec-

tions, is one example of how the Lab Solutions business unit is helping to meet growing requirements in laboratory work. Or the Clarisolve® depth filters offered by the Process Solutions business unit for single-stage clarification of pretreated feed streams. With Clarisolve®, customers can now take full advantage of high-density pretreated feed streams and improve overall process economics.

“To us, it’s crucial for Merck to understand the complexity of our work.”

“To address these challenges, Merck relies on direct customer feedback,” says Professor Albert Jeltsch, Director of the Institute of Biochemistry at the University of Stuttgart, which uses Merck’s Muse™ Cell Analyzer, among others. “This enables us to determine in real time the cell concentration, apoptosis as well as the cell cycle with even greater accuracy and precision,” says Jeltsch.

Lab Solutions, Bioscience, Process Solutions – can all three areas be served equally well at the same time? “Yes of course,” says Yates, “with plenty of imagination and innovative power.” As Yates explains, this will ensure that Merck Millipore’s “innovation pipeline is always well-stocked.”
Group Management Report

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<th>Operations</th>
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</thead>
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<td><strong>Merck Serono</strong></td>
<td></td>
</tr>
<tr>
<td>Darmstadt, Germany</td>
<td>Merck Serono headquarters, Marketing &amp; Distribution, Production, Research &amp; Development hub</td>
</tr>
<tr>
<td>Coursier sur Vevey, Switzerland</td>
<td>Production, Distribution</td>
</tr>
<tr>
<td>Mollet del Valles, Spain</td>
<td>Marketing &amp; Distribution, Production, Research &amp; Development</td>
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<td>Semoy, France</td>
<td>Production, Distribution</td>
</tr>
<tr>
<td>Bari, Italy</td>
<td>Production, Research &amp; Development</td>
</tr>
<tr>
<td>Rio de Janeiro, Brazil</td>
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<td>Mexico City, Mexico</td>
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<td>Beijing, China</td>
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<td>Billerica, USA</td>
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<td>Tokyo, Japan</td>
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<tr>
<td><strong>Consumer Health</strong></td>
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<tr>
<td>Darmstadt, Germany</td>
<td>Consumer Health headquarters, Production, Marketing &amp; Distribution</td>
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<td>Jakarta, Indonesia</td>
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<td><strong>Performance Materials</strong></td>
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<tr>
<td>Darmstadt, Germany</td>
<td>Performance Materials headquarters, Production, Marketing &amp; Distribution, Research &amp; Development</td>
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<td>Gernsheim, Germany</td>
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<td>Atsugi, Japan</td>
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<td><strong>Merck Millipore</strong></td>
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<td>Billerica, USA</td>
<td>Merck Millipore headquarters, Marketing &amp; Distribution</td>
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<tr>
<td>Bangalore, India</td>
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Fundamental Information about the Group
The Merck Group and its divisions

The Merck Group, which is headquartered in Darmstadt, Germany, is a global corporate group. With a history dating back nearly 350 years, it is the world’s oldest pharmaceutical and chemical company. Merck holds the global rights to the Merck name and brand. The only exceptions are Canada and the United States, where Merck operates as EMD. Merck’s product portfolio ranges from innovative pharmaceuticals and biopharmaceutical products, to specialty chemicals, high-tech materials and life science tools. Merck markets its wide range of products within its four divisions: Merck Serono, Consumer Health, Performance Materials and Merck Millipore.

Merck Serono

Merck Serono discovers, develops, manufactures and markets innovative prescription drugs to treat cancer, multiple sclerosis (MS), infertility, and growth disorders, as well as certain cardiovascular and metabolic diseases and allergies. As the company’s largest division, Merck Serono generates 56% of Group sales and 57% of EBITDA pre one-time items (excluding Corporate and Other). The Merck Serono division was formed in 2007 with the acquisition of the Swiss biopharmaceutical company Serono SA, which was integrated stepwise into Merck’s traditional business with prescription drugs. The integration process progressed steadily in recent years and was completed after divesting the former Serono headquarters in Geneva, Switzerland in 2013 and fully transferring divisional headquarters to Darmstadt.

Merck Serono commercializes its products worldwide and has a strong presence in established markets. The regions of Europe and North America contributed 63% of divisional sales in 2013. However, Merck Serono has also been operating in emerging markets for over three decades. This presence was continuously further expanded in recent years. In 2013, the division generated 30% of sales in that region, which is higher than the share of sales in emerging markets at many other pharmaceutical companies in Europe or the United States.

Merck Serono sells mainly biotechnologically produced drugs. Rebif® is the top-selling product. It is used to treat relapsing forms of multiple sclerosis (MS), which is one of the most common neurological diseases among young adults.

In Oncology, Merck offers Erbitux® for the targeted treatment of metastatic colorectal cancer. Erbitux® is the second best-selling drug in Merck Serono’s product portfolio. This monoclonal antibody is also a standard in the treatment of squamous cell carcinoma of the head and neck.

Merck Serono also offers products that help couples to conceive a child. The division has a complete portfolio of recombinant gonadotropins, including Gonal-f®, the most frequently prescribed gonadotropin worldwide. The products in the Fertility franchise are an important growth driver for Merck Serono. This is primarily due to couples postponing childbearing until later in life when natural fertility declines.

The General Medicine franchise comprises brand-name products to treat cardiometabolic diseases. Although no longer patent-protected, these are still the therapies of choice for numerous diseases. This applies, for example, to Glucophage® containing the active ingredient metformin, the drug of choice for first-line treatment of type 2 diabetes, or Concor®, a drug for chronic cardiovascular disease. Particularly in emerging markets, there is a continuous rise in demand for cardiometabolic therapies. This is due to both increasing life expectancy and in part also to growing prosperity in this region, along with the resulting changes in lifestyle and eating habits.
Merck Serono is continuously working to improve ways to administer medicines and active ingredients. For several years, therefore, Merck Serono has been developing novel, more user-friendly injection devices, which make injections less painful and at the same time more reliable for patients than conventional, pre-filled syringes. In addition, these products make it easier for medical staff to check whether patients adhere to their therapeutic regimen. Examples are the Gonal-f® RFF Redi-ject™ injection device and the electronic auto-injection device Rebif® Rebidose. These disposable injection devices were approved by the U.S. Food and Drug Administration in 2013 after already having been successfully used in many countries. An optimized and expanded version of the new easypod® system was introduced in Europe in 2013. This is an innovative delivery device for the treatment of growth hormone deficiency.

Merck is also active in the field of allergology. Subsequent to the acquisition of the remaining shares in Allergopharma in December 2012, Merck intends to further expand its product range for the global allergy market. The Allergopharma unit is specialized in developing high-dose hypoallergenic products for specific immunotherapy and diagnosis of type 1 allergies (such as hay fever or allergic asthma). In 2013 Merck broke ground on a new production facility for this unit in Hamburg, Germany in order to serve new markets, such as China, with these products.

**Consumer Health**

The Consumer Health division manufactures and markets over-the-counter pharmaceuticals. The division focuses on a number of well-known strategic brands, e.g. Bion®, Nasivin®, Femibion®, Seven Seas®, Sangobion®, Cebion®, Sedalmerck® and Kytt® and contributed 4% to Group sales and 2% to EBITDA pre one-time items (excluding Corporate and Other) in 2013. Consumer Health has high market penetration in Europe, Latin America as well as Southeast Asia. The division is also generating very strong growth in Russia and Emerging Markets, particularly in India, Indonesia and Brazil, which have firmly established themselves among the division’s top-ten markets in terms of sales.

Global megatrends favor future growth of Consumer Health. People are becoming more health-conscious and concerned with their own physical well-being. Preventive health care and as little invasive therapy as possible are becoming increasingly important – in both established and emerging markets, characterized by a growing middle class with specific needs.

**Performance Materials**

The Performance Materials division comprises Merck’s entire specialty chemicals business. It offers high-tech performance chemicals for applications in fields such as consumer electronics, lighting, coatings, printing technology, plastics applications, and cosmetics. In 2013, Performance Materials contributed 15% to Group sales and 23% to EBITDA pre (excluding Corporate and Other). The EBITDA pre margin was 47.5% of sales. This reflects the far above-average profitability of the business.

Performance Materials comprises three business units: Liquid Crystals, Pigments & Cosmetics, and Advanced Technologies.
Liquid Crystals generates more than 70% of divisional sales. With a market share of over 60%, Merck has established itself as the global market and technology leader in liquid crystal mixtures. The market is highly consolidated. In addition, there are high barriers to market entry due to the technological complexity of liquid crystals and the high quality requirements of customers and consumers. The seven largest LC display manufacturers are among the customers of the liquid crystals business. Performance Materials has the broadest product offering in the industry and also offers liquid crystals based on PS-VA and IPS technologies. This enables the division to meet individual customer needs and offers solutions for all display sizes, from smartphones and tablet computers to large-area television screens. The division also manufactures and markets materials for organic light-emitting diodes (OLEDs), which are used in innovative lighting applications and display technologies.

Pigments & Cosmetics develops and markets a comprehensive product portfolio of effect and functional pigments, spanning a variety of colors and shimmer effects. The pigments are primarily processed into automotive and industrial coatings, plastics, printing, materials used in installations for renewable energy production, cosmetics, and counterfeit prevention applications. The product portfolio also includes high-quality cosmetic products for use in skin, hair and oral care, including UV filters.

By providing innovative research and development, the Advanced Technologies business unit bolsters the growth of the Liquid Crystals and the Pigments & Cosmetics business units.

Merck Millipore

The Merck Millipore division has a broad product and technology portfolio and offers innovative solutions for the life science industry. Life science comprises the research branches of natural and engineering sciences concerned with the structure and behavior of living organisms. The division’s products and services are used in the research, development and manufacture of biotechnological and pharmaceutical drug therapies, and for general laboratory applications. The division was established in 2010 following the acquisition of the Millipore Corporation. It is a leading supplier of life science tools.

In 2013, Merck Millipore contributed 25% to Group sales and 18% to EBITDA pre (excluding Corporate and Other). The majority of sales are generated by consumables. This enables the division to achieve recurring sales and stable, attractive cash flows. A highly diversified and loyal customer base additionally ensures a low risk profile. At the same time, Merck Millipore benefits from its broad portfolio and its global reach.

Merck Millipore comprises three business units: Bioscience, Lab Solutions and Process Solutions. The main product groups of the Bioscience business unit include tools and consumables for filtration and sample preparation, reagents and kits for cell biology experiments, as well as small tools and consumables for cell analysis. With these products, Merck Millipore supports its customers in understanding complex biological systems and identifying new target molecules. The Bioscience business unit contributed 16% to divisional sales in 2013. Merck Millipore offers complete and validated applications to make research processes faster and more efficient. The Bioscience business unit is highly innovative. A solid proportion of annual sales are achieved with new products. Examples include the Muse™ cell analysis system and the Direct Detect™ biomolecular quantification system. In 2013, these products were recognized with numerous innovation awards (for example, the R&D Magazine 100 Award).
The Lab Solutions business unit manufactures products for research as well as analytical and clinical laboratories in a wide variety of industries. The business unit accounts for 42% of divisional sales. It is one of the leading suppliers of laboratory water equipment, laboratory chemicals and consumables. In addition, Lab Solutions develops and markets test solutions to identify microbial contamination, for example in pharmaceutical products, food or drinking water. For inorganic chemistry, Lab Solutions supplies ultrapure reagents, including salts, acids, caustic alkalies, and buffering agents. It also manufactures reference materials for instrumental analysis and products for inorganic trace analysis.

The Process Solutions business unit offers a diversity of products to pharmaceutical and biotechnology companies that enable customers to develop large- and small-molecule drugs safely, effectively and cost-efficiently. Accounting for 42% of Merck Millipore sales, Process Solutions offers its customers continuous innovations, highest quality standards as well as high reliability of supply, and is growing faster than the competition.

In addition, the business unit’s portfolio comprises more than 400 chemicals for the synthesis of active pharmaceutical ingredients as well as drug delivery compounds. The offering in biotech production comprises products supporting cell growth and gene expression, a wide range of filtration systems, as well as salts and sugars. The single-use solutions offered by the Process Solutions business unit provide increased operational flexibility to biopharmaceutical customers since they eliminate time- and cost-intensive cleaning procedures. Moreover, these single-use solutions are compatible with various products, reducing investment costs for the customer.
Objectives and strategies of the Merck Group

In 2007, Merck launched a transformation process aimed at securing its business viability through profitable growth in highly specialized niche markets within the pharmaceutical and chemical sectors. This process started with the large-scale acquisitions of Serono SA in 2007 and the Millipore Corporation in 2010. Afterwards, we embarked on the “Fit for 2018” transformation and growth program with a new executive management team. In the first phase, we created the foundation for profitable growth by introducing a new leadership organization and a comprehensive efficiency program that covers all businesses, functions and regions. The second phase is aimed at successively implementing the growth options identified. Merck will continue to develop its portfolio further by building on existing core competencies. The objectives here are:

- Closeness to existing businesses
- Innovative strength
- Customer proximity (to offer tailored solutions)
- Focus on specialty businesses

Moreover, Merck is aiming to expand its business model systematically and continuously to include new technologies. This also includes the planned acquisition of AZ Electronic Materials, which is aimed at broadening the product base and new technology offerings for customers, through which Merck can win new customers for existing business. This transformation into a specialist for innovative high-tech products operating in pharmaceuticals and chemicals is already reflected in our finances.

In Pharmaceuticals, the Merck Serono division already generates more than 60% of its sales with medicines of biotechnological origin. In 2006, we only had one such product: Erbitux®, which accounted for less than 10% of sales. The Chemicals business has increasingly become a high-tech materials business that offers a wide range of value-adding products. Today, high-tech materials and life science tools make up around 80% of sales in this sector. In 2006, the share was around 30%.

General principles and Group strategy

The year 2018 will mark the 350th anniversary of Merck. The general principles of the transformation and growth program “Fit for 2018” and the Group strategy are to serve as a compass beyond 2018 as well.

General principles

In all its business endeavors, Merck orients toward general principles. They help those responsible within the company to shape strategic plans and to make decisions.

The structure of Merck KGaA with members of the Merck family as personally liable partners requires the Executive Board to pay special attention to the long-term development of value. Therefore, sustainability plays a special role at Merck. The objective is to align the long-term development of the company with the legitimate interests of shareholders, whose engagement in Merck is often of a shorter duration. That is why Merck’s business portfolio must always be balanced so that it reflects an optimum mix of entrepreneurial opportunities and risks. Merck achieves this through sustained diversification in pharmaceuticals, chemicals and life science tools, as well as through its geographic breadth with respect to growth sources.
For Merck, the principle of **sustainability** applies not only to economic aspects. Instead, it also encompasses responsibility for society and environmental preservation. With its current and future product portfolio, Merck wants to help solve global challenges and shape a sustainable future. That is also why innovation is the basis of the company’s business activities; it is the prerequisite for future growth. The Merck Group is continually working on new products and service innovations for patients and customers and relies on a continual process of internal innovation throughout all areas of the company.

**Group strategy**

Merck focuses on innovative and top-quality high-tech products in the pharmaceutical and chemical sectors. The company’s goal is sustainable and profitable growth. Merck intends to achieve this by growing primarily organically and by further developing its competencies, but also by making targeted acquisitions that complement and expand existing strengths in meaningful ways. Building on leading branded products in all four divisions, Merck aims to generate income that is largely independent of the prevailing economic cycles. Moreover, the aim is to further expand the strong market position in emerging markets in the medium to long term. In 2013, the Emerging Markets region contributed 36% to Group sales.

**Strategic initiatives**

**Capability initiatives**

As Merck continues to grow in size and the business becomes increasingly global, we want Merck to be seen as ONE company. ONE Merck stands not only for a strong brand, but also for a performance-oriented global company with a strong sense of "we". Merck is more than the sum of its parts. For this purpose, we have launched four capability initiatives.

The capability initiative **ONE Merck brand** aims to strengthen the value of the Merck brand, to increase the company’s global visibility and reputation, to become more attractive to customers, partners and talent globally.

The framework for talent development, compensation and performance management is to be harmonized globally as **ONE Talent Development, Rewards and Performance Management**.

As part of this initiative, Merck will focus on establishing a consistent and integrated talent and performance management process and improving the talent portfolio by proactively identifying and sourcing talent as well as by ensuring workforce diversity.

The goal of the third capability initiative **ONE Process Harmonization, Standardization and Excellence** is to better coordinate processes and apply them consistently. This is particularly the case with software applications. Continuous improvement will take place through benchmarking. Ultimately, this will allow Merck to adapt rapidly to business changes as well as to integrate future acquisitions both seamlessly and efficiently.
The importance of Merck’s global headquarters in Darmstadt is to be underscored along the lines of ONE global headquarters. Merck in Darmstadt is to become a vibrant home for creativity, exchange and innovation.

Our aim is to implement all capability initiatives in the medium term.

**Business initiatives**

Furthermore, Merck has set up a range of business initiatives in order to expand the existing portfolio as well as to capture new business opportunities. The following initiatives are of major significance:

**Biosimilars**

In order to capture the opportunities offered by biosimilars, Merck set up a dedicated unit. Merck wants to use its expertise in developing, manufacturing and commercializing high-quality biotechnological medicines in order to create a competitive biosimilars portfolio. The focus is on developing molecules through in-house research and development as well as through partnerships.

**Research & Development at Merck Serono**

Merck Serono introduced a more entrepreneurial model to elevate the performance dynamics of its Research & Development. Based on Translational Innovation Platforms (TIPs), the division wants to foster long-term planning and an entrepreneurial mindset, supported by an independent advisory board of external experts.

**OLEDs**

The Performance Materials division aims to further expand its global leadership position in display materials. Merck expects OLED technology to increase in importance in the future. Performance Materials is therefore investing in developing a comprehensive OLED portfolio. By 2018, Merck aims to be a leading supplier of OLED materials.

**Business strategies of the divisions**

**Merck Serono**

Merck Serono aims to become a preferred global biopharmaceutical partner, providing innovative specialty medicines, leading brands, and high-value solutions. Global megatrends such as world population growth and a general increase in life expectancy are bolstering the demand for our products. The aim is to grow at least in line with the global pharmaceutical market.
Innovative drugs are the key to competing in mature markets, which remain the largest and most profitable markets for our products. In addition, we will use customized products and dosage forms to systematically capture the growth potential of emerging markets in order to further expand our leading position in key cardiometabolic diseases mainly based on our General Medicine products such as Glucophage®, Concor® and Euthyrox®.

The division continues to focus on the therapeutic areas of Oncology, Multiple Sclerosis, Fertility and General Medicine.

In Oncology, Merck launched the Erbitux® Reloaded program, the strategic focus of which is on building on the existing business to expand market share and to ensure market leadership in first-line therapy of metastatic colorectal cancer in patients with KRAS wild-type tumors. Based on the results of the FIRE 3 study as well as further retrospective analyses of pivotal trials, Merck Serono is emphasizing the importance of offering patients complete testing for RAS status in order to ensure optimum treatment. In Multiple Sclerosis, the vision is to remain a leader by providing innovative solutions that include drugs, devices and services to help people living with multiple sclerosis. Merck Serono plans to fully exploit the potential of Rebif®, its top-selling product, in an increasingly competitive multiple sclerosis market and to position it as the best interferon-based therapeutic option for patients who suffer from the relapsing form of the disease. Merck Serono intends to further expand its market leadership in Fertility especially by leveraging the comprehensive portfolio of products and life cycle management activities, and by capturing growth opportunities in emerging markets. In General Medicine, Merck Serono will focus on further boosting its efforts in emerging markets and enhancing the life cycle management of its products. In addition, Merck Serono intends to continue to strengthen its current portfolio through suitable partnerships.

China and Brazil are key growth markets for the division. Merck Serono wants to step up its activities in these countries by 2018. At the same time, Merck Serono intends to further expand its activities in North America. The division is therefore examining potential business models such as alliances, acquisitions of start-ups as well as the launch of new products.

**Consumer Health**

In 2012 and 2013, the Consumer Health division undertook steps to strategically realign the internal organization while sharpening its focus on core brands and particularly attractive key markets. As of 2014, Consumer Health intends to push ahead with its growth agenda, particularly in emerging markets of Latin America and Southeast Asia. To this end, the division is pursuing a clear strategy: The aim is for Consumer Health to achieve a market share of at least 3% by 2021 in each of the division's top 20 markets (including France, Mexico, Brazil, Germany and the United Kingdom), with at least three brands in leading positions. An important milestone within the framework of this strategy will be the transfer of the Neurobion® and Floratil® brands from the Merck Serono to the Consumer Health division in 2014. Neurobion® is a leading global brand in the vitamin B segment and Floratil® is a leading brand in the probiotic antidiarrheal segment in Brazil. Their transfer to Consumer Health will allow a stronger focus on consumer needs. As a consequence, the emerging markets exposure of Consumer Health will increase from 28% in 2013 to 51% in 2014, and Consumer Health will also increase the market share of the division in key markets such as Brazil, Mexico, India and Indonesia.
Performance Materials

The demand for high-tech products in general and for innovative display solutions in particular has seen high global growth in recent years. Nor is this trend expected to weaken in the coming years. Instead, Merck assumes that there will be increasing demand for these types of consumer goods from a growing middle class in emerging markets. Therefore, Performance Materials will defend its position as the market and technology leader for liquid crystals and further expand it as far as possible.

Since the typical life cycle of liquid crystal mixtures is less than three years, innovation will remain the key success factor. The liquid crystals pipeline is well-stocked with new technologies such as self-aligned vertical alignment (SA-VA), advanced fringe field switching (FFS) as well as projects beyond displays. The division wants to further position itself in the OLED market and play a leading role in this market segment in the medium to long term. Lower production costs for OLED displays are a precondition for this. External partnerships will also be used in the future to ensure the required exchange of technology and expertise.

In addition, the planned acquisition of AZ Electronic Materials and the resulting combination of two research and development teams will lead to further innovative solutions for customers in the electronics industry.

Within its Pigments & Cosmetics business unit, Merck will continue to focus on customers as well as the effect pigments business and selected technology segments in the functional materials business.

Merck Millipore

In order for Merck Millipore, the life science tools division of Merck, to continue to outperform its peers, the division is pursuing various strategic approaches. Merck Millipore will maximize the potential of the combined portfolio, drive market share growth in North America, Asia and Latin America, and increase sales generated by new products. The division’s profitability is to improve by globalizing the entire portfolio and reducing organizational complexity. Merck Millipore will secure operational excellence by implementing systems such as Enterprise Resource Planning (ERP), delivering the highest standard of customer service, and cultivating talent in the organization. These measures are to be fully implemented by 2017.
Strategic financial and dividend policy

For reasons of sustainability, Merck generally follows a conservative financial policy. Apart from a solid balance sheet with transparent and healthy structures, this policy is reflected by the selection of financing sources, liquidity management, key financial indicators, dividend policy, and risk management.

Merck generates high business free cash flow and its return on capital employed is consistently improving. In the context of the Group-wide efficiency program currently underway, cash is being reserved with high priority to fund restructuring measures across all divisions and regions. Around €800 million of one-time costs related to restructuring are planned to be incurred from 2012 to 2015. As of 2014, major acquisitions will again be on Merck’s agenda.

Moreover, cash is to be used for selective acquisitions in order to provide for future growth, for instance the planned takeover of AZ Electronic Materials (Performance Materials).

Lastly, Merck uses its cash for dividend payments to its shareholders. Merck’s dividend policy is aimed at a moderate long-term sustainable payout ratio of 35% to 40% based on net income before one-time items.
Internal management system of the Merck Group

As a global pharmaceutical and chemical company organized around four divisions with a diverse portfolio of products and services, Merck uses a comprehensive framework of indicators to manage performance. Within this framework, the most important KPI (key performance indicator) to measure the operational performance of the Merck Group and its divisions is EBITDA pre.

The Merck Value Creation and Financial KPI Pyramid, which summarizes the important financial performance measures of the Merck Group, reflects the comprehensive framework of financial KPIs to steer our businesses and prioritize the allocation of our cash resources. It consists of three managerial dimensions, which require the use of different indicators: Merck Group, Business Portfolio and Projects. Apart from its strong focus on operational performance, the Merck Value Creation and Financial KPI Pyramid also emphasizes the need for measurable mid- and long-term value creation as well as the efficient allocation of cash to the most promising investment alternatives.

Explanations: EBITDA pre = Earnings before interest, income tax, depreciation and amortization pre one-time items, EPS = Earnings per share, MEVA = Merck value added, BFCF = Business free cash flow, ROCE = Return on capital employed, NPV = Net present value, eNPV = expected Net present value (probability adjusted), PoS = Probability of success.
Group and Division KPIs

The three Group and division KPIs, namely sales, EBITDA pre and business free cash flow, are the most important financial KPIs used to assess the operational performance of the Merck Group and its divisions. Reference to these KPIs can therefore be found in the report on economic position, the report on risks and opportunities, and in the report on expected developments. As the most important indicators of Merck’s financial business performance, the Group and division KPIs are key elements of Merck’s performance management and incentive system.

Sales

Sales are defined as the sales of goods and services rendered to external customers net of value added tax and after sales deductions such as rebates or discounts. Sales are the main indicator of business growth in the Merck Group and therefore an important parameter of external as well as internal performance measurement.

<table>
<thead>
<tr>
<th>Merck Group</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million/change in %</td>
<td>2013</td>
</tr>
<tr>
<td>Sales</td>
<td>10,700.1</td>
</tr>
</tbody>
</table>

EBITDA pre

EBITDA pre is the main performance indicator measuring ongoing operational profitability and is used internally and externally. To allow for an understanding of the underlying operational performance of the Merck Group and its four divisions, it excludes from the operating result depreciation and amortization in addition to specific income and expenses of a one-time nature. One-time items within EBITDA are restricted to five categories: integration costs/IT costs, restructuring costs, gains/losses on the divestment of business, acquisition costs and other one-time items. The classification of specific income and expense as one-time items follows clear definitions and underlies strict governance at corporate level. For example IT costs, which are not related to the integration of an acquired business, can only be classified as one-time items if they are related to a fundamental change in the global IT landscape of the Merck Group or a division. Also, the category restructuring costs only includes one-time charges for globally defined and centrally approved restructuring programs. Restructuring costs incurred in 2012 and 2013 were directly related to the Group-wide “Fit for 2018” transformation and growth program.

Within the scope of internal performance management, EBITDA pre allows for the necessary changes or restructuring without penalizing the performance of the operating business.
Business free cash flow (BFCF)

Apart from EBITDA pre and sales, business free cash flow (BFCF) is the third important Group and division KPI and therefore also used for internal target agreements and individual incentive plans. It comprises the major cash-relevant items that the individual businesses can influence. Broken down to the divisional level, it sums up EBITDA pre less main cash items such as investments in property, plant and equipment, software, advance payments for intangible assets, as well as changes in inventories and trade accounts receivable, all of which are under full control of the individual businesses. To manage working capital on a regional and local level, our businesses use the two indicators DSO (days sales outstanding) and DSI (days sales in inventory). The introduction of business free cash flow has led to considerable improvements in cash awareness as well as reduced working capital requirements.

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result (EBIT)</td>
<td>1,610.8</td>
<td>963.6</td>
<td>67.2</td>
</tr>
<tr>
<td>Depreciation/Amortization/Reversals of impairments</td>
<td>1,458.4</td>
<td>1,396.6</td>
<td>4.4</td>
</tr>
<tr>
<td>EBITDA</td>
<td>3,069.2</td>
<td>2,360.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Restructuring costs</td>
<td>130.5</td>
<td>503.8</td>
<td>–74.1</td>
</tr>
<tr>
<td>Integration costs/IT costs</td>
<td>49.0</td>
<td>36.7</td>
<td>33.5</td>
</tr>
<tr>
<td>Gains/losses on the divestment of businesses</td>
<td>2.3</td>
<td>60.1</td>
<td>–96.2</td>
</tr>
<tr>
<td>Acquisition costs</td>
<td>0.0</td>
<td>1.0</td>
<td>–100.0</td>
</tr>
<tr>
<td>Other one-time items</td>
<td>2.3</td>
<td>3.1</td>
<td>–25.8</td>
</tr>
<tr>
<td>EBITDA pre</td>
<td>3,253.3</td>
<td>2,964.9</td>
<td>9.7</td>
</tr>
</tbody>
</table>

Merck Group | Business free cash flow

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA pre</td>
<td>3,253.3</td>
<td>2,964.9</td>
<td>9.7</td>
</tr>
<tr>
<td>Investments in property, plant, equipment and software as well as advance payments for intangible assets</td>
<td>–446.2</td>
<td>–366.5</td>
<td>21.7</td>
</tr>
<tr>
<td>Changes in inventory according to the balance sheet</td>
<td>59.7</td>
<td>157.2</td>
<td>–62.0</td>
</tr>
<tr>
<td>Changes in trade accounts receivable according to the balance sheet</td>
<td>93.2</td>
<td>213.7</td>
<td>–56.4</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>2,960.0</td>
<td>2,969.3</td>
<td>–0.3</td>
</tr>
</tbody>
</table>
Investments and value management
Sustainable value creation is essential to secure the long-term success of our company. To optimize the allocation of financial resources we use a defined set of parameters as criteria for the prioritization of investment opportunities and portfolio decisions.

Net present value (NPV)
The main criterion for the prioritization of investment opportunities is net present value. It is based on the discounted cash flow method and is calculated as the sum of the discounted free cash flows over the projection period of a project. Consistent with the definition of free cash flow, the weighted average cost of capital (WACC), representing the weighted average of the cost of equity and cost of debt, are used as the discount rate. Depending on the type and location of a project different mark-ups are applied to the WACC.

Return on capital employed (ROCE)
In addition to NPV, ROCE is an important metric for the assessment of investment projects. It is calculated as the operating result (EBIT) excluding one-time items divided by the sum of property, plant and equipment, intangible assets and working capital.

Payback period
An additional parameter to prioritize investments into property, plant and equipment is the payback period, which indicates the time in years after which an investment will generate positive net cash flow.

Merck value added (MEVA)
MEVA gives information about the value created in a period. Value is created when the return on the company’s or divisional capital employed (ROCE) is higher than the weighted average cost of capital (WACC). MEVA metrics provide Merck with a powerful tool to weigh investment and spending decisions against capital requirements and investors’ expectations.

Capital Market-Related Parameters
The operational performance of our businesses within a certain period provides an important basis for assessing the financial health of our company. In addition, the financial stability of the company is reflected by the following capital market-related parameters:

Net income and earnings per share (EPS)
Earnings per share are calculated by dividing profit after tax attributable to the shareholders of Merck KGaA (net income) by the weighted average number of theoretical shares outstanding. The use of a theoretical number of shares takes into account the fact that the general partner’s capital is not represented by shares. To provide a more comparable view, Merck also publishes EPS pre, which excludes one-time items and...
amortization of intangible assets (mostly from the acquisitions of Serono SA and the Millipore Corporation) and is based on the company’s underlying tax ratio.

Credit rating
The rating of Merck’s credit worthiness by external agencies is an important indicator with respect to our ability to raise debt capital at attractive market conditions. The capital market makes use of the assessments published by independent rating agencies in order to assist debt providers in estimating the risks associated with a financial instrument. Currently, Merck is assessed by Moody’s and Standard & Poor’s (S&P). Here, net financial debt is an important indicator, which we define as current and non-current financial liabilities less cash and cash equivalents as well as current financial assets. A five-year overview of Merck’s credit rating can be found in the report on risks and opportunities.

Dividend ratio
As a publicly listed company Merck strives to pay a reasonable dividend to shareholders based on the returns that we generate. With the aim of ensuring an attractive return to shareholders, Merck pursues a reliable dividend policy with a target payout ratio based on adjusted net income (reported net income plus one-time items, e.g. restructuring costs).

Other Relevant/Non-Financial Performance Measures
Apart from the indicators of the financial performance of our businesses, non-financial measures also play an important role in furthering the success of our company. From a Group perspective, specifically innovations in our businesses as well as the attraction and retention of highly qualified employees are of central importance. Further indicators of relevance to specific topics can be found in the Corporate Responsibility report.

Innovation
Innovation is the foundation of our business and will also be the prerequisite for future success in changing markets. We are continuously working to develop new products and service innovations for patients and customers, which is also reflected in our slogan “Merck – Living Innovation”. Indicators for the degree of innovation are defined individually depending on the specifics of our businesses.

Talent retention
Employing a highly qualified and motivated workforce is the basis for achieving our ambitious business goals. Therefore, we put a strong focus on establishing the processes and the environment needed to attract and retain the right talent with the right capabilities at the right time. To measure how successful we are in our efforts, talent retention has been implemented as an important non-financial indicator.
Responsible conduct with respect to our employees, products, the environment, and society plays a key role in Merck’s corporate culture. In the course of our nearly 350-year history, the principle of corporate responsibility has become a permanent pillar of our corporate governance. It constitutes part of our daily conduct and thus a fundamental prerequisite for our business success.

More information on this topic can be found in our 2012 Corporate Responsibility Report1.

Strategy and management

Our corporate responsibility (CR) activities are steered by our Group-wide CR Committee, which consists of representatives from Merck’s divisions, as well as from relevant Group functions. Our ambition is to be a global company that creates added value for consumers, our market partners and the community while also helping them lead better lives. We endeavor to achieve positive recognition for Merck in society and have an obligation to operate safely as well as respect the environment.

Mankind is confronted with major global issues, such as the increasing demand for affordable, renewable energy, a growing need for access to health – especially in developing health care systems – and the prevention of greenhouse gas emissions. We believe that we can do our part to resolve these global challenges through our innovative pharmaceutical, chemical and life science products, as well as through responsible corporate governance; in this way, we can prepare ourselves for the future while increasing Merck’s acceptance in society.

Merck’s CR engagement is focused on three spheres of activity:

- **People**: We strengthen our company’s ability to act by recruiting, developing and motivating the most suitable employees. We want to help society function better and aim to set the example for ethical conduct.

- **Products**: Our products serve people’s current and future needs, and many of them contribute to environmental protection. Safety and ethical aspects matter just as much as business success.

- **Environment**: In the manufacture of our products, we seek to impact the environment as little as possible. Safety, environmental protection and quality management are absolutely essential to this goal.

Merck supports relevant initiatives concerning responsible corporate governance. We participate in the United Nations Global Compact and are committed to complying with the compact’s principles regarding human rights, labor standards, environmental protection, and anti-corruption. Another way in which we live our corporate responsibility is our commitment to follow the guidelines of the Responsible Care Global Charter, an initiative of the International Council of Chemical Associations (ICCA). This charter aims to continuously improve the products and services of the chemical industry in terms of environmental protection, health, plant safety, and security.

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1Merck applies the G3.1 Sustainability Reporting Guidelines of the Global Reporting Initiative
In addition, we are involved in the Chemie³ initiative, a collaboration between the German Chemical Industry Association (VCI), the German Employers’ Federation of the Chemical Industry (BAVC), and the German Mining, Chemical and Energy Industrial Union (IGBCE). This initiative aims to make sustainability a core part of the chemical industry’s guiding principles and seeks to jointly drive the sector’s position within the German economy as a key contributor to sustainable development.

To Merck, corporate responsibility does not merely mean actively taking action, but also actively listening. The dialogue with the various stakeholder groups is therefore highly important to us. These stakeholders include our employees, our business associates, the Merck family, investors, regulatory agencies, and associations. We engage in a continuous exchange with our stakeholders in order to transparently demonstrate how we live the Merck Values.

This engagement has earned Merck a variety of recognition, not the least of which was our listing on the FTSE4Good Index once more in 2013. To be included in this leading international sustainability index, a company has to demonstrate socially conscientious, ecological and ethical conduct.

Responsibility for people: Social responsibility

Merck sees itself as part of the community, not only at its individual locations, but also at global level. Taking responsibility towards society is an integral part of our entrepreneurial approach. We believe that we can make an important contribution to society through our knowledge, our skills and our products.

Our social responsibility activities are primarily focused on those areas in which we have specific expertise stemming from our core businesses. We are thus engaged in health care projects and support education, specifically in the natural sciences. We provide disaster relief in emergency situations, especially in those regions in which we also do business.

To increase the effectiveness of our projects, we have consolidated our resources into three global lighthouse projects:

1. The Merck Praziquantel Donation Program: We are partnering with the World Health Organization (WHO) to combat the worm disease schistosomiasis in school children in Africa (see also p. [55]).
2. Global Pharma Health Fund: This is a charitable initiative funded by Merck to fight counterfeit medicines in developing countries and emerging markets (see also p. [56]).
3. The Deutsche Philharmonie Merck, a cultural ambassador: With up to 80 professional musicians and a very diverse concert repertoire, this orchestra is an integral part of the cultural life in the vicinity of our Group headquarters in Darmstadt and also tours internationally.

In addition, our subsidiaries are engaged in local projects. We have defined a general set of criteria for selecting projects, and the decisions concerning specific local projects are made by our subsidiaries. In 2013, we spent a total of € 46.2 million on corporate social responsibility activities. Of the total monetary and non-monetary donations made by our subsidiaries in 2013, 63% went to Emerging Markets (Latin America and Asia, excluding Japan), 36% to Europe, as well as 1% to North America and the Rest of World region.
Responsibility for people: Merck employees

In accordance with the Merck Values, we live a culture of mutual esteem and respect. We want to become better and faster by recruiting, developing and motivating the most suitable employees. In addition, we would like to further enhance the performance culture of our company and promote the diversity of our workforce.

As of December 31, 2013, Merck had 38,154 employees worldwide (2012: 38,847). Merck was represented by a total of 191 companies in 66 countries, with 63 production sites located across 21 countries.

Fit for 2018

The “Fit for 2018” transformation and growth program impacted HR work in 2013 as well. At the majority of Merck’s sites, the structural prerequisites were put in place and agreements were reached with the respective social partners in order to create a socially responsible approach to the workforce reduction required by the transformation process. For example, in Germany, around 1,200 employees chose to participate in a partial retirement program or a voluntary leaver program. By the end of 2013, we had completed the process of moving Merck Serono headquarters from Geneva to Darmstadt. In comparison with 2012, the total number of employees in 2013 decreased by 693.

Vocational and advanced training

Merck continues to take the vocational and advanced training of its employees very seriously. We have therefore maintained a constant vocational training rate at Darmstadt, the largest site of the Merck Group. In 2013, a total of 516 young people were enrolled in vocational training programs at this site, in 23 different occupations. At other sites where we offer vocational and advanced training, we have likewise maintained a high vocational training rate.

“Start in die Ausbildung”, a German program to prepare young people for an apprenticeship, was continued with 20 interns, the same number as in 2012.

In 2013, we globally harmonized our approach to advanced training, better gearing it towards the future business focus of the Merck Group. Here, our goal is to advance the competencies and abilities of our employees and managers so that they can help implement our corporate strategy more efficiently while at the same time unlocking their individual potential. We have accordingly revised our training programs at all levels.

Performance management

In 2012, we ran a pilot of an integrated performance and talent management process, which we then rolled out broadly in 2013. Merck considers it important to identify employee potential early on and foster it on an individual basis. We want to offer our talent attractive career opportunities as well as continual personal and professional prospects within the company.

The new process systematically combines talent recognition with the Performance Management Process that allows us to objectively assess the performance of each individual employee. This assessment is a crucial prerequisite for personal development as well as for the overall success of the company. Key features here are clear objectives, differentiated and open feedback on performance, as well as individual development
plans. To date, around 22,400 employees have participated in the globally harmonized Performance Management Process.

**Internal talent development and external recruiting**

Through the above-mentioned process, Merck aims to bolster its performance culture and develop talent in a more targeted manner. In 2013, we achieved our first successes and expanded our pool of internal talent, which makes it easier to fill management positions with internal staff when they become vacant. In 2013, 92% of management position vacancies were filled by internal candidates. Merck also recruited external executives for several key positions in the organization in order to add new outside perspectives to our long-standing in-house expertise.

Merck is using the motto “Make great things happen” to position itself in the global job market, which conveys to potential applicants a sense of what makes Merck unique: an inspiring, motivating work environment in which innovations thrive; an environment in which everyone has the opportunity to apply their ideas and engagement to benefit customers and the company, while at the same time growing as employees.

**Occupational health and safety**

As a responsible employer, it is especially important to us to do everything in our power to prevent workplace-related illnesses and accidents. We apply the lost time injury rate (LTIR) as an indicator to determine the success of measures aimed at accident prevention as well as occupational health and safety. This internationally recognized key performance indicator describes the number of workplace accidents resulting in lost time per one million working hours. Merck set itself the goal of reducing the LTIR to 2.5 by 2015. In 2013, we again outperformed this goal, achieving an LTIR of 2.1.

<table>
<thead>
<tr>
<th>Incidents</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013*</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIR (Lost Time Injury Rate)</td>
<td>3.5</td>
<td>3.0</td>
<td>2.0</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Number of fatalities</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Incl. temps

This continuous rate of improvement can be particularly attributed to the BeSafe! program, which was launched in 2010. In 2013, we continued to sensitize our employees to workplace hazards through numerous activities and awareness campaigns. BeSafe! is a Group-wide initiative with harmonized standards and local modules for the specific requirements at individual sites. This program focuses on engaging managers in the safety culture and building their buy-in; it aims to make safety an intrinsic value and empower our employees to take responsibility for their own safety.

Since 2010, Merck has been presenting the Safety Excellence Award in order to underscore the importance of safety. It is granted to all production sites with no workplace accidents on record for the year. In 2013, 38 out of 63 production sites were recognized.
**Workforce diversity**

We believe that workforce diversity leads to greater innovation and promotes better team performance, which is why we aim to foster diversity among our employees. To this end, the Executive Board has defined three focus areas. As a global company, we particularly endeavor to achieve a good balance between different cultures and nationalities, between different age groups, as well as between male and female employees.

In addition to creating the position of Chief Diversity Officer, who is responsible for strategically managing diversity within the Merck Group, Merck also established the Diversity Council in 2013. This aims to build further buy-in for diversity within the company. The council consists of high-ranking managers from every division as well as from several Group functions; it is primarily concerned with developing and refining our diversity and inclusion strategy.

In addition, Merck supports specific employee networks in order to foster exchange among like-minded individuals, building expertise that benefits the company. For example, in 2013, we worked with a network of international employees to better gear our Darmstadt site to an international workforce. This helps employees from across the globe to easily and quickly familiarize themselves with Group headquarters, thereby increasing work efficiency within the company.

**Focus areas: Internationality, demography, gender ratio**

One of our fundamental principles is to recruit employees from the countries in which we operate and offer them career development opportunities. People from a total of 114 different nations work at Merck. Only 27% of Merck employees are German citizens, and 72% work outside of Germany. Three of our four divisions are currently headed by non-Germans.

In Germany, several other EU countries and the United States, we must prepare ourselves for demographic change. In these countries, the average age of our employees exceeds 40 – and we assume that this figure will continue to rise in the coming years. In Europe, we are addressing these demographic challenges through various programs. These include adapting workplaces to the needs of older employees and establishing a health management program to maintain their ability to do their jobs.

Women currently make up 42% of our entire workforce. Since the ratio of women to men varies widely across the different regions, divisions and functions, Merck has set itself the goal of increasing the percentage of female employees wherever they are underrepresented.

**Filling management positions**

We believe that balanced diversity among management enhances career advancement opportunities for talented employees while also helping to provide a broad experience base within the company. It furthermore allows for differentiated entrepreneurial decision-making, thereby making a significant contribution to the success of the company.
As a global company, Merck considers it highly important to have an international management team. Currently, 61% of our managers – meaning positions rated Global Grade 14 and up in our Global Grading System – have a nationality other than German. Altogether, 59 different nationalities are represented in such positions.

The percentage of management positions held by women (Global Grade 14 and up) is currently 25% Group-wide. In the subsidiaries outside of Germany, this percentage is higher than at Group headquarters in Darmstadt. Likewise, more women work in managerial positions in our Pharmaceuticals divisions than in our Chemicals divisions. Certain Group functions such as IT have a lower percentage of women in management positions. However, the figures are clearly increasing across the Group as a whole. Merck has reached its strategic goal of raising the percentage of management positions held by women from 25% to 30% and intends to further increase this percentage by 2016. In order to achieve this ambition, Merck is implementing numerous measures at the local level. 2013 was the first time that a woman was appointed as head of a Merck Group division.

**Work-life balance**
Merck wishes to help its employees achieve a good balance between their professional and personal objectives. This maintains and strengthens their motivation and performance potential, making it easier for them to plan their daily lives.

In Germany and other countries, Merck offers various flexible working hour models. Globally, approximately 5% of our employees worked part-time in 2013. 8% of our part-time employees are men.

In addition to this, Merck introduced a comprehensive employee assistance program called “assistance4me” in 2013. Throughout Germany, this initiative offers employees extensive help with regard to finding childcare and nursing care, as well as home and garden services. At various sites, employees benefit from childcare options that Merck subsidizes. A daycare center has been operating at the Darmstadt site in Germany for more than 40 years, financially supported by the Merck family. In 2013, Merck invested in expanding the facility, increasing the daycare center staff by 40% in order to provide 50 additional spots. The hours of operation were also extended. The daycare center will be hiring English-speaking staff in order to accommodate the increasingly international workforce at Merck.

**Responsibility for our products**
Our success and our future are founded on innovative products that address people’s needs and enable them to lead a better life. Through our products, we are helping to overcome global challenges such as climate change and access to health. At the same time, we are also helping our customers achieve their own sustainability goals.

The safety of our products is at the core of our corporate responsibility. As long as used properly, our products should pose no danger to customers or the environment, nor should our pharmaceuticals have a negative benefit-risk evaluation. We therefore examine safety across the entire life cycle of our products and continuously take steps to minimize risks. We make our products safer to use by providing patients and customers with extensive informational material so that they can use the products in a responsible, safe and proper manner.
Safety of our chemical products

There are numerous regulations intended to ensure that chemicals pose no danger to humans or the environment. Compliance with these regulatory requirements is an important part of our work. With our Group-wide Product Safety Chemicals policy, we have introduced global processes for defining, steering and implementing product safety, and have established the corresponding management structures.

Our policies and regulations incorporate all relevant national and international chemical regulations, including the EU chemicals regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) and the Globally Harmonised System of Classification and Labeling of Chemicals (GHS). We are committed to transparency; for instance, in line with the Global Product Strategy, an international initiative of the chemical industry, we provide our customers with product safety summaries for hazardous materials.

Merck has successfully completed the second phase of REACH implementation. All substances we produce or import in quantities ranging from 100 to 1,000 metric tons per year – around 70 different substances – were fully registered with the European Chemicals Agency (ECHA) by June 1, 2013. The next step, part of the third phase, is for us to register all substances produced or imported in quantities ranging from one to 100 metric tons by 2018. We have already started this process and are right on schedule with our activities.

Safety of our drugs

In everything we do, our number one priority is our patients’ safety. Ultimate responsibility for drug safety matters at Merck Serono is borne by our Medical Safety and Ethics Board (MSEB), which is chaired by the Global Chief Medical Officer. Merck Serono Global Drug Safety is responsible for continuously, systematically monitoring the safety of our drugs (pharmacovigilance). This unit processes safety information from various sources such as clinical trials, adverse reaction reports and scientific literature in order to provide patients with the latest risk-benefit evaluations during the entire life cycle of a drug. Through our Pharma Code for Conducting Pharmaceutical Business and Pharmaceutical Operations, we set standards for responsible marketing activities in order to ensure that patients and professional health care providers have access to relevant information and that patients receive effective treatment.

Quality of our products

Our goal is to provide customers and patients with high-quality brand-name products. Through our quality vision – “Quality is embedded in everything we do!” – we remind our employees of their responsibility – across all divisions, all Group functions and all levels of the company.

Sustainable products

We strive to continuously enhance the sustainability footprint of our products and are working to offer our customers products that enable them to reduce the impact of their own activities, as well as to achieve their own sustainability goals. One example of this is the Green² concept. Through this program, the Performance Materials division is helping to promote environmentally preferable, energy-efficient, safe technologies and materials. We are developing innovative materials for energy-efficient liquid crystal and OLED displays and are thus helping our customers to reduce their own environmental impacts. Thanks to liquid crystals from Merck, displays consume approximately 20% less energy in comparison with the preceding generation of technology.
We have expanded the Green® concept to include cosmetic products from our Performance Materials division. We are working to sustainably procure and produce cosmetic ingredients as well as optimize the related production processes. In dialogue with our customers from the cosmetics industry, we also develop proposals for cosmetic formulations that meet strict sustainability criteria as well as address the current trend towards more natural cosmetics. Several of our products have recently been certified by ECOCERT, an independent organization that represents high international standards for environmentally sustainable products.

As part of the Design for Sustainability program, the Merck Millipore division has developed a number of tools to drive sustainability across the product development process. One example is a scorecard that identifies key health and environmental impacts in certain life cycle stages as well as opportunities to make improvements. The Design for Sustainability program is especially aimed at reducing our customers’ own environmental impact, including their carbon footprint and water use.

In addition to this, Merck fosters its employees’ ideas for new businesses through its Innospire program. In view of the globally rising levels of energy consumption as well as the increasing scarcity of water, in 2013 we focused on energy conservation, energy efficiency, and energy conversion, as well as water treatment, water quality analyses, and efficient water consumption. These topics were of particular importance in our Performance Materials and Merck Millipore divisions. Merck employees were called upon to submit suggestions for new materials and systems, as well as for new business models. During the 2013 run of the Innospire program, 300 ideas were submitted, some of which pertained to the above-mentioned topics.

**Access to health**

Promoting access to health – not only to medicines – for underserved populations across the world is a priority for Merck. Our Access to Health (A2H) initiative leverages core competencies across all Merck divisions to provide comprehensive health solutions to underserved populations and patients in low- and middle-income countries. Merck is committed to the UN Millennium Development Goals (MDGs) and to working with partners to achieve them. Our robust approach to addressing the complex challenge of providing access is comprised of four components, known as the 4As for Access: Availability, Affordability, Awareness and Accessibility.

**Availability**

Availability includes efforts to reduce barriers to health care solutions and to tackle unmet needs in therapeutic areas that disproportionately affect the poor in low- and middle-income countries. Merck is a signatory to the London Declaration on Neglected Tropical Diseases (NTDs), which aims to expand access for the 1.4 billion people affected by NTDs. Within the scope of this unprecedented multi-stakeholder effort, Merck pledged to increase its praziquantel donation tenfold and to develop a pediatric formulation to treat schistosomiasis, a worm disease that often is contracted via contaminated water and is endemic in Africa, Asia and Latin America.

**Affordability**

Affordability entails offering our products at prices that poor populations can also afford through programs such as innovative pricing, intellectual property initiatives and donations. Through the Merck Praziquantel Donation Program, which is one of our lighthouse projects, Merck donates Cesol® 600 tablets, which contain the active ingredient praziquantel, to the World Health Organization (WHO) to fight schistosomiasis in Africa. At the end of 2011, Merck pledged to continue its efforts until the disease is eliminated in Africa, contributing
up to 250 million tablets annually in the medium term. The WHO partnership has made it possible to treat around 38 million African children. Manufacturing plants in developing countries allow Merck to improve the affordability of their products by selling them in local markets at lower prices.

**Awareness**

Awareness focuses on the education of health care professionals, technicians and patients to promote high-quality disease prevention, screening and treatment. Interpol, the world’s largest international police organization, estimates that up to 30% of all medicines in developing countries are either counterfeit or of substandard quality. This is especially true in Africa and Asia, since they have little in the way of effective governmental drug inspection centers. The Minilab™ developed by the Global Pharma Health Fund (GPHF), which is exclusively financed by Merck, is an important element of our efforts to combat counterfeit medicines and ensures patient safety. The Minilab™ detects counterfeit medicines quickly, easily and inexpensively by using reference samples to test the identity and concentration of 70 active ingredients, ranging from antimalarial drugs and antibiotics to analgesics and antipyretics. To date, the GPHF has supplied 642 Minilabs to more than 80 countries. Merck also collaborates with Interpol and other biopharmaceutical companies to raise awareness about the harmful effects of counterfeit medicines.

Through our three-year Capacity Advancement Program (CAP), Merck is promoting awareness among health workers. In Kenya, we collaborate with the University of Nairobi on the Diabetes Community Awareness and Medical Education Program in a campaign to improve the early diagnosis of diabetes. The campaign has already reached 1,000 people in Kenya, providing patients with free screenings and medical check-ups. We run and sponsor pharmacovigilance training programs in collaboration with local health authorities to ensure that patients get best-quality health solutions, regardless of their location.

**Accessibility**

To strengthen supply chain and delivery as well as contribute to addressing the so-called “last mile” challenge, we are engaged with various global health stakeholders in discussions around collective and tailored solutions. To raise awareness about thyroid disorders, Merck runs screening programs in Africa, Asia and Latin America. We also use our ThyroMobil® to provide onsite screening and education about iodine deficiency. In Algeria, Merck supports local production through the transfer of manufacturing technology for the production of metformin and bisoprolol. As part of its commitment to improving access to health care for underserved populations, Merck has also constructed the rural pharmacy – an innovative pharmacy specifically designed for rural parts of Africa that will be piloted in Ghana. The pharmacy is a 40-foot shipping container which can be transported to rural communities pre-equipped and with minimal assembly required. Since people living in rural areas often travel great distances to access health care services, the pharmacy will improve accessibility by bringing health solutions directly to them.

Merck aims to establish itself as a health partner of choice in low- and middle-income countries and actively support them as they continue to develop.
Merck’s suppliers must also adhere to environmental, compliance and social responsibility standards.

Supplier management

For its business activities Merck needs raw materials, packaging materials, technical products, components, and services. Our basic expectations for suppliers and service providers include their compliance with fundamental environmental and social standards, derived primarily from the Core Labor Standards of the International Labour Organisation and the UN Global Compact. We have also signed the Code of Conduct of the German Association Materials Management, Purchasing and Logistics e.V. (BME), which is intended to combat corruption, violations of antitrust law, and child labor, among other issues.

In 2013, we instituted the Merck Responsible Sourcing Principles, which codify the requirements that we expect our suppliers to meet with regard to environmental, social and compliance standards. We have integrated these principles into our general terms and conditions and, depending on the potential risk, verify compliance with the Responsible Sourcing Principles by subjecting our suppliers to sustainability audits.

Responsibility for the environment

We have set out to reduce our impact on the environment by applying the precautionary approach principle. This especially includes utilizing resources such as energy, water and raw materials both sparingly and efficiently while also reducing our emissions and waste.

Environmental management system

Our Corporate EHS Policy defines our principles and strategies for environment, health and safety. It is implemented through internal guidelines and instruction manuals on compliant behavior, such as the Merck Group EHS Security and Quality Manual. At all sites, the local EHS managers are also in charge of operational environmental protection measures. These employees continually receive training and obtain additional qualifications.

Since our businesses are constantly changing, our environmental management system must also remain flexible and adaptable. For this reason, we have internal and external audits conducted on a regular basis to determine whether the ISO 14001 requirements are still being met. In 2013, Merck received the ISO 14001 group certificate for our environmental management system for the fifth consecutive year.

Expenditure on environmental protection, health and safety totaled €142 million in 2013, which also includes investments made during 2013.

Climate protection

Climate change and its consequences are one of the main challenges facing society in the 21st century. Being a responsible company, it is especially important to us to do our part, which is why we have set ourselves the goal of reducing total direct and indirect greenhouse gas emissions by 20% by 2020, measured against the 2006 baseline.

In order to achieve this goal, Merck has launched a climate protection program called EDISON that consolidates all climate change mitigation and energy efficiency activities of the Merck Group. In 2014, as in 2012 and 2013, the Executive Board will additionally earmark around €10 million for measures to conserve energy and reduce greenhouse gas emissions. We intend to use this sum to initiate another 130 individual projects as well as to continue projects from 2012 and 2013. Through the 200 EDISON projects that were launched in
these two years, Merck aims to annually save around 63 metric kilotons of CO$_2$ in the medium term. In 2013, Merck lowered its greenhouse gas emissions by around 1% relative to the 2006 baseline.

Around two thirds of the projects planned Group-wide have already been or are being rolled out, including also major energy generation projects. In Jaffrey, New Hampshire (USA), as well as in Goa, India, Merck is currently constructing power plants that will use carbon-neutral biomass as fuel in order to supply the sites with electricity. Another EDISON project is the gas-fired cogeneration unit at our site in Gernsheim, Germany, which went on line in mid-2013. It uses a high-efficiency gas turbine-driven cogeneration system to produce electricity, while almost completely preventing the loss of unused heat. This will cut down Merck’s carbon footprint by around 6,000 metric tons of carbon dioxide per year.

Energy consumption (in GWh)

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>Total energy consumption</td>
<td>1,275</td>
<td>1,395</td>
<td>1,391</td>
<td>1,388</td>
<td>1,431</td>
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<tr>
<td>Direct energy consumption</td>
<td>823</td>
<td>905</td>
<td>906</td>
<td>920</td>
<td>968</td>
</tr>
<tr>
<td>Natural gas</td>
<td>742</td>
<td>794</td>
<td>798</td>
<td>818</td>
<td>864</td>
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<tr>
<td>Liquid fossil fuels</td>
<td>66</td>
<td>96</td>
<td>95</td>
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<tr>
<td>Biomass and other self-generated renewable energy</td>
<td>15</td>
<td>15</td>
<td>13</td>
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<tr>
<td>Indirect energy consumption</td>
<td>452</td>
<td>490</td>
<td>485</td>
<td>468</td>
<td>463</td>
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<tr>
<td>Electricity</td>
<td>443</td>
<td>480</td>
<td>481</td>
<td>464</td>
<td>458</td>
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<tr>
<td>Water vapor</td>
<td>9</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>5</td>
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</table>

CO$_2$ eq emissions (eq=equivalents)

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<tr>
<th></th>
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<tr>
<td>Total CO$_2$ eq emissions</td>
<td>474</td>
<td>537</td>
<td>502</td>
<td>502</td>
<td>524</td>
</tr>
<tr>
<td>Direct CO$_2$ eq emissions</td>
<td>299</td>
<td>348</td>
<td>315</td>
<td>317</td>
<td>343</td>
</tr>
<tr>
<td>Indirect CO$_2$ eq emissions</td>
<td>175</td>
<td>189</td>
<td>187</td>
<td>185</td>
<td>181</td>
</tr>
</tbody>
</table>

Focus areas: Energy efficiency, greenhouse gas emissions, water scarcity

Energy management plays a key role in our efforts for sustainable energy efficiency and climate change mitigation. Merck’s production sites in Darmstadt and Gernsheim account for around 40% of Merck’s global energy consumption. In 2012, both of these sites qualified for ISO 50001 – Energy Management System certificates, which were reaffirmed in 2013. Our Taoyuan site in Taiwan received the ISO 50001 certificate in 2013 for the first time. Counting the Bari and Tiburtina sites in Italy, this makes five Merck production sites that have a certified energy management system.
We utilize company cars sparingly and ensure that they are energy efficient, which also contributes to climate change mitigation and cuts down costs. In 2013, Merck therefore revised its company car policy and defined specific goals. By 2020, we want to decrease the Group-wide CO$_2$ emissions of our car fleet by 30% relative to the 2012 baseline. Consequently, Merck will be requiring its company cars to be low-emission, state-of-the-art vehicles that provide good fuel economy.

The Climate Performance Leadership Index and the Climate Disclosure Leadership Index of the Climate Disclosure Project (CDP), an independent non-profit organization, both indicate that we are on the right track. In 2013, we were once more ranked in performance band B, which puts us clearly in the upper range of all participating companies in the Germany, Austria and Switzerland category. Merck again significantly improved its disclosure score, raising it to 92 out of 100 possible points, thus meeting the requirements for the CDP’s top quality rating. Around 350 companies are rated on their performance in emissions reductions and climate change reporting. The CDP publishes these two indices in order to make greenhouse gas emissions reporting more transparent.

In addition to energy, in 2013 Merck also focused its attention on the topic of water. We have examined our sites to determine which ones are located in regions where water is scarce and thus an especially precious commodity, and plan to establish sustainable water management programs particularly at these sites. Furthermore, we participated in the CDP’s water program in 2013 for the first time.
Research and Development at Merck

Merck conducts research and development worldwide in order to develop new products and services designed to improve the quality of life of patients and customers. In 2013, we focused on further optimizing the relevance and profitability of our research and development activities and we increased the number of new collaborations with external research and development partners.

Nearly 4,000 employees around the world work for Merck researching innovations to serve long-term health and technology trends in established and emerging markets as well as in developing countries.

Overall, the Merck Group invested around €1.5 billion in research and development in 2013. In addition, we are focusing on a newly defined mix of in-house research and cost-saving collaborations, which enables us to increase the productivity of our research while simultaneously reducing financial outlay.

The organizational set-up of our research and development activities reflects the divisional structure of the Merck Group. Within the Executive Board, Stefan Oschmann is responsible for the Merck Serono and Consumer Health divisions and Bernd Reckmann is responsible for the Performance Materials and Merck Millipore divisions.

Merck Serono

General

In 2013, R&D at Merck Serono evolved significantly. Starting in 2013 as separate functions – Global Research and Early Development, and Global Development and Medical – Merck Serono unified the two groups into one global R&D organization.

The guiding principle of the new organization at Merck Serono is to foster an environment of end-to-end research and development – from bench to bedside – with a resolute commitment to ensuring that the needs of the patient are the primary driver of Merck Serono’s efforts. Operationally, there is a strong focus on delivering the highest-quality science to clinical development with speed and efficiency, and translating that science into meaningful, differentiated new therapies for patients in need.

Discovery is structured across three distinct yet closely aligned Translational Innovation Platforms (TIPs): Oncology, Immuno-Oncology, and Immunology/Neurodegenerative Diseases. Each TIP integrates research, the early phases of development and biomarker strategies, and is now accountable for delivering promising discovery programs into development up to clinical proof of confidence. In order to achieve this, in-house teams of researchers and clinicians work closely together, while collaborating with leading academic institutes, research laboratories and industry organizations to complement their internal capabilities.

Merck Serono is implementing an open collaborative model in R&D and reflecting this, numerous collaborations were entered into during 2013. These included an innovative strategic collaboration with Quintiles creating a comprehensive process that integrates the expertise and experience from both organizations into a single, well-aligned clinical development unit. Several agreements were also signed with external partners in both research and development.

Across the continuum of R&D, Merck Serono is promoting a solution-oriented, collaborative and accountable culture that delivers value to the business and to patients. The Merck Serono R&D organization is boosting its efforts to advance a robust pipeline and achieve its launch ambitions.
Research & Development strategy

In 2013, Merck Serono R&D made considerable progress in simplifying its global operations structure. Today, a nimble and highly-experienced team of just over 2,500 R&D professionals is working towards adding value and bringing new therapeutic options to patients around the world.

With hubs in Darmstadt, Germany; Boston, Massachusetts (USA); Tokyo, Japan; and Beijing, China, the broad footprint of Merck Serono gives it access to innovation in its key markets. Across the spectrum of the biopharma ecosystem – from academia, to hospitals, to research institutions, and to other companies in the biopharmaceutical industry – Merck Serono complements its internal expertise by leveraging the experience and knowledge of others. In 2013, Merck Serono delivered clear examples of this strategic priority, announcing agreements with several companies and academic institutions around the world (for details see the pipeline on page 70).

In April 2013, Merck and Quintiles, the world’s largest provider of biopharmaceutical development and commercial outsourcing services, announced a new, five-year clinical development agreement. This strategic collaboration is the first of its kind between a biopharmaceutical company and a biopharmaceutical services provider, integrating the expertise and experience of both organizations. This novel approach to clinical development is founded on a shared commitment to cost-disciplined science. The collaboration is intended to optimize productivity in the design and execution of clinical studies with a focus on quality, speed and efficiency. Under the agreement, Merck Serono is shaping and leading the strategy of its clinical development programs, with Quintiles directing clinical trial planning, design and execution, using highly efficient processes and proven technologies.

In the course of 2013, Merck Serono further strengthened its global presence. In Darmstadt, the division officially opened a biopharmaceutical R&D building. In Boston, the division’s R&D site was renamed the EMD Serono Research and Development Institute, and will accommodate more than 500 employees in the coming years across the full R&D spectrum. Merck Serono continues to build on its 80-year history in China and sees excellent opportunities to further strengthen its reputation as a partner in biopharma, a leader in R&D, and an employer of choice for top talent in this market. The division’s hub in Tokyo serves as a gateway to northeast Asia, allowing the delivery of scientific and medical innovation of its pipeline to patients with diseases that are of particular concern to this region.

Merck Serono strengthened its leadership team by appointing world-class physicians, scientists and health care professionals to senior positions, including the Global Chief Medical Officer, and the Head of Global Clinical Development, both of whom joined the organization in January 2014.

To further advance the field of medicine Merck sponsors research and advanced medical education globally, reflecting our commitment to science, education and patient care. For example, Merck Serono supports outstanding extramural research projects through its Grant for Fertility Innovation and its Grant for Multiple Sclerosis Innovation, which are both awarded annually and available to researchers and clinicians worldwide. Similar annual Grants for Innovation were launched in 2013 in Oncology and Growth Disorders and the first awards in these fields will be granted in 2014. Through contributions to multiple medical education providers, Merck Serono supports the development and delivery of independent advanced medical training for scientists, physicians, nurses, pharmacists, and other health care professionals. In 2013, Merck Serono invested more than €13 million in independent medical education programs and in grants for innovation.
Overall, the global Merck Serono R&D organization is now well-positioned, with enhanced operational effectiveness, an unwavering commitment to exceptional science, and a focus on delivering a pipeline that will continuously bring innovation to the business and to patients.

The Merck Serono pipeline in 2013

Merck Serono’s core R&D fields include oncology, immuno-oncology, immunology and neurology. The development pipeline continues to be weighted towards oncology, however 2013 also saw important scientific and business development advances in other areas. Merck Serono has an open collaborative model in R&D and in reflection of this a number of collaborations were entered into during 2013, some of which are highlighted below.

In December 2013 the European Commission approved an amendment to the Erbitux® (cetuximab) product information, updating the indication for Erbitux® to the treatment of patients with RAS wild-type metastatic colorectal cancer (mCRC). The European Commission approval is based on the totality of data emerging on the role of mCRC RAS tumor status in the benefit–risk profile of anti-EGFR monoclonal antibodies. The approval primarily refers to new biomarker data from the OPUS (OxaliPlatin and cetUximab in first-line treatment of mCRC) study. OPUS is a randomized, controlled, Phase II trial, involving 337 mCRC patients, 179 with KRAS wild-type (exon 2) tumors, demonstrating the efficacy of Erbitux® plus FOLFOX-4 (oxaliplatin-based therapy) versus FOLFOX-4 alone. Results of a RAS tumor status analysis were presented at the Gastrointestinal Cancers Symposium (American Society of Clinical Oncology – GI meeting) in January 2014, in San Francisco. Recent analyses of multiple studies evaluating monoclonal anti-epidermal growth factor receptor (EGFR) antibodies, such as Erbitux®, examined KRAS wild-type tumor status (exon 2) for additional RAS mutations (defined as mutations in exons 3 or 4 of KRAS and/or exons 2, 3 or 4 of NRAS). The results from these studies suggest that patients with RAS wild-type tumors may benefit from treatment with Erbitux®, while patients with RAS mutant tumors may not. The Summary of Product Characteristics of Erbitux® has therefore now been updated as part of the European Commission approval.

Initial results of the independently run FIRE-3 study, a randomized, controlled, head-to-head Phase III trial comparing Erbitux® and bevacizumab on top of standard chemotherapy (FOLFIRI) in patients with KRAS wildtype metastatic colorectal cancer (mCRC), were presented at the American Society of Clinical Oncology (ASCO) meeting in 2013 by the German cooperative investigator group AIO. The study did not achieve the primary endpoint as the objective response rate (ORR) was not significantly different for the two treatment arms: 62% for Erbitux® combination versus 58% for bevacizumab combination. However, investigators reported the median overall survival based on a 57% event rate was 28.7 months for the Erbitux® plus FOLFIRI group versus 25.0 months for the bevacizumab plus FOLFIRI group. The toxicity profiles in the two groups were manageable and as expected from previous studies.
Also at the 2013 ASCO meeting, data were presented from two proof-of-concept Phase II trials, evaluating the safety and efficacy of Sym004, an early-stage development opportunity licensed from Symphogen, a private Danish biopharmaceutical company developing recombinant antibody mixtures. Sym004 is a mixture of two chimeric monoclonal antibodies (mAbs) against different parts of the Epidermal Growth Factor Receptor (EGFR). Both mAbs bind EGFR with high affinity but have only limited preclinical activity individually. Synergistic inhibition has however been demonstrated by the Sym004 mixture both in vitro and in vivo. Results from a Phase II study in metastatic colorectal cancer showed clinical activity in anti-EGFR treatment-refractory KRAS wild-type mCRC patients, warranting further development. No unexpected adverse events were observed. In a Phase II study in squamous cell cancer of the head and neck (SCCHN), Sym004 demonstrated clinical activity in heavily pretreated patients with advanced SCCHN previously progressing on, or after therapy with already available anti-EGFR mAbs. No unexpected toxicities were reported.

Turning to TH-302, an investigational hypoxia-targeted drug, the global Phase III MAESTRO study was launched in late 2013, to assess its efficacy and safety in combination with gemcitabine, in patients with previously untreated, locally advanced unresectable or metastatic pancreatic adenocarcinoma. This followed a positive Phase II study in this indication which was reported at the American Association for Cancer Research (AACR) meeting in 2012. MAESTRO is a randomized, placebo-controlled, international, multi-center, double-blind Phase III trial of TH-302 plus gemcitabine compared with placebo plus gemcitabine and is targeted to enroll 660 patients. The primary efficacy endpoint is overall survival and secondary endpoints include progression-free survival (PFS), overall response rate and disease control rate, as well as assessments of safety and tolerability, pharmacokinetics and biomarkers. The study is being conducted under a Special Protocol Assessment (SPA) with the U.S. Food and Drug Administration (FDA). An SPA is a review conducted by FDA on a clinical trial that will form the primary basis of an efficacy claim in a marketing application. MAESTRO is the second Phase III study of TH-302 since there is already an ongoing study in soft tissue sarcoma patients assessing the efficacy and safety of TH-302 in combination with doxorubicin. This trial is targeted to enroll 620 patients in order to investigate the effect in overall survival for patients being treated with the combination. This trial is being conducted by Threshold Inc. also under an SPA with the U.S. FDA.

In the first quarter of 2013 Merck announced that its Phase III CENTRIC study of the investigational integrin inhibitor cilengitide given in combination with standard chemoradiotherapy for patients with newly diagnosed glioblastoma (brain tumors) and methylated MGMT gene promoter status, did not reach its primary endpoint of significantly increasing overall survival. The trial was conducted in partnership with the European Organisation for Research and Treatment of Cancer (EORTC), and its results were presented at the ASCO meeting in June 2013. In view of the results of this study, Merck decided to discontinue the overall development program for cilengitide.
Tecemotide, a MUC1 antigen-specific cancer immunotherapy (formerly referred to as Stimuvax and L-BLP25) is being investigated in patients with inoperable locally advanced non-small-cell lung cancer (NSCLC). In September, Merck announced its decision to proceed with a new Phase III study: START2 which is planned to include around 1,000 patients. This was based on the results of the Phase III START study, which were also presented at the ASCO 2013 annual meeting, as well as on consultation with certain regulatory authorities. While the primary endpoint of the START study was not met, a post-hoc analysis of a large predefined subgroup of patients from the study (consisting of 853 patients), who had received initial concurrent chemoradiotherapy (CRT) followed by tecemotide, demonstrated longer overall survival compared to those who had received concurrent CRT plus placebo (30.8 months, versus 20.6 months; p=0.016). START2 is a randomized, double-blind, placebo-controlled multicenter Phase III trial designed to assess the efficacy, safety and tolerability of tecemotide in patients with unresectable, locally advanced NSCLC who showed response or stable disease after at least two cycles of platinum-based concurrent CRT. Concurrent CRT is the current standard of care for these patients. The primary endpoint of START2 is overall survival. Merck received scientific advice from the European Medicines Agency (EMA) on the program, and reached an agreement with the U.S. FDA on an SPA for this study.

Also during the ASCO 2013 meeting in June 2013 data were presented from two pimasertib trials. Results from a Phase I trial in combination with Sanofi’s dual PI3K/mTOR inhibitor (SAR245409) in advanced solid tumors showed that continuous daily dosing of pimasertib and SAR245409 is tolerated and has shown signs of activity. In addition, results from the ongoing study of pimasertib in combination with gemcitabine in patients with pancreatic cancer showed activity at a dose of 60 mg twice per day, and this is now being investigated further in this indication. In the fourth quarter of 2013 an additional Phase I trial was initiated of pimasertib in combination with Sanofi’s hDM2 inhibitor (SAR405838) in patients with solid tumors.

In June Merck Serono announced its commitment to the field of cancer immunotherapy by creating a fully dedicated immuno-oncology translational innovation platform (or TIP) integrating research, early development and biomarker strategies. In addition to the division’s existing oncology platform, this new immuno-oncology platform is focusing on developing therapies that leverage the immune system’s natural ability to fight tumors, and work in combination with existing and future therapies in the following areas:

- **Therapeutic cancer vaccines:** targeting tumor antigens to elicit a tumor-specific immune response
- **Cancer stem cells:** targeting cancer stem cells to prevent or reduce tumor formation and inhibit metastases
- **Immunotolerance:** eliminating or circumventing inhibitory mechanisms in the immune system that prevent cancer cells from being recognized and attacked by the body
To ensure a broad immuno-oncology research and early development platform, an in-house team of researchers and clinicians has been assembled to build a portfolio of investigational immunotherapies, while collaborating with leading academic, research and industry organizations to complement internal capabilities. The current immuno-oncology portfolio comprises a robust pipeline of preclinical molecules as well as several therapeutic candidates in early clinical development (Phase I) in solid tumors, including:

- **Anti-PD-L1**: a monoclonal antibody targeting PD-L1 (programmed cell death ligand) expressed by various tumors
- **NHS-IL12**: a cancer immunotherapy targeting IL-12 to the necrotic regions of tumors, sponsored by the U.S. National Cancer Institute (NCI)
- **NHS-IL2**: targeting IL-2 to the necrotic regions of tumors

Merck’s approach is to develop immunotherapies that can be combined with other therapeutic modalities, bearing in mind that attacking multiple cancer targets simultaneously increases the possibility of therapeutic success.

Several collaborations between Merck and other organizations were announced in the field of oncology throughout 2013. These included:

- A collaboration to run innovative projects in oncology under the roof of an innovation center operated by BioMed X GmbH on the campus of the University of Heidelberg. The objective is to seed and boost early stage research projects in the field of oncology. This new research lab will establish a new way of fostering innovation, a concept that has been co-developed by Merck Serono and BioMed X. It will allow Merck Serono to run research projects with interdisciplinary project teams of young talented scientists recruited worldwide and coached by a supervisor from the division, in the vibrant environment of an open-innovation lab facility.
- Selvita, a biotechnology company based in Krakow, Poland, in the field of joint discovery and lead optimization for small-molecule-based drugs targeting proteins involved in cancer cell metabolism. The partners plan to target key metabolic pathways involved in sustaining growth and the proliferation of cancer cells with the aim of delivering potential first-in-class candidate drugs for multiple oncology indications.
BeiGene Co., Ltd., a biotech research and development company based in China. In 2013, Merck entered into two agreements with this company to co-develop, and commercialize two molecules for the treatment of cancer: BeiGene-283, a second-generation BRAF inhibitor that is currently in preclinical development. BRAF is a protein that is a downstream component of the MAPK (mitogen-activated protein kinase) signaling pathway, which is thought to promote cancer cell growth, and that is dysregulated in a number of human cancers. BeiGene-290, a potent poly (ADP-ribose) polymerase (PARP) inhibitor which is currently in preclinical development. PARP inhibitors target an enzyme family which is involved in a number of cellular processes, including DNA repair and programmed cell death.

Spanish National Cancer Research Centre (CNIO) in the area of cancer drug development. The agreement builds upon CNIO’s research discoveries to encourage the development and commercialization of new compounds. As part of the agreement Merck has been granted exclusive rights to develop and commercialize CNIO’s new inhibitors of the ataxia telangiectasia and Rad3-related (ATR) kinase. This enzyme has an important role in the response to DNA damage and in facilitating cell survival. Due to the fact that tumor cells accumulate more DNA damage than healthy cells, blocking ATR kinase activity with selective inhibitors is a strategy worth investigating further for specific tumor types.

The division is moving ahead with the development of a portfolio of biosimilar compounds applicable to various disease areas including oncology and rheumatology.

Turning to the multiple sclerosis (MS) field, ONO-4641 (ceralifimod), a sphingosine-1-phosphate receptor modulator, showed positive results in the Phase II DreaMS study in patients with relapsing MS, and these were presented at the American Academy of Neurology (AAN) annual meeting in 2012. In 2013 further studies, both non-clinical and clinical, were performed and provided more information on efficacy, safety and the potential for differentiation of this agent, including 12-month results from an ongoing blind DreaMS extension study presented at the 29th annual meeting of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) in October. Merck Serono is in discussions with certain regulatory authorities concerning potential Phase III study designs. The final decision about the future of the Phase III program will be made in the second quarter of 2014.

One project in the MS field advanced into Phase II in the fourth quarter of 2013, namely plovamer acetate, a second-generation peptide copolymer immunomodulator. This study is targeted to include 550 patients with relapsing-remitting multiple sclerosis (RRMS) in over 120 centers internationally. In addition an immune-tolerizing agent known as ATX-MS-1467, which is intended to reduce an inappropriate immune response against certain components of the patient’s own nervous tissue, completed Phase I testing and is being prepared for a proof of principle Phase Ila study in patients with RRMS. This is scheduled to start in the first half of 2014.
Early in 2013 Merck announced that it had been granted an option by Opexa Therapeutics, Inc. for the development and commercialization of Tcelna™ (mil elegucel-T), as a potential first-in-class therapy for patients suffering from MS. Tcelna™ is being developed by Opexa and currently is in a Phase Ib clinical trial in patients with secondary progressive MS (SPMS). It is being developed as a personalized therapy specifically tailored to each patient’s individual disease profile and has been evaluated in Phase I and II clinical studies in MS. Tcelna™ has received Fast Track Designation from the U.S. FDA as a potential treatment for SPMS.

In the fourth quarter of 2013 Merck Serono signed a memorandum of understanding with the Israel biotech company Kadimastem, which develops human pluripotent stem cell-related products. The aim is to utilize the screening platform of Kadimastem to characterize new compounds which could act as remyelinating agents in MS; as well as to possibly extend the collaboration into related fields like amyotrophic lateral sclerosis (a form of motor neuron disease).

In the field of Immunology, Merck decided to focus the development of its investigational drug sprifermin (recombinant human FGF-18) on the osteoarthritis (OA) indication and to embark on a new multinational Phase IIb study known as FORWARD in patients with OA of the knee. This is being performed as part of a strategic alliance on sprifermin that Merck entered into in early 2013 with Nordic Bioscience Clinical Development A/S of Denmark. Sprifermin is a protein thought to stimulate cells known as chondrocytes to synthesize cartilage matrix and to renew themselves. The alliance draws on the joint expertise and resources of Merck and Nordic Bioscience which will provide clinical development services to Merck on a shared-risk basis. Merck retains full responsibility for the development and commercialization of sprifermin. The FORWARD study further evaluates sprifermin for inhibition of the progression of structural damage, reduction of pain and improvement of physical function in patients with OA of the knee. This study was initiated in the third quarter of 2013 and is planned to include over 500 patients.

Merck is currently investigating atacicept (anti-Blys/anti-APRIL fusion protein) for the treatment of systemic lupus erythematosus (SLE). Clinical and biomarker results from the APRIL SLE Phase II study of atacicept were presented at the Annual Meeting of the European League Against Rheumatism (EULAR) in June 2013. APRIL SLE was a double-blind, placebo-controlled study assessing the therapeutic value of atacicept in SLE. While no statistically significant difference was observed in the number of patients experiencing a disease flare between atacicept 75 mg and placebo during the 52 week treatment period (primary endpoint), post hoc analyses suggested that treatment with the 150-mg dose of atacicept was associated with a reduced number of patients experiencing SLE flares versus placebo (36.6% versus 54.1%). Based on the totality of data from the APRIL SLE study Merck decided to proceed to a new Phase II study: ADDRESS II. This is a double-blind, placebo-controlled study to further assess the efficacy and safety of atacicept at two doses (75 mg and 150 mg given subcutaneously once per week) in reducing SLE disease activity in patients receiving standard-of-care therapy. The primary endpoint of the study will investigate the effect of atacicept in reducing disease activity.
In early 2013 Merck and the Feinstein Institute for Medical Research, the research division of the North Shore-Long Island Jewish Health System in New York, announced that they will collaborate to develop antibodies as potential treatments of SLE. This collaboration allows Merck Serono to further strengthen its research in SLE with the intention of developing new treatments for this disease.

In March, Merck Serono announced the creation of Calypso Biotech in Geneva, Switzerland, a spin-off company resulting from its Entrepreneur Partnership Program (EPP) which was launched in April 2012. Formed around an R&D portfolio in the field of inflammatory bowel diseases, Calypso will target selected niche indications with high unmet medical needs.

Merck Serono has a strong legacy in fertility and continues to pioneer innovative science that advances its goal of improving pregnancy outcomes and "take home baby rates". Gonal-f® (recombinant follitropin alfa for injection) is prescribed to supplement or replace naturally occurring follicle-stimulating hormone (FSH), an essential hormone widely used to treat infertility. In the fourth quarter Merck Serono announced that the U.S. FDA granted approval for Gonal-f® RFF Redi-jet™ (follitropin alfa injection), a disposable pre-filled injection device intended for the subcutaneous injection of a liquid formulation of Gonal-f® RFF (Revised Formulation Female). This pen is part of a global product franchise of ready-to-use pens with demonstrated dose accuracy designed for patient self-administration of Merck’s fertility hormones (gonadotropins). Merck Serono is continuously innovating to improve its injection devices in order to meet the needs of patients and health care professionals alike.

Fertility research remains an important R&D focus. In December 2013 Merck Serono announced the creation of TocopherRx, a Boston-based spin-off company resulting from its EPP, and is seed financed by MS Ventures. TocopherRx, the eighth spin-off in the EPP will focus on an oral follicle-stimulating hormone (FSH) agonist for treatment of infertility, a promising early asset that could help couples seeking solutions for fertility problems. An oral FSH agonist would have obvious advantages to the patient since injections of this hormone would be avoided. TocopherRx will advance Merck Serono’s preclinical program towards clinical testing, bringing forward an innovative Merck Serono investigational asset through externalization in a capital-efficient manner. This project demonstrates Merck’s continued commitment to developing the next-generation of infertility treatments and required technologies to improve the success rate of in vitro fertilization procedures as well as patient convenience.

Merck announced its strong support for the Grant for Fertility Innovation (GFI) award with grants totaling up to € 4 million for the years 2013/2014. The announcement was made during the 29th annual meeting of the European Society of Human Reproduction and Embryology (ESHRE). Launched in 2009, the GFI is dedicated to transforming innovative translational fertility research projects into concrete health solutions to improve the outcomes of assisted reproductive technologies (ART). In the last five years, more than 600 applications were received from over 50 countries around the world, and 26 projects from 16 countries were awarded grants totaling € 6 million. Merck Serono has recently launched similar Grants for Innovation in the fields of multiple sclerosis, oncology and growth disorders. The first four awards of the Grant for Multiple Sclerosis Innovation (GMSI) were presented on the occasion of the 29th annual meeting of ECTRIMS in Copenhagen in October 2013.
Merck Serono entered into several collaborations relevant across all of its core R&D fields of Oncology, Immuno-oncology, Immunology and Neurology, as follows:

- Merck and Ablynx announced in the third quarter of 2013 that they have further expanded their relationship through a research alliance that could lead to several co-discovery and co-development collaborations. Merck Serono will fund a dedicated discovery group at Ablynx to develop Nanobodies® against a number of targets of interest to Merck Serono.

- Merck and Open Monoclonal Technology, Inc., a leader in the genetic engineering of animals for the development of human therapeutic antibodies, announced the expansion of the collaboration agreement they entered into in 2012. Merck Serono will now have unlimited access to the OmniRat™ technology platform.

- Merck Serono announced a five-year strategic partnership broadening its collaboration with the Lead Discovery Center GmbH (LDC), Dortmund, Germany, a renowned translational research organization. The new agreement integrates the expertise and resources of both organizations to expedite the discovery and development of therapeutic candidates in diseases with high unmet medical needs in areas of interest to Merck Serono. The first project under the new agreement is in immunology and emerged from an ongoing collaboration of LDC with the Max-Planck researcher and Nobel Laureate Professor Robert Huber.

Merck Serono’s Israel Bioincubator continued to develop in 2013. The Bioincubator is financed by the € 10 million Merck Serono Ventures Israel Bioincubator and is focused on preseed and seed opportunities originating in Israel. In addition to housing Neviah Genomics, the following two companies joined in late 2013: Metabomed, which focuses on research in the field of cancer metabolism and computational biology; and ChanBio, which focuses on the discovery of antibodies selective for ion channels, considered to be potential therapeutic targets for the treatment of MS.

In the field of growth disorders, an updated version of the easypod® system for use in European markets was presented in September 2013 on the occasion of the 9th Joint Meeting of Paediatric Endocrinology organized by the European Society for Paediatric Endocrinology (ESPE). The easypod® system is an electronic, fully automated recombinant human growth hormone injection device that provides accurate data on treatment adherence. The new easypod® system provides information to help physicians address the issues of poor patient compliance and low adherence rates that are often associated with growth hormone (GH) therapy.
## Merck Serono pipeline, as of December 31, 2013

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<td>Neurodegenerative diseases</td>
<td>ONO-4641 (ceralifimod, oral S1P receptor modulator)</td>
<td>Multiple sclerosis</td>
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<td>Plovaner acetate (FY-2301, second-generation peptide copolymer)</td>
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<td>Phase II</td>
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<td>Soft tissue sarcoma</td>
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<td>TH-302 (hypoxia-targeted drug)</td>
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1 Combined with PI3K/mTOR inhibitor (SAR245409) from Sanofi, conducted under the responsibility of Merck
2 Combined with hDM2 inhibitor (SAR405838) from Sanofi, conducted under the responsibility of Sanofi
3 Sponsored by the National Cancer Institute (USA)
4 START2 study in preparation, INSPIRE study ongoing
5 ADDRESS II study in preparation
6 FORWARD study
7 Post-approval request by the European Medicines Agency
8 More information on the ongoing clinical trials can be found at www.clinicaltrials.gov
Consumer Health

In its Consumer Health division, Merck markets over-the-counter medicines and food supplements in Europe—primarily for France, Germany, and the United Kingdom—as well as in Emerging Markets, where sales volumes are rising.

Consumer Health research and development activities focus on constantly improving tried and proven formulations consistent with the needs of consumers. At the same time, the division is further developing its established brand-name products by making them simpler to use and by offering accompanying services. Consumer Health products include Bion®, Nasivin®, Femibion®, Seven Seas®, Sangobion®, Cebion®, Sedalmerck® and Kytta®.

Performance Materials

Merck is the undisputed market and technology leader in liquid crystals, which are primarily used in televisions and mobile communication applications. We are also one of the leading suppliers of functional and decorative effect pigments. Our high-tech materials and solutions are used by customers from the consumer electronics, lighting, printing technology, plastics applications, and cosmetics industries. Within Performance Materials, Merck is also focusing on the growth dynamics of emerging markets.

Liquid Crystals

In addition to developing new liquid crystal mixtures and individual LC substances to further develop products for television and mobile applications, the Liquid Crystals business unit is also focusing on materials that will enable information to be presented in true 3D, using technologies such as holographic displays. The division is furthermore working on the development of technologies for liquid crystal displays that will provide a realistic 3D viewing experience without the glasses required by current 3D televisions. In 2013, Merck developed an initial prototype of this new generation of televisions. All research and development activities pertaining to the liquid crystals of tomorrow have been consolidated under the LC2021 initiative.

Merck is also developing liquid crystals for entirely new applications. Liquid crystals can be used in items such as smart windows to regulate the transmission of light and heat through building facades. Merck is working together with architects and glass manufacturers on the windows of the future. Besides remote control features, liquid crystals provide flexibility in selecting the color as well as integrating windows into existing facades, and they also help save energy. Whether installing windows in new buildings or replacing old windows, liquid crystals offer a sustainable, innovative solution for the future.

OLEDs

Organic light-emitting diodes (OLEDs) are used in innovative lighting applications and display technologies. They provide brilliant colors and sharp images from any viewing angle; they have a long lifespan and are highly energy efficient. In addition, OLEDs enable round or flexible displays, making them perfect for use in the latest technical applications. One such example is the smartwatch, a wristwatch that provides additional computer functionality along with Internet access.

The Merck product line for these types of applications is called livilux®. Merck has developed a strong portfolio of worldwide patents, based on more than ten years of experience.
Development partnerships with customers are a way of testing new technologies and making them market-ready. For instance, with printer manufacturer Seiko Epson, the Performance Materials division has co-developed a technology that can be used to print OLED displays. While Merck contributed its expertise in vacuum research and ink development to the collaboration, Seiko Epson contributed its expertise in print heads featuring micro piezo inkjet technology. This jointly developed technology offers the advantage of lower costs and higher material efficiency since, in contrast to vapor-deposited OLED displays, printed OLED displays are produced at room temperature in a non-toxic atmosphere. In addition, this technique only deposits material in the areas where diodes are actually located.

High-quality pigments and functional materials
This broad term stands for high-quality decorative effect pigments and functional materials used in applications such as laser marking, conductive coatings, and heat-reflective glazing for greenhouses.

The Meoxal® brand is the latest development in effect pigments. These pigments captivate with their brilliant color saturation and exceptional performance, thanks to their innovative layer technology and the use of aluminum flakes as substrate. They are highly suitable for a multitude of high-performance applications, especially for automotive and plastic coatings. The first pigments in the new brand family – Meoxal® Wahiba Orange and Taklamakan Gold – were launched in the second quarter of 2013. The first examples of their practical application were showcased at the 2013 International Motor Show (IAA) in Frankfurt am Main.

The portfolio also includes cosmetic actives. For instance, 2013 saw the launch of RonaCare® Poppy SE, the innovative skin-firming product made from natural poppy seed extract. Besides skin-firming properties, skin protection and color adaptation are also topics of focus. Sun-tanned skin remains an ideal of beauty in western societies. To meet this need, Merck has developed RonaCare® Bronzyl™, which stimulates the production of melanin, the skin’s natural tanning process. The opposite effect can be achieved with RonaCare® Pristine Bright™. This product supports a light skin tone, which is highly esteemed particularly in Asian cultures.
Merck Millipore

Within the Merck Millipore division, we are working with our customers to develop innovative solutions for the research, development and production of biopharmaceuticals and biotech processes worldwide.

Lab Solutions

In 2013, the Lab Solutions business unit developed the EZ-product family. It comprises the EZ-Fit™ Manifold, the EZ-Pak® Dispenser Curve, the EZ-Stream™ Pump, and the EZ-Fluo® Rapid Detection System. The aim of these products is to streamline the bioburden analysis workflow. The EZ-Fit™ Manifold makes laboratory filtration easier thanks to its unique design that permits assembly and disassembly without tools, access to all internal areas for easy cleaning, and a low profile to increase operator comfort. Different filtration heads, all with quick-fit connections, make the manifold compatible with disposable filtration devices, stainless steel and glass funnels. The EZ-Pak® Dispenser Curve provides high-speed sterile membrane dispensing with no-touch operation. With the efficient EZ-Stream™ Pump, filtered fluids flow directly through the pump to waste, eliminating the need for intermediate waste containers. The pump is designed for quiet operation, and the vacuum level is compliant with regulatory standards. The EZ-product family is complemented by the EZ-Fluo™ Rapid Detection System, an easy-to-use, non-destructive, fluorescent staining-based system for rapid detection and quantification of microbial contamination in filterable samples.

Process Solutions

The Process Solutions business unit is also continuously working to develop new products. For instance, Clarisolve® Depth Filters, used in cell culture processing, were launched in September 2013. Their greater volumetric capacity and reduced turbidity over currently available depth filters significantly improve the clarification of pretreated feed streams. In addition, the Clarisolve® system does not require a secondary stage of clarification, while eliminating the need for centrifugation and reducing the pre-use flushing volume by up to 93%. This lowers the environmental burden and helps customers to improve overall process economics. In December 2013, Clarisolve® Depth Filters received an Innovation Award from "Pharmaceutical Manufacturing Magazine", a U.S. trade publication.

Bioscience

The Bioscience business unit is a prime example of innovation. For instance, Merck Millipore has developed, among others, the Muse™ Cell Analyzer, which is one of the world’s leading analytical devices. The Muse™ Cell Analyzer provides real-time, multidimensional information on cell populations. This semistationary flow cytometer enables faster, more accurate decision-making based on greater insight into cell health. As a result, the speed and efficiency of cell analysis are enhanced. In 2013, the Muse™ Cell Analyzer was presented with the renowned silver R&D Magazine 100 Award (Stevie Award), as well as the Good Design Award of the Chicago Athenaeum: Museum of Architecture and Design.
Collaborations: Efficiency and innovation through partnerships

It is not always possible to precisely plan the process of researching and developing new products and solutions. Nevertheless, we aim to improve the efficiency of our R&D activities in this respect, which is why we are constantly enhancing our organization and also engaging in new types of collaborative partnerships.

Through our collaboration activities, we constantly maintain contact with leading scientists at universities and institutes worldwide. For example, Merck is a partner in the Industrial Liaison Program of the Massachusetts Institute of Technology (MIT) in the United States, and we cooperate with the University of Heidelberg. In addition, we collaborate within the scope of initiatives and joint projects funded, for instance, by the European Union or German federal ministries.

Further collaborations formed in 2013:

→ In April 2013, Merck inaugurated its “New Business R&D and Application Lab” in Taiwan. The aim of the laboratory is to work with customers locally to develop materials and first-rate services for the development of OLED panels, LED lighting, 3D technology and flexible displays. This will make it possible to considerably shorten new product development lead times.

→ In May 2013, Merck announced the launch of a project sponsored by the German Federal Ministry of Education and Research (BMBF) to develop high-efficiency cobalt-based dye-sensitized solar cells. Merck, the consortium leader, is participating in the research project together with 3GSolar from Jerusalem, Israel, and Color Synthesis Solutions Ltd. (CSS) from Manchester, United Kingdom. The partners to the project are pursuing the goal of significantly increasing the efficiency and stability of dye-sensitized solar cells.

→ In July 2013, Merck entered into a partnership with the Kymeta Corporation, a company headquartered in the United States. Kymeta is developing ultra-thin antennae for satellite communication that are based on liquid crystal technology. Liquid crystals allow these antennae to be made in such a way that they can someday be used for satellite communication in moving objects such as cars, planes, and trains.

→ In November 2013, Merck announced the start of the POPUP research project funded by the German Federal Ministry of Education and Research (BMBF). This aims to help achieve the breakthrough of organic photovoltaics (OPV). The research consortium coordinated by Merck consists of ten technology leaders working in various areas of OPV. The objectives of POPUP are to develop significantly more efficient and stable OPV materials for cost-effective industrial printing and coating processes.
In December 2013, Merck joined forces with market-leading partners from the automobile industry to launch a project sponsored by the German Federal Ministry of Education and Research (BMBF). This initiative aims to develop liquid crystal-based headlight systems with components that can be selectively turned on or off to provide optimal illumination, for instance during complex traffic situations.

**MS Ventures** is a strategic corporate venture capital fund that makes early-stage investments in innovative biotech firms. The investments focus on Merck Serono’s fields of research and therapy. The fund was set up in 2009. In order for Merck Serono to be able to invest more in early innovation, in 2013 the size of MS Ventures was increased to €100 million. In addition, MS Ventures also manages the €10 million MS Israel Bioincubator Fund as well as spin-off companies funded through the €30 million Entrepreneur Partnership Program.

**Open Innovation:** In 2013, a total of 30 students from around the world participated for the third time in the one-week Merck Serono Innovation Cup. The winning team developed a convincing business plan for a new approach to enhance the efficacy of cancer vaccines. Internal R&D experts are currently looking at ways to advance the idea. Apart from competitions, Merck also offers attractive open innovation opportunities to talented future scientists, for example via the University of Heidelberg and MIT in the United States.
Merck Shares

At a glance

In 2013, the Merck share price rose by more than 30%, thus outperforming the DAX® by five percentage points. Merck shares were six percentage points stronger than the relevant pharmaceutical industry index and also outperformed the relevant chemical industry index by nearly 17 percentage points. Reaching an annual high of €130.50 at the beginning of December 2013, Merck shares also hit a new all-time high, closing not far from this level at €130.25 at the end of December 2013.

The average daily trading volume decreased by 25%, from around 300,000 in 2012 to more than 230,000 shares in 2013. The North America region continued to dominate with around 43% of shares in free float, slightly down compared to 51% in 2012. By investor type, GARP (growth at reasonable price) and value investors dominated, as in 2012. At the end of 2013, the top five investors held around 28% of the free float*.

Share price development from January 1, 2013 to December 31, 2013

Source: Bloomberg (closing rates)

*Relative to the Group’s net shareholding
### Share data

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend</td>
<td>€ 1.90</td>
<td>€ 1.70</td>
</tr>
<tr>
<td>Share price high</td>
<td>€ 130.50</td>
<td>€ 106.55</td>
</tr>
<tr>
<td>Share price low</td>
<td>€ 97.06</td>
<td>€ 72.37</td>
</tr>
<tr>
<td>Year-end share price</td>
<td>€ 130.25</td>
<td>€ 99.83</td>
</tr>
<tr>
<td>Daily average number of Merck shares traded</td>
<td>in units 234,308</td>
<td>310,608</td>
</tr>
<tr>
<td>Market capitalization (at year-end)</td>
<td>€ million 28,315</td>
<td>21,702</td>
</tr>
<tr>
<td>Market value of authorized shares (at year-end)</td>
<td>€ million 8,417</td>
<td>6,451</td>
</tr>
</tbody>
</table>

1 Share-price relevant figures relate to the closing price in XETRA® trading on the Frankfurt Stock Exchange  
2 Based on the floor trading systems of all German exchanges and the regulated market on XETRA®  
3 Based on the theoretical number of shares (217.4 million)  
4 Based on the number of shares in free float (64.6 million)  
Source: Bloomberg, Thomson

### Identified investors by region as of December 2013

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>43%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>18%</td>
</tr>
<tr>
<td>German Retail/Undisclosed</td>
<td>10%</td>
</tr>
<tr>
<td>Germany</td>
<td>11%</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>14%</td>
</tr>
<tr>
<td>Rest of World</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: King Worldwide (as of December 2013)  
Total number of shares outstanding: 64,621,126

### Identified investors by type as of December 2013

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GARP (growth at reasonable price)</td>
<td>36%</td>
</tr>
<tr>
<td>Value</td>
<td>25%</td>
</tr>
<tr>
<td>Growth</td>
<td>13%</td>
</tr>
<tr>
<td>Index</td>
<td>15%</td>
</tr>
<tr>
<td>Hedge</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: King Worldwide (as of December 2013)
The year 2013 was marked by a strengthening in advanced economies and a slowdown of growth in emerging markets. However, emerging markets continued to account for the bulk of global growth. According to projections by the International Monetary Fund (IMF), global gross domestic product (GDP) increased by 2.9% in 2013. While advanced economies only generated an increase of 1.2%, the GDP of emerging economies and developing countries grew by 4.5%.

The GDP of the United States, the world’s largest economy, grew by 1.6% in 2013, a lower rate than expected a year ago. Growth in the United States was hampered by the fiscal consolidation and conflicts over the increasing debt ceiling. For the eurozone, the IMF noted a decline in gross domestic product by 0.4%. While the southern European countries still struggled, the core economies showed signs of recovery. Spurred by fiscal policy changes, Japan also showed signs of economic recovery.

The overall global trends and increased weight of emerging markets are supporting the development at Merck, with the Emerging Markets region contributing around three-quarters of total organic sales growth in 2013.

Pharmaceutical market

IMS Health, a provider of market information for the health care industry, reported a 2.9% increase in pharmaceutical market sales in 2013. This growth was driven by emerging economies; among others the Chinese pharmaceutical market grew by 14.5% and the Latin American market grew by 10.8%. By contrast, due to continued cost-containment measures and patent expiries, the U.S. and EU markets declined slightly. Remarkably, the global market for multiple sclerosis treatments, which includes Merck Serono’s top-selling product Rebif®, grew by 10%, which was significantly above the market average, among others spurred by recent launches of new products according to research by Evaluate Pharma.

The pharmaceutical research firm Nicholas Hall reported that the over-the-counter (OTC) drug market grew by 4.7% in the year 2013. The growth was driven by Latin America and Asia, while Europe, where the Consumer Health division generates the largest share of its sales, grew by 3.7% in 2013.

Markets for high-tech materials

With its Liquid crystals business Merck is the leading supplier of LC mixtures to the display industry, which experienced a sluggish year in 2013 after years of significant growth. The market analysis provided by Display Search came to the conclusion that only a slight increase of 1.4% in the annual area of flat panel display shipments in 2013 occurred. Notably, with more than 90% of the total market, LC remains the dominant display technology with TV display size as the major growth driver.
Cosmetics and automotive coatings represent major markets for Merck’s Pigments business. The German Automotive Industry Association (VDA) reported a positive development for global sales of passenger cars, which exceeded expectations and grew by 5% in 2013. The growth was driven by the U.S. (+7%) and China (+21%) with China becoming the world’s largest market for passenger cars, while markets in Japan and western Europe slightly declined.

Life science market

Within the life science sector, the Merck Millipore division is a leading supplier of products and services which are used in the research, development and production of biotech and pharmaceutical drugs as well as general laboratory applications.

The market researchers from Frost & Sullivan reported modest growth of 1.2% for the global laboratory products market in 2013, below last year’s expectations. Significant differences in growth between regions existed: Markets in Europe (+0.1%) and the United States (+0.3%) remain challenging due to uncertain economic conditions and due to budget sequestration measures in the academic and governmental sectors in the United States. Emerging economies and developing countries grew significantly faster, however, with approximately 11% of the global market volume remaining relatively small in size.

Dependent on the sales and R&D spending of pharmaceutical companies, the market for Process Solutions suffered from a 1.5% decline in industry R&D spending in 2013, as reported by Evaluate Pharma. At the same time, the market was positively influenced by pharmaceutical sales, which grew by 2.9% in 2013.
At the beginning of 2013 we forecast moderate organic sales growth for the Merck Group driven by the good performance of the Merck Serono and Merck Millipore divisions. As we continued to focus on the implementation of our "Fit for 2018" transformation and growth program, we expected EBITDA pre one-time items to increase further as a result of realized net savings. We forecast a high free cash flow and expected bigger cash-outs for the restructuring cost, while for business free cash flow, Merck’s third financial key performance indicator, we expected a moderate decrease compared to 2012, as we had already delivered major working capital reductions in 2012 and as we planned an increase in investments in property, plant and equipment in 2013.

Based on the successful acceleration of our transformation process, which led to faster implementation of the cost-savings initiatives, we were able to announce in spring 2013 that we would deliver our mid-term financial targets for 2014 one year earlier than originally expected. The good operational development of our Consumer Health and Performance Materials divisions further contributed to this, which led to the fact that we further upgraded our view on the financial performance of Merck with the announcement of our third-quarter results.

When assessing the results of 2013 versus the original projections, it can be stated that we have achieved our strategic objectives of the "Fit for 2018" transformation and growth program to realize efficiencies and to deliver organic growth of the business in 2013. Merck’s actual business figures for 2013 confirmed our forecast. As forecast in the Annual Report for 2012, we achieved organic sales growth of 4.2% and we increased our EBITDA pre one-time items by € 288 million. Thereby, the Merck Serono and Merck Millipore divisions developed positively in line with the expected development. Sales and EBITDA pre one-time items of the Consumer Health division increased more than expected due to the strong development of core brands and the substantial progress in driving the turnaround of the business. A favorable Liquid Crystals mix and leaner Pigments & Cosmetics organization led to higher EBITDA pre one-time items of the Performance Materials division. Driven by the significant increase of EBITDA pre one-time items and further reduction of working capital, we exceeded our expectations and delivered business free cash flow at the previous year’s level for the Merck Group as well as the Merck Serono and Performance Materials divisions.

Review of forecast against actual business developments
Review of forecast against actual business developments in 2013

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Merck Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>10,740.8</td>
<td>moderate organic growth</td>
<td>€ 10.7 – 10.9 billion</td>
<td>10,700.1</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>2,964.9</td>
<td>increase</td>
<td>€ 3.1 – 3.2 billion</td>
<td>3,253.3</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>2,969.3</td>
<td>moderate decrease</td>
<td>–</td>
<td>2,960.0</td>
</tr>
<tr>
<td><strong>Merck Serono</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>5,995.8</td>
<td>moderate organic growth</td>
<td>€ 1.9 – 2.0 billion</td>
<td>5,953.6</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>1,824.7</td>
<td>improvement</td>
<td>€ 70 – 75 million</td>
<td>1,955.0</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>1,880.2</td>
<td>moderate decrease</td>
<td>–</td>
<td>1,875.7</td>
</tr>
<tr>
<td><strong>Consumer Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>472.6</td>
<td>stable</td>
<td>stable</td>
<td>476.9</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>66.8</td>
<td>slight increase</td>
<td>€ 70 – 75 million</td>
<td>72.5</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>88.8</td>
<td>moderate decrease</td>
<td>–</td>
<td>83.9</td>
</tr>
<tr>
<td><strong>Performance Materials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>1,674.2</td>
<td>slight organic decline</td>
<td>stable</td>
<td>1,642.1</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>741.9</td>
<td>remain on high level</td>
<td>€ 700 – 740 million</td>
<td>779.7</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>798.1</td>
<td>moderate decrease</td>
<td>–</td>
<td>787.8</td>
</tr>
<tr>
<td><strong>Merck Millipore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>2,598.2</td>
<td>moderate organic growth</td>
<td>€ 620 – 640 million</td>
<td>2,627.5</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>614.4</td>
<td>growth in line with sales</td>
<td>€ 620 – 640 million</td>
<td>642.8</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>511.3</td>
<td>moderate decrease</td>
<td>–</td>
<td>493.8</td>
</tr>
<tr>
<td><strong>Corporate and Other</strong></td>
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<td></td>
<td></td>
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<tr>
<td>EBITDA pre one-time items</td>
<td>–282.9</td>
<td>improvement</td>
<td>€ –210 million</td>
<td>–196.7</td>
</tr>
</tbody>
</table>

1 The actual figures for 2012 have been adjusted. More information can be found in Note (52) of the consolidated financial statements.
Course of business and economic position
Merck Group

Overview of 2013

→ Sales stable – solid organic growth of 4.2% almost fully offsets negative foreign exchange effects of –4.7%
→ Accelerated implementation of efficiency measures within the scope of the “Fit for 2018” transformation and growth program
→ EBITDA pre one-time items increased by 10% to around € 3.25 billion – Key drivers are the positive business performance of all four divisions and the successful implementation of restructuring measures
→ Earnings per share pre one-time items up 15% to € 8.78
→ Business free cash flow again reaches the high previous year’s level of around € 3.0 billion
→ Net financial debt lowered considerably to € 0.3 billion as of December 31, 2013
→ Merck’s long-term credit ratings upgraded to “A” (Standard & Poor’s) and “A3” (Moody’s)

Merck Group | Key figures

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>11,095.1</td>
<td>11,172.9</td>
<td>–0.7</td>
</tr>
<tr>
<td>Sales</td>
<td>10,700.1</td>
<td>10,740.8</td>
<td>–0.4</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>1,610.8</td>
<td>963.6</td>
<td>67.2</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>15.1</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>3,069.2</td>
<td>2,360.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>28.7</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>3,253.3</td>
<td>2,964.9</td>
<td>9.7</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>30.4</td>
<td>27.6</td>
<td></td>
</tr>
<tr>
<td>Earnings per share pre one-time items (€)</td>
<td>8.78</td>
<td>7.61</td>
<td>15.4</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>2,960.0</td>
<td>2,969.3</td>
<td>–0.3</td>
</tr>
</tbody>
</table>

Development of total revenues and sales as well as results of operations

In 2013, Merck performed well in a challenging market environment. Despite adverse exchange rate movements, strong earnings improvements were achieved, thanks mainly to the accelerated implementation of the efficiency measures within the scope of the “Fit for 2018” transformation and growth program. In 2013, total revenues of the Merck Group declined slightly by –0.7% to € 11,095 million (2012: € 11,173 million). Organic growth increased total revenues by 3.8%. Negative foreign exchange effects lowered total revenues by –4.6%. Apart from the negative exchange rate movements of Latin American currencies and the U.S. dollar, this decline was mainly due to the exchange rate development of the Japanese yen. Acquisitions contributed 0.1% to the increase. Royalty, license and commission income, which is disclosed as part of total revenues, decreased by –8.6% to € 395 million (2012: € 432 million). This was mainly the result of the expiration of two license agreements in the Merck Serono division.
Sales (total revenues less royalty, license and commission income) saw solid organic growth of 4.2% in 2013 but the increase was outweighed by foreign exchange effects of –4.7%. Acquisitions increased sales by 0.1%. Overall, sales decreased slightly by € 41 million to € 10,700 million in 2013 (2012: € 10,741 million).

The development of sales in the individual quarters in comparison with 2012 as well as the respective organic growth rates are presented in the following table:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2013 (€ million)</th>
<th>2012 (€ million)</th>
<th>Organic Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>2,660</td>
<td>2,564</td>
<td>5.0%</td>
</tr>
<tr>
<td>Q2</td>
<td>2,744</td>
<td>2,743</td>
<td>3.3%</td>
</tr>
<tr>
<td>Q3</td>
<td>2,722</td>
<td>2,659</td>
<td>4.7%</td>
</tr>
<tr>
<td>Q4</td>
<td>2,712</td>
<td>2,637</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

As regards the distribution of sales across the four operating divisions of the Merck Group, no significant changes occurred in 2013 compared with 2012. Merck Serono once again generated 56% of Group sales, remaining the largest division in terms of sales. Merck Millipore and Performance Materials followed, contributing 25% (2012: 24%) and 15% (2012: 16%) to Group sales, respectively. As in 2012, the Consumer Health division accounted for 4% of Group sales.

<table>
<thead>
<tr>
<th>Division</th>
<th>2013 (€ million)</th>
<th>% of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck Serono</td>
<td>5,953.6</td>
<td>56%</td>
</tr>
<tr>
<td>Consumer Health</td>
<td>476.9</td>
<td>4%</td>
</tr>
<tr>
<td>Performance Materials</td>
<td>1,642.1</td>
<td>15%</td>
</tr>
<tr>
<td>Merck Millipore</td>
<td>2,627.5</td>
<td>25%</td>
</tr>
</tbody>
</table>
All four divisions of the Merck Group posted organic sales increases with growth rates between 3.0% and 5.6% as well as negative exchange rate effects of around –5% in each division. Achieving organic sales growth of 3.9%, which corresponded to an absolute increase of €235 million, Merck Serono made the strongest contribution to organic sales growth, followed by Merck Millipore with organic sales growth of €142 million and a growth rate of 5.5%, as well as Performance Materials with €51 million, or 3.0%. With an organic sales growth rate of 5.6%, the Consumer Health division reported the highest percentage increase, corresponding to an absolute sales increase of €26 million.

From a regional perspective, the dynamic business performance in the Emerging Markets region, which encompasses Latin America and Asia with the exception of Japan, contributed first and foremost to the organic growth of the Merck Group. At 9.3%, which corresponded to an absolute organic sales increase of €347 million, the region delivered very strong organic growth, which was primarily driven by the Merck Serono division. Including currency headwinds of –7.1%, Group sales in the Emerging Markets region totaled €3,796 million (2012: €3,712 million). In 2013, the region thus increased its contribution to Group sales by two percentage points to 36%.
In Europe, organic sales growth of 1.4% was partially cancelled out by negative foreign exchange effects of –0.7%. Acquisitions contributed 0.3% to the increase in sales. Overall, sales in Europe increased slightly by 1.1% to € 3,985 million (2012: € 3,943 million). Europe's percentage contribution to Group sales thus remained unchanged at 37%.

The North America region posted sales amounting to € 2,078 million. (2012: € 2,128 million), which represents a year-on-year decrease of –2.4%. With a slight organic increase in sales of 0.6% coupled with negative exchange rate effects of –3.0%, North America’s contribution to Group sales was 19% (2012: 20%). Higher demand from customers of the Process Solutions and Lab Solutions business units of the Merck Millipore division made up for the slight organic sales decline incurred by Merck Serono in the region.

The Rest of World region, i.e. Japan, Africa and Australia/Oceania, generated € 842 million (2012: € 958 million) or 8% of Group sales (2012: 9%). The decline in sales was largely the outcome of a substantial foreign exchange impact of –16.0% mainly attributable to the Japanese yen. Organic growth of 3.9% in this region was primarily generated by the Merck Serono division.

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>Sales</th>
<th>Organic growth</th>
<th>Exchange rate effects</th>
<th>Acquisitions/divestments</th>
<th>Total change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>3,984.6</td>
<td>1.4</td>
<td>–0.7</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td>North America</td>
<td>2,078.0</td>
<td>0.6</td>
<td>–3.0</td>
<td>–</td>
<td>–2.4</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>3,795.6</td>
<td>9.3</td>
<td>–7.1</td>
<td>–</td>
<td>2.2</td>
</tr>
<tr>
<td>Rest of World</td>
<td>841.9</td>
<td>3.9</td>
<td>–16.0</td>
<td>–</td>
<td>–12.1</td>
</tr>
<tr>
<td>Merck Group</td>
<td>10,700.1</td>
<td>4.2</td>
<td>–4.7</td>
<td>0.1</td>
<td>–0.4</td>
</tr>
</tbody>
</table>

Cost of sales of the Merck Group fell by –5.2% to € 2,993 million (2012: € 3,158 million). Despite lower royalty, license and commission income as well as negative foreign exchange effects, gross profit increased by 1.1% to € 8,103 million (2012: € 8,015 million). Gross margin, i.e. gross profit as a percentage of sales, grew by around one percentage point to 75.7% (2012: 74.6%). This improvement was primarily due to efficiency increases in connection with the “Fit for 2018” transformation and growth program as well as to a more favorable product mix, especially in the Liquid Crystals business unit.

Group marketing and selling expenses declined by –3.5% to € 2,326 million in 2013 (2012: € 2,411 million). Foreign exchange effects, yet also the faster achievement of the savings targets as part of the “Fit for 2018” program initiated in 2012 were primarily responsible for this. The decline in marketing and selling costs was mainly attributable to the Merck Serono division. Consequently, for the Merck Group the proportion of these expenses to sales declined to 21.7% (2012: 22.4%). Administration expenses of the Merck Group increased slightly to € 562 million (2012: € 552 million).
Royalty, license and commission expenses amounted to € 567 million in 2013 (2012: € 580 million), declining by –2.2%, which was largely the result of lower Rebif® co-marketing expenses in the United States.

In 2013, other operating expenses (net) declined by € –408 million to € 718 million (2012: € 1,126 million). This sharp drop in the net expense balance primarily reflects the level of one-time items recorded here. During 2013, one-time items, including impairments, fell by € -277 million to € 387 million (2012: € 664 million). In connection with “Fit for 2018”, € 166 million consisting of restructuring charges of € 130 million and impairments of € 36 million were incurred in 2013. In 2012, one-time expenses amounting € 538 million consisting of restructuring charges of € 504 million and impairments of € 34 million were recorded in this context. In 2013, other operating expenses included an impairment of € 127 million on the intangible asset for Humira® in the Merck Serono division which was classified as a one-time item. The impairment loss resulted from an out-of-court settlement with AbbVie Biotechnology Ltd., Bermudas, and Abbott GmbH & Co. KG, Germany (together referred to as “AbbVie”). Under this settlement, Merck will receive no further royalty payments for this product from AbbVie as of the second half of 2014. Further reasons for the decline in other operating expenses included lower litigation expenses and impairments on receivables as well as gains from operational currency hedges. A detailed presentation of the development of other operating expenses and income can be found in the consolidated financial statements under Note [28].

Research and development (R&D) expenses decreased slightly by –0.5% compared to 2012, amounting to € 1,504 million (2012: € 1,511 million) and thus continued to represent 14.1% of sales. As in 2012, 79% of Group research and development expenses were attributable to the Merck Serono division. The Merck Millipore division accounted for 11%, the second-highest share of Group research and development expenses.

Amortization of intangible assets, which resulted primarily from the purchase price allocations for the acquisitions of Serono SA and the Millipore Corporation, decreased by –6.7% to € 813 million (2012: € 872 million). The decline was mainly due to the expiration of the amortization periods for the two intangible assets Avonex® and Enbrel®, which were acquired within the scope of the Serono SA acquisition.
In 2013, the Merck Group delivered a significant increase in the operating result (EBIT), which soared by 67.2% to €1,611 million (2012: €964 million), as well as in EBITDA (operating result before depreciation and amortization), which rose by 30.0% to €3,069 million (2012: €2,360 million). This was due on the one hand to the good performance of operating business and on the other hand to the sharp decline in the very high level of one-time items incurred in 2012. Adjusted for one-time expenses (excluding impairments) totaling €184 million (2012: €605 million), EBITDA pre one-time items, the key financial indicator used to steer operating business, grew 9.7% to €3,253 million (2012: €2,965 million). The resulting EBITDA pre margin thus increased from 27.6% to 30.4%. The profitability improvement of nearly three percentage points stemmed mainly from the organic sales growth achieved in 2013 as well as strict cost management. Above all, the faster implementation of the efficiency measures within the scope of the “Fit for 2018” transformation and growth program had a positive effect on profitability.

The development of EBITDA pre one-time items in the individual quarters in comparison with 2012 is presented in the following table:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>EBITDA pre one-time items and change by quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>€801 million (18.8%)</td>
</tr>
<tr>
<td>Q2</td>
<td>€826 million (10.7%)</td>
</tr>
<tr>
<td>Q3</td>
<td>€831 million (10.1%)</td>
</tr>
<tr>
<td>Q4</td>
<td>€795 million (0.7%)</td>
</tr>
</tbody>
</table>

All divisions contributed to the increase in EBITDA pre one-time items and the EBITDA pre margin. With an improvement of €130 million in EBITDA pre to €1,955 million, Merck Serono achieved the strongest absolute increase of all the operating divisions. Consequently, at 57% (2012: 56%) the division’s contribution to EBITDA pre was the highest among all the operating divisions (excluding the decline in Group EBITDA pre by €-197 million due to Corporate and Other). Contributing 23% of EBITDA pre as in 2012, the Performance Materials division reported EBITDA pre one-time items of €780 million (2012: €742 million). Owing to its good business performance, the division increased this key indicator by €38 million or 5.1%. At 18%,
Merck Millipore’s percentage share of EBITDA pre one-time items declined slightly (2012: 19%, excluding Corporate and Other), although this division also posted earnings growth of 4.6% or €28 million. With EBITDA pre one-time items of €72 million (2012: €67 million), the Consumer Health division once again contributed 2% to the EBITDA pre one-time items of all operating divisions.

<table>
<thead>
<tr>
<th>EBITDA pre one-time items by division – 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million/in %</td>
</tr>
<tr>
<td>1 Merck Serono 1,955.0 57%</td>
</tr>
<tr>
<td>2 Consumer Health 72.5 2%</td>
</tr>
<tr>
<td>3 Performance Materials 779.7 23%</td>
</tr>
<tr>
<td>4 Merck Millipore 642.8 18%</td>
</tr>
</tbody>
</table>

Not presented: Decline in Group EBITDA pre one-time items by €–197 million due to Corporate and Other

The financial result of the Group improved by 12.7% to €–222 million (2012: €–255 million). This mainly reflects the lower interest expense on borrowed capital following the sharp drop in net financial debt as well as the decline in net interest expense for pension provisions. More information on the financial result can be found in the consolidated financial statements under Note [31].

Income taxes amounted to €–180 million (2012: €–130 million) and led to a tax ratio of 12.9% (2012: 18.3%). The low tax ratio in 2013 resulted mainly from one-time deferred tax income owing to changes in the applicable tax rates. More information on income taxes can be found in the consolidated financial statements under Note [32].

Owing to this development of expenses and income, profit after tax more than doubled, totaling €1,209 million (2012: €579 million). Net income, i.e. profit after tax attributable to Merck shareholders, for 2013 was €1,202 million (2012: €567 million), yielding earnings per share of €5.53 (2012: €2.61). Adjusted for one-time items, earning per share (EPS adjusted by net of tax effect of one-time items and amortization of purchased intangible assets) increased by 15.4% to €8.78 (2012: €7.61).
Net assets and financial position

Merck Group | Balance sheet structure

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ million</td>
<td>in %</td>
<td>€ million</td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>980.8</td>
<td>729.7</td>
<td>251.1</td>
</tr>
<tr>
<td>Current financial assets</td>
<td>2,410.5</td>
<td>1,797.9</td>
<td>612.6</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>2,021.4</td>
<td>2,114.6</td>
<td>–93.2</td>
</tr>
<tr>
<td>Inventories</td>
<td>1,474.2</td>
<td>1,533.9</td>
<td>–59.7</td>
</tr>
<tr>
<td>Other current assets</td>
<td>497.6</td>
<td>450.0</td>
<td>47.6</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>13,434.1</td>
<td>64.5</td>
<td>–1,583.1</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible assets</td>
<td>9,867.2</td>
<td>10,944.5</td>
<td>–1,077.3</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>2,647.2</td>
<td>2,953.6</td>
<td>–306.4</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>919.7</td>
<td>1,119.1</td>
<td>–199.4</td>
</tr>
<tr>
<td>Total assets</td>
<td>20,818.6</td>
<td>100.0</td>
<td>–824.7</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>3,898.8</td>
<td>18.7</td>
<td>–662.8</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current financial liabilities</td>
<td>440.4</td>
<td>1,091.4</td>
<td>–651.0</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>1,364.1</td>
<td>1,288.3</td>
<td>75.8</td>
</tr>
<tr>
<td>Current provisions</td>
<td>494.7</td>
<td>684.3</td>
<td>–189.6</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>1,599.6</td>
<td>1,497.6</td>
<td>102.0</td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>5,850.6</td>
<td>28.1</td>
<td>–816.3</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current financial liabilities</td>
<td>3,257.5</td>
<td>3,362.1</td>
<td>–104.6</td>
</tr>
<tr>
<td>Non-current provisions</td>
<td>1,011.1</td>
<td>891.7</td>
<td>119.4</td>
</tr>
<tr>
<td>Provisions for pensions and other post-employment benefits</td>
<td>910.9</td>
<td>1,211.7</td>
<td>–300.8</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>671.1</td>
<td>1,201.4</td>
<td>–530.3</td>
</tr>
<tr>
<td>Equity</td>
<td>11,069.2</td>
<td>53.2</td>
<td>654.4</td>
</tr>
<tr>
<td>Total liabilities and equity</td>
<td>20,818.6</td>
<td>100.0</td>
<td>–824.7</td>
</tr>
</tbody>
</table>
The total assets of the Merck Group declined in 2013 by € –825 million or –3.8% to € 20,819 million (2012: € 21,643 million). This decline was due, among other things, to the repayment of a bond with a nominal volume of € 750 million as well as the cash transfer of € 200 million to plan assets to cover pension obligations in Germany. Total assets decreased in 2013 because plan assets were netted with pension obligations. Exchange rate changes also lowered total assets. Whereas current assets increased by € 758 million, non-current assets declined by € –1,583 million. The increase in current assets resulted mainly from the development of cash and cash equivalents, which increased by € 251 million, as well as of liquid financial assets, which increased by € 613 million, despite the bond repayment and the cash transfer to the plan assets. This reflects the excellent liquidity position of the Merck Group. The decline in non-current assets was due mainly to depreciation and amortization of intangible assets as well as property, plant and equipment. Goodwill included in intangible assets amounted to € 4,583 million (2012: € 4,696 million) and was thus approximately at the same level as in 2012. The ratio of non-current assets to total assets (asset ratio) declined from 69.4% to 64.5%.

On the liabilities side, equity increased by € 654 million to € 11,069 million (2012: € 10,415 million). The main driver of this increase was profit after tax of € 1,209 million in 2013. The increase was counterbalanced mainly by negative exchange rate changes as well as dividend payments for 2012. As of December 31, 2013, the equity ratio increased by more than five percentage points to 53.2% (2012: 48.1%). Owing to the increase in equity on the one hand and the decrease in non-current assets on the other hand, asset coverage as of December 31, 2013 improved significantly to 82.4% (2012: 69.4%). Asset coverage indicates to what extent non-current assets are covered by equity. Current liabilities declined mainly owing to the repayment of the bond with a nominal volume of € 750 million that matured in 2013. The decline in non-current liabilities was largely the result of lower pension provisions as well as the decline in deferred tax liabilities. The sum of current and non-current liabilities declined by € –1,479 million to € 9,749 million from € 11,228 million. This excellent decline of –13.2% strengthened the consolidated balance sheet further. The financing structure (ratio of current liabilities to total liabilities) also improved. As of December 31, 2013, short-term liabilities were 40.0% of total liabilities (2012: 40.6%).
Financial liabilities were reduced by €–756 million in 2013, amounting to €3,698 million as of December 31, 2013 (2012: €4,454 million). Owing to the increase in cash and cash equivalents, the decrease in net financial debt was even greater than that of financial liabilities. In 2013, net financial debt decreased by €–1,619 million or –84.1% to €307 million (2012: €1,926 million). Expected future cash flows such as repayments and interest from financial liabilities are presented in the consolidated financial statements under Note [57] "Management of financial risks".

### Merck Group | Net financial debt

<table>
<thead>
<tr>
<th></th>
<th>Book value Dec. 31, 2013</th>
<th>Book value Dec. 31, 2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eurobond 2009/2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €750 million)</td>
<td>Sep. 2013</td>
<td>4.875</td>
<td>No</td>
</tr>
<tr>
<td>Eurobond 2010/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €1,350 million)</td>
<td>March 2015</td>
<td>3.375</td>
<td>No</td>
</tr>
<tr>
<td>Eurobond 2009/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €100 million)</td>
<td>Dec. 2015</td>
<td>3.615</td>
<td>No</td>
</tr>
<tr>
<td>Eurobond 2009/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €250 million)</td>
<td>June 2016</td>
<td>5.875</td>
<td>No</td>
</tr>
<tr>
<td>Eurobond 2009/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €60 million)</td>
<td>Nov. 2016</td>
<td>4.000</td>
<td>No</td>
</tr>
<tr>
<td>Eurobond 2009/2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €70 million)</td>
<td>Dec. 2019</td>
<td>4.250</td>
<td>No</td>
</tr>
<tr>
<td>Eurobond 2010/2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Nominal volume €1,350 million)</td>
<td>March 2020</td>
<td>4.500</td>
<td>No</td>
</tr>
<tr>
<td>Total bonds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other financial liabilities</td>
<td>No</td>
<td>555.2</td>
<td>558.5</td>
</tr>
<tr>
<td>Total financial liabilities</td>
<td></td>
<td>3,697.9</td>
<td>4,453.5</td>
</tr>
<tr>
<td>less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td></td>
<td>980.8</td>
<td>729.7</td>
</tr>
<tr>
<td>Current financial assets</td>
<td></td>
<td>2,410.5</td>
<td>1,797.9</td>
</tr>
<tr>
<td>Net financial debt</td>
<td></td>
<td>306.6</td>
<td>1,925.9</td>
</tr>
</tbody>
</table>
Following a sharp reduction in working capital in 2012, a further substantial decrease of –9.7% to €2,132 million was achieved in 2013. Consequently, working capital decreased to 19.9% of sales (2012: 22.0%).

Business free cash flow of the Merck Group in 2013 amounted to €2,960 million (2012: €2,969 million), thus remaining at the previous year’s high level. The composition of this figure is presented in the Group management report under “Internal Management System”.

The distribution of business free cash flow across the individual quarters as well as the percentage changes in comparison with 2012 were as follows:

<table>
<thead>
<tr>
<th>Merck Group</th>
<th>Business free cash flow and change by quarter¹</th>
<th>€ million/change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>593</td>
<td>–6.6%</td>
</tr>
<tr>
<td>Q2</td>
<td>724</td>
<td>8.0%</td>
</tr>
<tr>
<td>Q3</td>
<td>853</td>
<td>4.2%</td>
</tr>
<tr>
<td>Q4</td>
<td>789</td>
<td>–7.6%</td>
</tr>
</tbody>
</table>

¹Quarterly breakdown unaudited

<table>
<thead>
<tr>
<th>Merck Group</th>
<th>Working capital</th>
<th>€ million</th>
<th>Dec. 31, 2013</th>
<th>Dec. 31, 2012</th>
<th>Change in € million</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts receivable</td>
<td>2,021.4</td>
<td>2,114.6</td>
<td>–93.2</td>
<td>–4.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>1,474.2</td>
<td>1,533.9</td>
<td>–59.7</td>
<td>–3.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>–1,364.1</td>
<td>–1,288.3</td>
<td>–75.8</td>
<td>–5.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working capital</td>
<td>2,131.5</td>
<td>2,360.2</td>
<td>–228.7</td>
<td>–9.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of sales (last 12 months)</td>
<td>19.9%</td>
<td>22.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Following a sharp reduction in working capital in 2012, a further substantial decrease of –9.7% to €2,132 million was achieved in 2013. Consequently, working capital decreased to 19.9% of sales (2012: 22.0%).

Business free cash flow of the Merck Group in 2013 amounted to €2,960 million (2012: €2,969 million), thus remaining at the previous year’s high level. The composition of this figure is presented in the Group management report under “Internal Management System”.

The distribution of business free cash flow across the individual quarters as well as the percentage changes in comparison with 2012 were as follows:
The Merck Serono division generated business free cash flow amounting to €1,876 million (2012: €1,880 million), thus raising its contribution to Group business free cash flow to 58% (2012: 57%). This excludes the decline of €–281 million due to Corporate and Other. Performance Materials contributed €788 million (2012: €798 million) to Group business free cash flow, which once again represented 24%. Taken together, the Merck Millipore and Consumer Health divisions contributed 18% (2012: 19%) to Group business free cash flow.

Investments in property, plant, equipment and software included in the calculation of business free cash flow as well as advance payments for intangible assets increased in 2013 by 21.7% to a total of €446 million (2012: €367 million). In 2013, investments in property, plant and equipment included in this figure amounted to €408 million (2012: €329 million), corresponding to an increase of €79 million or 24.0% compared with 2012. Investments in property, plant and equipment, which totaled €408 million, included €248 million in numerous smaller investment projects (total volume of each project below €2 million). At the beginning of 2013, Merck acquired six office buildings in Darmstadt, which the company had previously leased. The buildings also house the headquarters of the Merck Serono division. In addition, major projects to expand production were also approved in 2013. Special mention is made here of an investment by Merck Serono in a new production plant in China with a total volume of €80 million. The new facility will become Merck Serono’s second-largest pharmaceutical production site worldwide. Commercial production is scheduled to begin in 2017. In December 2013, work began on a major investment project for the Allergopharma unit in Reinbek near Hamburg. The estimated investment of around €40 million will, in particular, serve to expand production capacities for products to diagnose and treat type 1 allergies. Within the scope of “Fit for 2018”, extensive investment projects to raise efficiency, particularly in the Merck Millipore and Performance Materials divisions were approved that relate to sites in Germany, the United States as well as Ireland and Spain.

In 2013, the two credit rating agencies Moody’s and Standard & Poor’s upgraded Merck’s credit rating as an issuer of long-term and senior unsecured bonds. Moody’s raised Merck’s long-term issuer rating to “A3” with stable outlook, and in May 2013, Standard & Poor’s upgraded Merck’s rating to “A” with stable outlook. An overview of the development of Merck’s rating for the period from 2008 to 2013 is presented in the Report on Risks and Opportunities. Both ratings ensure that Merck will be able to benefit in the future from attractive financing terms.

Due to the reduction in debt as well as strong cash flows from operating activities, the ratio of net financial debt to cash flows from operating activities decreased from 0.8 on December 31, 2012 to 0.1 on December 31, 2013.
In September 2013, Merck increased the volume of its Debt Issuance Program to €15 billion. The Debt Issuance Program forms the contractual basis for issuing bonds, thus giving the company flexibility in its issuing activities. It therefore represents an important element of the Group’s financing activities.

The development of key balance sheet figures is as follows:

<table>
<thead>
<tr>
<th>Merck Group</th>
<th>Key balance sheet figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity ratio</td>
<td>Equity</td>
</tr>
<tr>
<td></td>
<td>Total assets</td>
</tr>
<tr>
<td>Asset ratio</td>
<td>Non-current assets</td>
</tr>
<tr>
<td></td>
<td>Total assets</td>
</tr>
<tr>
<td>Asset coverage</td>
<td>Equity</td>
</tr>
<tr>
<td></td>
<td>Non-current assets</td>
</tr>
<tr>
<td>Finance structure</td>
<td>Current liabilities</td>
</tr>
<tr>
<td></td>
<td>Liabilities (total)</td>
</tr>
</tbody>
</table>

**Overall assessment of business performance and economic situation**

In 2013, Merck once again performed well in a market environment that remained challenging. The robust organic growth achieved almost fully offset the adverse exchange rate effects that impacted the development of total revenues and sales. The good operating business performance along with the accelerated implementation of the efficiency measures within the scope of the “Fit for 2018” transformation and growth program led to a strong increase in EBITDA pre. The EBITDA pre margin was 30.4% (2012: 27.6%), reflecting the high profitability of the Merck Group. In 2013, the business free cash flow of the Merck Group amounted to €2,960 million (2012: €2,969 million), thus reaching the previous year’s excellent level.

The solid accounting and finance policy of the Merck Group is reflected by the very good key balance sheet figures, which improved even further in 2013 owing to good business performance. For example, the strong equity ratio of 48.1% in 2012 rose further to 53.2%. Following the sharp reduction in working capital in 2012, another notable improvement was achieved in 2013. Taken together with the successful performance of operating business, this led to a high inflow of funds. Among other things, this cash flow was used to repay financial liabilities, making it possible to lower net financial debt to €307 million (2012: €1,926 million).

Against the backdrop of the superb liquidity position and financing base as well as the excellent business development, the economic position of the Merck Group can be assessed positively overall. It offers an ideal starting basis for the further execution of the successfully commenced “Fit for 2018” transformation and growth program, the focus of which is now shifting to organic and inorganic growth. In this connection, special reference is made to the announcement made in December 2013 of the intention to acquire AZ Electronic Materials S.A., Luxembourg, in 2014.
Overview of 2013

→ Solid organic sales growth unable to prevent slight decline in sales due to currency headwinds
→ Rebif® achieves stable full-year organic growth despite increasing competition
→ Erbitux® delivers good organic growth thanks to registration in Japan in head and neck cancer indication as well as healthy demand in Emerging Markets
→ Restructuring program within the scope of “Fit for 2018” successfully continued in 2013
→ Significant increase of 2.4 percentage points in EBITDA pre margin despite negative foreign exchange effects and lower royalty income

Merck Serono | Key figures

<table>
<thead>
<tr>
<th></th>
<th>€ million</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2012</td>
<td>Change in %</td>
</tr>
<tr>
<td>Total revenues</td>
<td>6,325.8</td>
<td>6,405.2</td>
<td>–1.2</td>
</tr>
<tr>
<td>Sales</td>
<td>5,953.6</td>
<td>5,995.8</td>
<td>–0.7</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>893.0</td>
<td>547.7</td>
<td>63.1</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>15.0</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>1,886.5</td>
<td>1,480.0</td>
<td>27.5</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>31.7</td>
<td>24.7</td>
<td></td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>1,955.0</td>
<td>1,824.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>32.8</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>1,875.7</td>
<td>1,880.2</td>
<td>–0.2</td>
</tr>
</tbody>
</table>

Development of total revenues and sales as well as results of operations

In 2013, total revenues of the Merck Serono division grew organically by 3.2%. Owing to negative foreign exchange effects amounting to –4.5%, total revenues of the division nevertheless declined by –1.2% to €6,326 million (2012: €6,405 million). Despite solid organic growth of 3.9%, sales decreased by –0.7% to €5,954 million (2012: €5,996 million). This slight decline was attributable to strong currency headwinds of –4.6%, which stemmed mainly from Latin American currencies, the Japanese yen as well as the U.S. dollar. All the division’s franchises contributed to the organic sales growth, with the highest absolute organic sales increases coming from the General Medicine franchise (including CardioMetabolic Care) and the oncology drug Erbitux®. In geographic terms, the Emerging Markets region and Japan fueled organic sales growth in 2013, posting increases of 12.2% and 16.9%, respectively. Royalty, license and commission income declined by –9.1% to €372 million (2012: €409 million). This was primarily the result of the termination of two licensing agreements owing to the expiration of a patent for Avonex® (as of May 2013) and one for Enbrel® (as of November 2013) and adverse foreign exchange effects. The agreement reached with Bristol-Myers Squibb on the co-promotion of Glucophage in China started to positively impact commission income in the third quarter of 2013.
The development of sales in the individual quarters in comparison with 2012 as well as the respective organic growth rates are presented in the following table:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Sales (€ million)</th>
<th>Organic Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>1,454</td>
<td>4.0%</td>
</tr>
<tr>
<td>Q2</td>
<td>1,531</td>
<td>2.1%</td>
</tr>
<tr>
<td>Q3</td>
<td>1,483</td>
<td>5.2%</td>
</tr>
<tr>
<td>Q4</td>
<td>1,486</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

*Quarterly breakdown unaudited*

From a geographic perspective, organic sales growth in the Merck Serono division was bolstered by the Emerging Markets and Rest of World regions, which generated sales increases of 12.2% and 9.9%, respectively.

Europe, Merck’s top-selling region, posted a slight organic decline in sales of –0.1%, with a negative foreign exchange impact of –0.6%, thereby generating sales of €2,482 million (2012: €2,502 million). While Russia, Turkey, Germany, and eastern European countries in particular delivered organic sales growth, France as well as countries in southern Europe suffered sales declines. Overall, the division continued to feel the
negative effects of the budget constraints in several European countries as well as the resulting health care cost containment measures. At 42%, Europe continued to account for the largest proportion of the division’s sales, as in 2012.

Emerging Markets, the division’s second-largest region by sales, posted very strong organic growth of 12.2%, which was offset by a negative foreign exchange impact of –9.5%. Consequently, sales increased from €1,737 million to €1,785 million. All of Merck Serono’s franchises in this region contributed to organic growth. The main drivers were products to treat cardiovascular diseases, diabetes and thyroid disorders. The share of divisional sales generated by the Emerging Markets region increased by one percentage point to 30%, which reflects the growing importance of this region to Merck Serono.

In 2013, sales in North America amounted to €1,280 million, declining by –4.1% compared to 2012 (€1,335 million), which comprised an organic sales decrease of –1.1% and unfavorable foreign exchange effects of –3.0%. This slight organic decline is primarily attributable to the Fertility franchise. The North America region contributed 21% (2012: 22%) to the division’s sales.

In the Rest of World region, sales grew organically by 9.9%, mainly powered by the good sales performance of Erbitux® and strong demand for products from the Fertility franchise. Including strong currency headwinds of –13.4%, which were primarily attributable to the Japanese yen, sales totaled €407 million (2012: €422 million). Once again, the Rest of World region contributed 7% to divisional sales.

In 2013, sales of the key products of the Merck Serono division developed as follows:

Merck’s top-selling drug Rebif®, which is used to treat relapsing forms of multiple sclerosis, achieved slight organic growth of 1.4% in 2013. This was especially attributable to its good performance in the first half of 2013, during which sales grew organically by 4.7%. Yet in the second half of 2013, Rebif® suffered an organic decline in sales, primarily in North America. Taking adverse foreign exchange effects of –2.9% into account, Rebif® sales decreased by –1.5% to €1,865 million (2012: €1,893 million). In North America, which generated 51% of Rebif® sales (2012: 52%) and is the largest market for this product, sales saw slight organic growth of 0.3% to €956 million (2012: €983 million). In particular, this was the result of a tougher competitive environment in North America in the second half of 2013, where lower sales volumes could not be completely compensated for by price increases. In Europe, sales of Rebif® grew organically by 2.8%, totaling
€ 745 million (2012: € 731 million). Including a foreign exchange impact of –0.9%, sales grew by a total of 1.9%. Consequently, Europe accounted for 40% of total Rebif® sales (2012: 39%). The Emerging Markets and the Rest of World regions posted organic increases in Rebif® sales of 1.1% and 5.4%, respectively, with adverse foreign exchange effects of –11.5% and –5.8%, respectively. Overall, this resulted in Emerging Markets sales declining by –10.4% to € 130 million (2012: € 145 million). In the Rest of World region, Merck Serono generated sales of € 34 million, as in 2012. At around 9%, the combined contribution of these two regions to Rebif® sales remained comparatively low.

In 2013, sales of the oncology drug Erbitux® showed organic growth of 5.9%. Including a foreign exchange impact of –6.5%, which primarily stemmed from the Japanese yen and Latin American currencies, sales declined slightly by € −5 million to € 882 million (2012: € 887 million). Merck Serono achieved organic growth in all three regions in which it holds the marketing rights. In 2013, 57% of Erbitux® sales were generated in Europe (2012: 56%), making it the top-selling region for this product. Erbitux® sales in this region grew organically by 0.5% in 2013, thereby totaling € 501 million, which includes adverse foreign exchange effects of –0.4% (2012: € 500 million). Despite strong organic growth of 8.9%, sales in Emerging Markets declined slightly to € 232 million (2012: € 236 million) as a result of currency headwinds of –10.3%. This region contributed 26% (2012: 27%) of total Erbitux® sales. At 18.8%, the Rest of World region generated the strongest organic growth for this oncology drug, delivering sales of € 149 million (2012: € 152 million). Posting organic growth of 22.1%, business in Japan performed well. However, this was canceled out by adverse exchange rate effects stemming from the weak Japanese yen against the euro. In particular, the approval of Erbitux® in head and neck cancer as well as higher market shares in other Erbitux® indications were the main drivers of the increase in organic sales.

| Merck Serono | Sales and organic growth of Rebif® and Erbitux® by region – 2013 |
|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|             | Rebif®          |                 |                 |                 |                 |
|             | Total           | Europe          | North America   | Emerging Markets| Rest of World   |
| € million   | 1,864.7         | 744.8           | 956.1           | 130.2           | 33.6            |
| Organic growth in % | 1.4 | 2.8 | 0.3 | 1.1 | 5.4 |
| % of sales  | 100 | 40 | 51 | 7 | 2 |
|             | Erbitux®        |                 |                 |                 |                 |
| € million   | 882.2           | 500.9           | –               | 232.4           | 148.9           |
| Organic growth in % | 5.9 | 0.5 | – | 8.9 | 18.8 |
| % of sales  | 100 | 57 | – | 26 | 17 |
Sales of Gonal-f®, the leading recombinant hormone used in the treatment of infertility, totaled €586 million in 2013 (2012: €612 million). This decline was largely attributable to adverse foreign exchange effects of –3.5%. Gonal-f® sales saw a slight organic decrease of –0.7%. Strong organic growth in the Emerging Markets and Rest of World regions could not offset the weaker sales performance in Europe and North America, where the correlation between economic developments and the demand for fertility products remained visible. However, other products from the Fertility franchise achieved strong organic growth, thereby generating total organic sales growth of 2.4% for the franchise and, including adverse foreign exchange effects, sales of €807 million (2012: €817 million).

At €394 million (2012: €399 million), sales by the Endocrinology franchise, which mainly consists of products to treat metabolic and growth disorders, decreased slightly by –1.3% since organic growth of 2.1% was more than offset by an adverse foreign exchange impact of –3.4%. Sales of the growth hormone Saizen® saw an organic decline of –1.8% as well as negative foreign exchange effects of –4.0%. As a result, sales declined by a total of –5.8% to €235 million. Merck Serono achieved double-digit organic growth rates with Serostim® for HIV-associated wasting, as well as with Kuvan® for the treatment of hyperphenylalaninemia, a metabolic disorder.
The General Medicine franchise (including CardioMetabolic Care), which commercializes Merck Serono’s products to treat cardiovascular diseases and diabetes, among others, generated organic sales growth of 6.5%. Including negative foreign exchange effects, sales amounted to €2,005 million (2012: €1,998 million).

Overall, sales volumes in this business franchise developed well. This reflected the performance of the three leading product franchises, namely Glucophage® for the treatment of diabetes, the beta-blocker Concor®, and Merck’s portfolio for the treatment of thyroid disorders, all of which achieved high organic growth rates. However, negative exchange rate effects were registered here as well. Sales of Glucophage®, which grew organically by 4.8% primarily due to sales in the Emerging Markets region, totaled €394 million (2012: €399 million). Thanks mainly to strong demand in Emerging Markets and Europe, Concor® and thyroid products generated organic growth of 11.4% and 21.0%, respectively, posting sales of €401 million (2012: €380 million) and €275 million, respectively (2012: €234 million).

At €1,106 million, the division’s cost of sales declined by –7.3% (2012: €1,193 million), with the decline exceeding the percentage decrease in sales. This was primarily due to higher yields in the manufacture of biotech products as well as strict cost control, which had a positive effect on the division’s gross profit. Overall, however, gross profit improved only slightly by €8 million to €5,220 million (2012: €5,212 million) as it was countered by the €37 million decline in royalty, license and commission income. Accordingly, gross margin (in percent of sales) rose slightly to 87.7% (2012: 86.9%).

Both the resolute implementation of cost reduction measures and currency translation effects lowered the division’s marketing and selling expenses as well as administration expenses. Marketing and selling expenses fell by –6.0% to €1,289 million (2012: €1,371 million) and administration expenses decreased by –2.5% to €211 million (2012: €217 million). In 2013, royalty, license and commission expenses totaled €548 million (2012: €562 million). This slight decline was primarily the result of currency translation effects as well as lower Rebif® co-marketing expenses in the United States. The significant decrease in other operating expenses (net) from €669 million in 2012 to €499 million in 2013 was largely due to the one-time items reported in this line. Whereas in 2012, one-time items (including impairments) amounted to €391 million and were mainly incurred in connection with “Fit for 2018”, one-time items (including impairments) in 2013 were only €258 million. In 2013, other operating expenses included an impairment loss on intangible assets classified as a one-time item, of €127 million, for Humira® in the Merck Serono division. The impairment loss resulted from an out-of-court settlement with AbbVie Biotechnology Ltd., Bermuda, and Abbott GmbH & Co. KG, Germany (together referred to as "AbbVie"). Under this settlement, Merck will receive no further royalty payments for this product from AbbVie as of the second half of 2014.

Research and development expenses were only slightly lower than in 2012, totaling €1,183 million (2012: €1,187 million). The ratio of R&D spending to sales thus remained at a high level of 19.9% (2012: 19.8%). The long-term development of the Merck Serono division and the pipeline continues to be a top priority.

Since the useful lives of the two intangible assets capitalized as part of the Serono SA purchase price allocation, namely Avonex® and Enbrel®, have expired, amortization of intangible assets declined significantly by –9.5% to €597 million (2012: €658 million).
The presented development of income and expenses resulted in a very sharp increase in the division’s operating result (EBIT) in 2013, of 63.1% to €893 million (2012: €548 million). After eliminating depreciation and amortization, and adjusted for one-time effects, EBITDA pre one-time items rose by 7.1% to €1,955 million (2012: €1,825 million), corresponding to a margin of 32.8% of sales (2012: 30.4%).

<table>
<thead>
<tr>
<th>Merck Serono</th>
<th>Reconciliation EBIT to EBITDA pre one-time items</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million</td>
<td>2013</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>893.0</td>
</tr>
<tr>
<td>Depreciation/Amortization/Reversals of impairments</td>
<td>993.5</td>
</tr>
<tr>
<td>EBITDA</td>
<td>1,886.5</td>
</tr>
<tr>
<td>One-time items</td>
<td>68.5</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>1,955.0</td>
</tr>
</tbody>
</table>

The development of EBITDA pre one-time items in the individual quarters in comparison with 2012 is presented in the following table:

<table>
<thead>
<tr>
<th>Merck Serono</th>
<th>EBITDA pre one-time items and change by quarter¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million/change in %</td>
<td>2013</td>
</tr>
<tr>
<td>Q1</td>
<td>403</td>
</tr>
<tr>
<td>Q2</td>
<td>450</td>
</tr>
<tr>
<td>Q3</td>
<td>466</td>
</tr>
<tr>
<td>Q4</td>
<td>506</td>
</tr>
</tbody>
</table>

¹Quarterly breakdown unaudited

2013 2012
Development of business free cash flow

In 2013, the Merck Serono division’s business free cash flow amounted to €1,876 million, which represents only a slight decline compared with the very high level of €1,880 million in 2012. The increase in EBITDA pre one-time items by €130 million, or 7.1%, positively affected the business free cash flow. However, the changes in trade accounts receivable achieved in 2012 could not be reached in 2012. In 2013, receivables declined by only €–43 million, whereas in 2012 this balance sheet item was significantly reduced by €–180 million.

Merck Serono | Business free cash flow

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA pre one-time items</td>
<td>1,955.0</td>
<td>1,824.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Investments in property, plant and equipment, software as well as advance payments for intangible assets</td>
<td>-164.3</td>
<td>-160.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>41.7</td>
<td>35.8</td>
<td>16.3</td>
</tr>
<tr>
<td>Changes in trade accounts receivable</td>
<td>43.3</td>
<td>180.2</td>
<td>-75.9</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>1,875.7</td>
<td>1,880.2</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

The development of business free cash flow in the individual quarters in comparison with 2012 is presented in the following table:

Merck Serono | Business free cash flow and change by quarter

<table>
<thead>
<tr>
<th>€ million/change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>Q1</td>
</tr>
<tr>
<td>Q2</td>
</tr>
<tr>
<td>Q3</td>
</tr>
<tr>
<td>Q4</td>
</tr>
</tbody>
</table>

1Quarterly breakdown unaudited
Overview of 2013


→ Successful turnaround achieved in 2013
→ EBITDA pre one-time items increases by 8.5% to € 72 million following the implementation of efficiency measures
→ EBITDA pre margin moves toward industry average thanks to profitability improvements
→ Solid base for development in future years established

Consumer Health | Key figures

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>479.6</td>
<td>475.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Sales</td>
<td>476.9</td>
<td>472.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>62.2</td>
<td>7.6</td>
<td>–</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>13.0</td>
<td>1.6</td>
<td>–</td>
</tr>
<tr>
<td>EBITDA</td>
<td>71.1</td>
<td>29.8</td>
<td>138.6</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>14.9</td>
<td>6.3</td>
<td>–</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>72.5</td>
<td>66.8</td>
<td>8.5</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>15.2</td>
<td>14.1</td>
<td>–</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>83.9</td>
<td>88.8</td>
<td>–5.5</td>
</tr>
</tbody>
</table>

Development of total revenues and sales as well as results of operations

In 2013, the Consumer Health division reported a slight 0.9% increase in sales to € 477 million [2012: € 473 million]. Strong organic growth of 5.6% was countered by a negative foreign exchange impact of –4.7%. Europe and Emerging Markets, the two largest regions in terms of sales, were the main drivers of the strong organic increases and the division’s overall positive development. Four of the eight strategic brands (Cebion®, Sangobion®, Kytta® and Femibion®) delivered double-digit organic growth rates and gained market share in the division’s key regions while the Bion®, Nasivin® and Sedalmerck® brands all posted growth rates in the mid-to-high single digits. The negative foreign exchange impact was broad-based, but particularly strong with respect to Latin American currencies, the British pound, the Indonesian rupiah, and the South African rand.
The development of sales in the individual quarters in comparison with 2012 as well as the respective organic growth rates are presented in the following table:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Consumer Health</th>
<th>Sales and organic growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ million/organic growth in %</td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>0</td>
<td>9.3%</td>
</tr>
<tr>
<td>Q2</td>
<td>–1.0%</td>
<td>116</td>
</tr>
<tr>
<td>Q3</td>
<td>14.6%</td>
<td>121</td>
</tr>
<tr>
<td>Q4</td>
<td>–0.3%</td>
<td>122</td>
</tr>
</tbody>
</table>

Quarterly breakdown unaudited

2013

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Consumer Health</th>
<th>Sales by region – 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ million/% of divisional sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td>Europe</td>
<td>328.1</td>
</tr>
<tr>
<td></td>
<td>North America</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Emerging Markets</td>
<td>131.9</td>
</tr>
<tr>
<td></td>
<td>Rest of World</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

From a geographic perspective, all of the division’s key regions delivered strong organic sales growth while suffering from negative foreign exchange effects. Europe, which accounts for 69% of sales (2012: 67%) and is the division’s largest region, posted organic sales growth of 5.0% lowered by a foreign exchange impact of –0.9%. The resulting 4.1% growth in this region thus generated sales of € 328 million (2012: € 315 million). Notable organic sales increases were achieved particularly in Germany, France and Russia, more than offsetting the weaker performance of the British subsidiary Seven Seas. In Germany, robust demand for Femibion® as well as the market launch of an odorless version of Kytta® had a visibly positive effect. France benefited in particular from the market launch of Bion® Energie Continue as well as from very good demand for cough and cold treatments in early 2013. Russia achieved strong growth with Nasivin® and Femibion®.
In the Emerging Markets region, the division registered strong organic growth of 6.9%, which was mainly attributable to Cebion®, Sangobion®, Bion®3 and Nasivin®. Taking substantial foreign exchange headwinds of -12.3% into account, sales declined overall by -5.3% to €132 million (2012: €139 million). Good organic sales growth was achieved, for example, in India, Indonesia and Brazil. The share of divisional sales accounted for by the Emerging Markets region declined to 28% (2012: 29%), owing to negative foreign exchange effects that stemmed mainly from Latin American currencies.

With organic sales growth of 5.7% and significant currency headwinds of -12.2%, the Rest of World region generated sales of €16 million (2012: €17 million). The proportion of divisional sales accounted for by this region therefore also declined to 3% (2012: 4%).

Cost of sales increased slightly by 1.9%, totaling €161 million in 2013 (2012: €158 million). Gross profit amounted to €318 million (2012: €317 million), remaining at the previous year’s level and leading to a gross margin of 66.7% (2012: 67.0%).

Marketing and selling expenses declined by -2.5% to €213 million (2012: €218 million) since activities directed to consumers, pharmacies and health care professionals were focused on higher-return opportunities. Administration expenses dropped by -8.7% to €18 million (2012: €20 million) and R&D expenses fell by -12.2% to €17 million (2012: €19 million) as the division continued to sharpen the focus of its R&D activities.

The net decline in other operating expenses to €4 million (2012: €46 million) was due mainly to the drop in one-time items to €1 million (2012: €37 million). Furthermore, impairments of property, plant and equipment as well as intangible assets, which totaled €11 million in 2012, did not recur in 2013. The high level of one-time items in 2012 was attributable to the restructuring measures within the scope of the “Fit for 2018” transformation and growth program.

The reported operating result (EBIT) of the Consumer Health division increased by around €54 million to €62 million (2012: €8 million) and EBITDA more than doubled, climbing to €71 million (2012: €30 million). Adjusted for one-time items, EBITDA pre one-time items rose by 8.5% to €72 million, or 15.2% of sales (2012: €67 million or 14.1% of sales).
The implementation of the measures initiated as part of the "Fit for 2018" transformation and growth program as well as better resource allocation improved the division’s cost structure, leading to a visible increase in profitability and the aforementioned organic top-line growth. In particular, the division’s strategic brands, which benefited most from more focused investment in marketing, sales and R&D activities, showed a strong improvement in this respect.

Structural adaptations, for example changes to the product portfolio and the exit from unprofitable markets, also resulted in a more profitable base for the division's business. Consumer Health thus established a good foundation and achieved a high profitability level, which should form a solid starting base for developments in the coming years.

### Consumer Health | Reconciliation EBIT to EBITDA pre one-time items

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result (EBIT)</td>
<td>62.2</td>
<td>7.6</td>
<td>–</td>
</tr>
<tr>
<td>Depreciation/Amortization/Reversals of impairments</td>
<td>8.9</td>
<td>22.2</td>
<td>–59.9</td>
</tr>
<tr>
<td>EBITDA</td>
<td>71.1</td>
<td>29.8</td>
<td>138.6</td>
</tr>
<tr>
<td>One-time items</td>
<td>1.4</td>
<td>37.0</td>
<td>–96.2</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>72.5</td>
<td>66.8</td>
<td>8.5</td>
</tr>
</tbody>
</table>

The development of EBITDA pre one-time items in the individual quarters in comparison with 2012 is presented in the following table:

### Consumer Health | EBITDA pre one-time items and change by quarter

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>9</td>
<td>52.6%</td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>19</td>
<td>3.9%</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>24</td>
<td>25.4%</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>20</td>
<td>–25.1%</td>
<td></td>
</tr>
</tbody>
</table>

1Quarterly breakdown unaudited
Development of business free cash flow

In 2013, business free cash flow of the Consumer Health division declined by € −5 million or −5.5% to € 84 million (2012: € 89 million). This decrease was primarily due to changes in trade accounts receivable. The reduction in this balance sheet item by € −13 million in 2013 compares with an even higher reduction of € −23 million in 2012. The increase in EBITDA pre one-time items mitigated this impact on business free cash flow.

The development of business free cash flow in the individual quarters in comparison with 2012 is presented in the following table:

<table>
<thead>
<tr>
<th>Consumer Health</th>
<th>Business free cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million</td>
<td>2013</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>72.5</td>
</tr>
<tr>
<td>Investments in property, plant and equipment, software as well as advance payments for intangible assets</td>
<td>−4.1</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>2.1</td>
</tr>
<tr>
<td>Changes in trade accounts receivable</td>
<td>13.4</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td><strong>83.9</strong></td>
</tr>
</tbody>
</table>

The development of business free cash flow in the individual quarters in comparison with 2012 is presented in the following table:

<table>
<thead>
<tr>
<th>Consumer Health</th>
<th>Business free cash flow and change by quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million(change in %)</td>
<td>2013</td>
</tr>
<tr>
<td>Q1</td>
<td>7</td>
</tr>
<tr>
<td>Q2</td>
<td>11</td>
</tr>
<tr>
<td>Q3</td>
<td>12</td>
</tr>
<tr>
<td>Q4</td>
<td>40</td>
</tr>
</tbody>
</table>

1Quarterly breakdown unaudited
Performance Materials

Overview of 2013

→ Slight decline in sales due to strong currency headwinds that outweighed organic growth
→ Strong market position of the Liquid Crystals business unit confirmed due to further development of existing products and high degree of innovation
→ Trend toward larger and higher-resolution television displays has a positive impact on the product mix of Liquid Crystals
→ EBITDA pre margin rises sharply by more than three percentage points due to structural improvements in the Pigments & Cosmetics business unit and a favorable product mix in Liquid Crystals

Performance Materials | Key figures

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>1,644.4</td>
<td>1,675.6</td>
<td>–1.9</td>
</tr>
<tr>
<td>Sales</td>
<td>1,642.1</td>
<td>1,674.2</td>
<td>–1.9</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>653.3</td>
<td>609.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>39.8</td>
<td>38.4</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>765.8</td>
<td>734.6</td>
<td>4.3</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>46.6</td>
<td>43.9</td>
<td></td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>779.7</td>
<td>741.9</td>
<td>5.1</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>47.5</td>
<td>44.3</td>
<td></td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>787.8</td>
<td>798.1</td>
<td>–1.3</td>
</tr>
</tbody>
</table>

Development of total revenues and sales as well as results of operations

For the Performance Materials division, 2013 was another very successful year. In comparison with 2012, a record year, sales increased organically by a further 3.0%. Taking into account currency headwinds of –4.9%, divisional sales decreased by –1.9% to € 1,642 million (2012: € 1,674 million), thus remaining at a high level. The adverse foreign exchange impact stemmed mainly from the Japanese yen, the Taiwanese dollar and the U.S. dollar.

The Liquid Crystals business unit, which accounts for more than 70% of divisional sales, increased its high market share, thus defending its market leadership in liquid crystal materials by continuously improving its flagship technologies. The Liquid Crystals business unit benefited from the shift in demand toward technically more complex liquid crystals. These include materials based on polymer-stabilized vertical alignment (PS-VA) technology, which are primarily used in large-sized, high-quality television displays.

In 2013, the Pigments & Cosmetics business unit achieved good organic sales growth thanks to higher demand for decorative pigments, above all the Xirallic® product family, which is used in particular in automotive coatings. The business unit recorded a slight increase in organic sales of functional materials.
The development of sales in the individual quarters in comparison with 2012 as well as the respective organic
growth rates are presented in the following table:

<table>
<thead>
<tr>
<th>Performance Materials</th>
<th>Sales and organic growth by quarter¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million/organic growth in %</td>
<td>Q1</td>
</tr>
<tr>
<td>0</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

¹Quarterly breakdown unaudited

In geographic terms, the Emerging Markets region accounted for 75% (2012: 73%) of sales by the Performance
Materials division. This two percentage-point increase was attributable to good organic sales growth of 4.9%.
The high share of sales generated by this region is due to the concentration of liquid crystal customers in
Asia. Including a negative foreign exchange impact of –3.4%, sales increased by 1.5% to €1,237 million (2012:
€1,218 million).

With sales of €164 million (2012: €160 million), Europe generated 10% (2012: 10%) of divisional sales.
Organic growth of 2.9% was achieved with both decorative pigments and functional materials.

The Rest of World region, which is dominated by Japan, recorded an organic sales decrease of –6.2%.
Along with strong currency headwinds of –18.3%, this resulted in sales of €156 million (2012: €206 million).
The Rest of World region’s share of sales declined from 12% in 2012 to 10% in 2013.
The North America region, where almost all sales are attributable to the Pigments & Cosmetics business unit, contributed 5% to divisional sales (2012: 5%). Including the negative foreign exchange impact, the slight decline in organic sales of –1.6% led to a total decline in sales of –4.4% to € 86 million (2012: € 90 million). The Xirallic® pigments business achieved high organic sales increases that could not compensate, however, for the weak demand for cosmetic active ingredients.

Performance Materials | Sales components by region – 2013

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>Sales</th>
<th>Organic growth</th>
<th>Exchange rate effects</th>
<th>Acquisitions/divestments</th>
<th>Total change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>164.3</td>
<td>2.9</td>
<td>–0.4</td>
<td>–</td>
<td>2.5</td>
</tr>
<tr>
<td>North America</td>
<td>85.6</td>
<td>–1.6</td>
<td>–2.7</td>
<td>–</td>
<td>–4.4</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>1,236.6</td>
<td>4.9</td>
<td>–3.4</td>
<td>–</td>
<td>1.5</td>
</tr>
<tr>
<td>Rest of World</td>
<td>155.6</td>
<td>–6.2</td>
<td>–18.3</td>
<td>–</td>
<td>–24.5</td>
</tr>
<tr>
<td>Performance Materials</td>
<td>1,642.1</td>
<td>3.0</td>
<td>–4.9</td>
<td>–</td>
<td>–1.9</td>
</tr>
</tbody>
</table>

In 2013, the division’s cost of sales decreased by –14% to € 616 million (2012: € 716 million). This decline was primarily attributable to a more favorable product mix in liquid crystal materials as well as to efficiency improvements in the Pigments & Cosmetics business unit achieved within the scope of the “Fit for 2018” transformation and growth program. In comparison with 2012, gross profit thus grew by 7.2% to € 1,028 million (2012: € 959 million). This led to a significantly higher gross margin as a percentage of sales, which rose by more than five percentage points to 62.6% (2012: 57.3%).

Marketing and selling expenses declined slightly by –1.6% to € 141 million (2012: € 143 million), and administration expenses dropped by –10.7% to € 28 million (2012: € 31 million). R&D expenses rose by 4.1% to € 143 million (2012: € 137 million). The Liquid Crystals business unit, which maintained its market position thanks to innovations and the further development of existing technologies, accounted for the vast majority of research and development spending. As a percentage of sales, R&D expenses therefore increased to 8.7% (2012: 8.2%). In 2013, the net rise in other operating expenses to € 48 million (2012: € 32 million) was mainly due to the disposal of intangible assets as well as to an increase in one-time items.

The aforementioned development of income and expenses led to a 7.2% increase in the reported operating result (EBIT) to € 653 million (2012: € 610 million). Without the depreciation and amortization included in EBIT, EBITDA rose by 4.3% to € 766 million (2012: € 735 million). Adjusted for one-time effects, EBITDA before one-time items rose by 5.1% to € 780 million (2012: € 742 million). Despite negative foreign exchange effects,
the division’s profitability, i.e. the EBITDA pre margin, rose to 47.5% of sales (2012: 44.3% of sales). This profitability increase of more than three percentage points was primarily attributable to changes in the product mix of the Liquid Crystals business unit; it was also the result of cost structure improvements in the Pigments & Cosmetics business unit achieved through efficiency measures under the “Fit for 2018” transformation and growth program.

Performance Materials | Reconciliation EBIT to EBITDA pre one-time items

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result (EBIT)</td>
<td>653.3</td>
<td>609.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Depreciation/Amortization/Reversals of impairments</td>
<td>112.5</td>
<td>124.9</td>
<td>−9.9</td>
</tr>
<tr>
<td>EBITDA</td>
<td>765.8</td>
<td>734.6</td>
<td>4.3</td>
</tr>
<tr>
<td>One-time items</td>
<td>13.9</td>
<td>7.3</td>
<td>90.4</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>779.7</td>
<td>741.9</td>
<td>5.1</td>
</tr>
</tbody>
</table>

The development of EBITDA pre one-time items in the individual quarters in comparison with 2012 is presented in the following table:

Performance Materials | EBITDA pre one-time items and change by quarter

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>207</td>
<td>163</td>
</tr>
<tr>
<td>Q2</td>
<td>209</td>
<td>193</td>
</tr>
<tr>
<td>Q3</td>
<td>197</td>
<td>197</td>
</tr>
<tr>
<td>Q4</td>
<td>189</td>
<td>167</td>
</tr>
</tbody>
</table>

1 Quarterly breakdown unaudited
Development of business free cash flow

In 2013, the Performance Materials division generated business free cash flow of €788 million (2012: €798 million). Despite a €38 million increase in EBITDA pre one-time items and the decrease in trade accounts receivable, business free cash flow declined slightly by –1.3% due to higher capital spending and a smaller reduction in working capital. Although the two relevant balance sheet items were further reduced by €–80 million in 2013, this total nevertheless fell short of the exceptionally high reduction of €–114 million achieved in 2012.

Performance Materials | Business free cash flow

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA pre one-time items</td>
<td>779.7</td>
<td>741.9</td>
<td>5.1</td>
</tr>
<tr>
<td>Investments in property, plant and equipment, software as well as advance payments for intangible assets</td>
<td>–71.7</td>
<td>–57.9</td>
<td>23.8</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>37.2</td>
<td>117.9</td>
<td>–68.4</td>
</tr>
<tr>
<td>Changes in trade accounts receivable</td>
<td>42.6</td>
<td>–3.8</td>
<td>–</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>787.8</td>
<td>798.1</td>
<td>–1.3</td>
</tr>
</tbody>
</table>

The development of business free cash flow in the individual quarters in comparison with 2012 is presented in the following table:

Performance Materials | Business free cash flow and change by quarter

<table>
<thead>
<tr>
<th>€ million/change in %</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>183</td>
<td>181</td>
<td>8.5%</td>
</tr>
<tr>
<td>Q2</td>
<td>202</td>
<td>168</td>
<td>21.7%</td>
</tr>
<tr>
<td>Q3</td>
<td>245</td>
<td>220</td>
<td>–10.2%</td>
</tr>
<tr>
<td>Q4</td>
<td>167</td>
<td>204</td>
<td>–18.1%</td>
</tr>
</tbody>
</table>

Quarterly breakdown unaudited
Overview of 2013

- Robust portfolio and solid organic growth counterbalance difficult market environment and negative foreign exchange effects
- All business units contribute to organic growth, especially in Emerging Markets
- Profitability increases by approximately one percentage point owing to strong business performance and strict cost control

Merck Millipore | Key figures

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>2,645.3</td>
<td>2,616.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Sales</td>
<td>2,627.5</td>
<td>2,598.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>262.0</td>
<td>251.7</td>
<td>4.1</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>10.0</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>589.8</td>
<td>560.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>22.4</td>
<td>21.6</td>
<td></td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>642.8</td>
<td>614.4</td>
<td>4.6</td>
</tr>
<tr>
<td>Margin (% of sales)</td>
<td>24.5</td>
<td>23.6</td>
<td></td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>493.8</td>
<td>511.3</td>
<td>-3.4</td>
</tr>
</tbody>
</table>

Development of total revenues and sales as well as results of operations

In 2013, the Merck Millipore division generated strong organic sales growth of 5.5% despite a challenging market environment. Biochrom AG, Berlin, which was acquired in 2012, contributed 0.5% to the increase in sales in 2013. Taking into account a negative foreign exchange impact of –4.8%, divisional sales increased by 1.1% to € 2,628 million (2012: € 2,598 million). Currency headwinds stemmed mainly from the Japanese yen, the U.S. dollar, and the Indian rupee. At € 18 million, the royalty, license and commission income recorded by the Bioscience and Process Solutions business units remained at the previous year’s level.
The development of sales in the individual quarters in comparison with 2012 as well as the respective organic
growth rates are presented in the following table:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Sales (€ million)</th>
<th>Organic Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>5.6%</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>6.7%</td>
<td></td>
</tr>
</tbody>
</table>

Quarterly breakdown unaudited

<table>
<thead>
<tr>
<th>Region</th>
<th>Sales (€ million)</th>
<th>% of Divisional Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>1,010.5</td>
<td>39%</td>
</tr>
<tr>
<td>North America</td>
<td>711.5</td>
<td>27%</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>642.4</td>
<td>24%</td>
</tr>
<tr>
<td>Rest of World</td>
<td>263.1</td>
<td>10%</td>
</tr>
</tbody>
</table>

In 2013, the Merck Millipore division achieved positive organic growth rates in all regions. However, negative
foreign exchange effects were registered in all regions as well.

As the division’s largest geographic market accounting for 39% of divisional sales (2012: 37%), Europe
generated sales of € 1,010 million (2012: € 966 million), representing organic sales growth of 4.2%. The rise
in sales was driven by all three business units: Process Solutions, Lab Solutions and Bioscience.
In North America, sales grew organically by 4.1%, largely offset by negative foreign exchange effects. Reported growth was 1.2%, which represents an increase in sales to €711 million (2012: €703 million). The organic increase in sales in this region mainly came from products from the Process Solutions and Lab Solutions business units, offsetting weaker demand for laboratory materials from the Bioscience business unit.

The Emerging Markets region registered organic sales growth of 10.5% and a negative foreign exchange impact of –6.6%. Including acquisition effects of 0.1%, sales rose to €642 million (2012: €617 million). The strong organic sales development was fueled by good demand for products from all the division's business units. The share of divisional sales generated by the Emerging Markets region remained at the previous year's level of 24%.

As a result of significant currency headwinds of –18.2%, especially relative to the Japanese yen, sales in the Rest of World region declined to €263 million (2012: €312 million). With slight organic growth of 2.4%, this region’s share of divisional sales declined to 10% (2012: 12%).

All three business units contributed to the organic growth of the division in 2013. In particular, Lab Solutions and Process Solutions, the two top-selling business units, generated good growth rates owing to price increases and higher sales volumes. Lab Solutions, which accounted for an unchanged 42% share of divisional sales, delivered good organic sales growth of 5.4% with its broad range of products for researchers and scientific laboratories. However, negative foreign exchange effects of – 5.4% completely canceled out this growth. The business unit’s sales thus remained on par with 2012, amounting to €1,097 million. Organic growth was mainly driven by elevated demand for biomonitoring solutions, particularly from customers in the pharmaceutical industry, as well as by price increases.
The Process Solutions business unit, which markets products and services for the pharmaceutical production value chain, generated organic sales growth of 7.7%, which was the highest rate within the Merck Millipore division. Taking into account a negative foreign exchange effect of –4.1% as well as the increase in sales of 1.1% due to the acquisition of Biochrom AG, sales amounted to €1,096 million in 2013 (2012: €1,046 million). Process Solutions thus accounted for 42% of divisional sales (2012: 40%). The increase was driven by higher demand from the pharmaceutical industry for products used in biopharmaceutical manufacturing, especially in Asia and the United States.

The Bioscience business unit, which primarily markets products and services for pharmaceutical, biotechnology and academic research laboratories, recorded a slight increase in organic sales of 0.3%. Including an adverse foreign exchange impact of –4.8%, sales amounted to €434 million (2012: €455 million). In particular, across-the-board health care spending cuts in the United States softened demand. The share of divisional sales accounted for by Bioscience in 2013 was 16% (2012: 18%).

In 2013, cost of sales amounted to €1,104 million (2012: €1,086 million) and rose by 1.7% compared with 2012. Nevertheless, this yielded a slightly higher gross profit of €1,541 million (2012: €1,531 million). Despite negative foreign exchange effects, gross margin, as a percentage of sales, remained virtually unchanged at 58.6% (2012: 58.9%).

Marketing and selling expenses increased by 1.1% to €683 million (2012: €676 million). In 2013, the division recorded a decline of –2.1% in administration expenses to €99 million (2012: €101 million). The net increase in other operating expenses from €117 million to €121 million was mainly due to one-time items (including impairments) of €70 million (2012: €54 million).

Merck Millipore’s R&D expenses fell as a result of foreign exchange effects, among other things, to €160 million (2012: €166 million). In 2013, the ratio of R&D spending to sales was therefore 6.1% (2012: 6.4%). In order to ensure a steady stream of product innovations, R&D expenses will remain at a high level going forward. The Process Solutions business unit accounts for the vast majority of the R&D budget.
Currency translation effects were mainly responsible for the decline in amortization of intangible assets from € 204 million to € 200 million. Including these effects, the division’s operating result (EBIT) rose by 4.1% to € 262 million (2012: € 252 million). After eliminating depreciation and amortization, EBITDA rose by 5.2% to € 590 million (2012: € 561 million). Adjusted for one-time charges, EBITDA pre rose by 4.6% to € 643 million, or 24.5% of sales (2012: € 614 million, 23.6% of sales). Despite unfavorable foreign exchange developments and the difficult market situation in North America, Merck Millipore increased its EBITDA pre margin, reflecting strong organic growth, a resilient portfolio, and strict cost control.

Merck Millipore | Reconciliation EBIT to EBITDA pre one-time items

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result (EBIT)</td>
<td>262.0</td>
<td>251.7</td>
<td>4.1</td>
</tr>
<tr>
<td>Depreciation/Amortization/Reversals of impairments</td>
<td>327.8</td>
<td>309.2</td>
<td>6.0</td>
</tr>
<tr>
<td>EBITDA</td>
<td>589.8</td>
<td>560.9</td>
<td>5.2</td>
</tr>
<tr>
<td>One-time items</td>
<td>53.0</td>
<td>53.5</td>
<td>-0.9</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>642.8</td>
<td>614.4</td>
<td>4.6</td>
</tr>
</tbody>
</table>

The development of EBITDA pre one-time items in the individual quarters in comparison with 2012 is presented in the following table:

Merck Millipore | EBITDA pre one-time items and change by quarter

<table>
<thead>
<tr>
<th>€ million/change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
</tr>
<tr>
<td>Q2</td>
</tr>
<tr>
<td>Q3</td>
</tr>
<tr>
<td>Q4</td>
</tr>
</tbody>
</table>

1 Quarterly breakdown unaudited
Development of business free cash flow

In 2013, the Merck Millipore division generated business free cash flow of € 494 million (2012: € 511 million). The –3.4% decline was largely due to the change in working capital. Whereas the total decrease of € –15 million in working capital had a positive impact on business free cash flow in 2012, the increase in the relevant balance sheet items by € 27 million in 2013 lowered this key figure accordingly. This effect was partially offset by the increase in EBITDA pre one-time items.

<table>
<thead>
<tr>
<th>Merck Millipore</th>
<th>Business free cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million</td>
<td>2013</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>642.8</td>
</tr>
<tr>
<td>Investments in property, plant and equipment, software as well as advance payments for intangible assets</td>
<td>-121.7</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>-21.3</td>
</tr>
<tr>
<td>Changes in trade accounts receivable</td>
<td>-6.0</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>493.8</td>
</tr>
</tbody>
</table>

The development of business free cash flow in the individual quarters in comparison with 2012 is presented in the following table:

<table>
<thead>
<tr>
<th>Merck Millipore</th>
<th>Business free cash flow and change by quarter†</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ million/ change in %</td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>113</td>
</tr>
<tr>
<td>Q2</td>
<td>157</td>
</tr>
<tr>
<td>Q3</td>
<td>146</td>
</tr>
<tr>
<td>Q4</td>
<td>144</td>
</tr>
</tbody>
</table>

†Quarterly breakdown unaudited
Corporate and Other

Corporate and Other comprises Group administration expenses for Group functions that cannot be directly allocated to the divisions, such as Finance, Procurement, Legal, Communications, and Human Resources. Corporate costs additionally encompass expenses for central, non-allocated IT functions, including expenses related to the expansion and harmonization of IT systems within the Merck Group. Accordingly, Corporate and Other has no sales to report. Gains or losses on currency hedging are also disclosed in Corporate and Other.

In 2013, administration expenses recorded under Corporate and Other increased to €206 million (2012: €183 million). "Other operating income and expenses" showed net expenses of €47 million (2012: €262 million) for Corporate and Other. The sharp decline in net expenses compared with 2012 was mainly attributable to one-time items as well as to the foreign currency result from operating activities. Expenses classified as one-time items amounted to €47 million in 2013 (2012: €162 million). The significant decrease in comparison with 2012 resulted mainly from the reduced restructuring charges for the "Fit for 2018" transformation and growth program as well as from gains/losses from businesses already divested. In 2013, the foreign currency result showed income of €32 million, whereas a loss of €58 million was posted in 2012.


### Corporate and Other | Key figures

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result (EBIT)</td>
<td>–259.7</td>
<td>–453.1</td>
<td>–42.7</td>
</tr>
<tr>
<td>EBITDA</td>
<td>–244.0</td>
<td>–445.1</td>
<td>–45.2</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>–196.7</td>
<td>–282.9</td>
<td>–30.5</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>–281.2</td>
<td>–309.1</td>
<td>–9.0</td>
</tr>
</tbody>
</table>
Report on Risks and Opportunities

Risks and opportunities are inherent to entrepreneurial activity. Merck has put systems and processes in place to identify risks at an early stage and to counteract them by taking appropriate action. At Merck, opportunity management is an integral component of internal decision-making processes such as short- and medium-term operational planning and intra-year business plans. We are pursuing the goal of exploiting opportunities and thereby enhancing the benefit to the Merck Group.

Risk and opportunity management

Merck is part of a complex, global business world and is exposed to a multitude of external and internal influences. Every business decision is therefore based on the associated risks and opportunities.

In our internal risk reporting, risks are defined as possible future events or developments that could lead to a negative deviation from our (financial) targets. In parallel, opportunities are defined as possible events or developments that imply a positive deviation from our planned (financial) targets.

Risk management process

The objective of our risk management activities is to recognize, assess and manage risks early on and to implement appropriate measures to minimize them. The responsibilities, objectives and process of risk management are described in our internal risk management guideline. Group Controlling & Risk Management forms the organizational framework for risk management and reports directly to the Group Chief Financial Officer.

Within the context of the Group-wide risk management process, the division heads, managing directors of Merck subsidiaries and heads of Group functions are specified as employees with responsibility for risk. The group of consolidated companies for risk reporting purposes is the same as the group of consolidated companies for the consolidated financial statements. Every six months, the risk owners assess their risk status and report their entire risk portfolio to Risk Management. In addition to presenting risks, this also includes reporting on measures to minimize risk. Merck uses special risk management software in the context of these activities.

Risks are assessed in the internal risk management process on the basis of their possible negative effect on the forecast financial targets and their anticipated probability of occurrence. If risk-mitigating measures can be taken, their impact on risk is also assessed. The residual risk after the implementation of mitigation measures is presented in the internal risk report as net risk. The planned timeframe for implementation and the assumed mitigation effect are tracked by Group Risk Management.

Group Risk Management uses the information reported to determine the current risk portfolio for the Merck Group, presenting this in a report to the Executive Board, the Supervisory Board and the Finance Committee with detailed explanations twice per year. Furthermore, significant changes in the assessment of the risks already known and new significant risks can be reported at any time and are communicated to the corporate bodies on an ad hoc basis.

For the standard process, a lower limit for risk reporting is set at a value of €5 million, and for the ad hoc process at a value of €25 million. Risks below these limits are managed independently in the units. The relevant timeframe for internal risk reporting is five years. The effect of risks is presented as an annual value.
The assessment of the risks presented relate to December 31, 2013. There were no relevant changes after the end of the reporting period that would have necessitated an amended presentation of the risk situation of the Group.

Within the scope of audits, Group Internal Auditing regularly reviews the performance of risk management processes within the units and, at the same time, the communication of relevant risks from the operating units to Group Risk Management.

In addition to these bottom-up processes, Group Risk Management addresses potential risks and risk areas on a top-down basis. This process is based on independent analyses of both internal and external information.

**Opportunity management process**

The risk management system described concentrates on business risks, and not on opportunities at the same time. The Merck Group’s opportunity management process is integrated into our internal controlling processes and carried out in the operating units on the basis of the Group strategy. The divisions analyze and assess potential market opportunities as part of strategy and planning processes. In this connection, investment opportunities are examined and prioritized in terms of their potential value proposition to Merck in order to ensure an effective allocation of resources. Thereby, Merck selectively invests in growth markets to leverage the opportunities of dynamic development and customer proximity at a local level.

If the occurrence of the identified opportunities is rated as likely, they are incorporated into the business plans and the medium-term forecasts. Trends going beyond this or events that could lead to a positive development in the net assets, financial position and results of operations are presented in the following report as opportunities. These could result in a positive deviation from forecasts and Merck’s medium-term prospects.

**Risk and opportunity assessment**

**Risks**

The significance of risks to Merck is calculated on the basis of their possible negative impact on the forecast financial targets in conjunction with the probability of occurrence of the respective risk. In line with these two factors, risks are classified as “high”, “medium” or “low”.

The underlying scales for measuring these factors are shown below:

<table>
<thead>
<tr>
<th>Probability of occurrence</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20%</td>
<td>Unlikely</td>
</tr>
<tr>
<td>20 – 50%</td>
<td>Possible</td>
</tr>
<tr>
<td>51 – 80%</td>
<td>Likely</td>
</tr>
<tr>
<td>&gt; 80%</td>
<td>Very likely</td>
</tr>
</tbody>
</table>
## Degree of impact

<table>
<thead>
<tr>
<th>Degree of impact</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; € 50 million</td>
<td>Critical negative impact on the net assets, financial position and results of operations</td>
</tr>
<tr>
<td>€ 20 – 50 million</td>
<td>Substantial negative impact on the net assets, financial position and results of operations</td>
</tr>
<tr>
<td>€ 5 – 20 million</td>
<td>Moderate negative impact on the net assets, financial position and results of operations</td>
</tr>
<tr>
<td>&lt; € 5 million</td>
<td>Insignificant negative impact on the net assets, financial position and results of operations</td>
</tr>
</tbody>
</table>

In our process, individual risks are quantified as specifically as possible and the probability of occurrence of the risk is estimated. The combination of the two factors results in the risk matrix below, which shows the individual risks and their significance to Merck.

## Risk matrix

<table>
<thead>
<tr>
<th>Impact</th>
<th>Probability of occurrence</th>
<th>&gt; 20%</th>
<th>20 – 50%</th>
<th>51 – 80%</th>
<th>&gt; 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; € 50 million</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>€ 20 – 50 million</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>€ 5 – 20 million</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>&lt; € 5 million</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

## Opportunities

Opportunities are assessed in their respective specific business environment. Marketing measures for operational planning are usually quantified in relation to sales and EBITDA. Net present value, the return on capital employed (ROCE) and the amortization period of the investment are used to assess and prioritize investment opportunities. Similarly, scenarios are frequently set up to simulate the influence of possible fluctuations and changes in the respective factors on results. There is no overarching, systematic classification of the probability of occurrence and impact of opportunities.
Internal control system for the Group accounting process

The objective of the internal control system for the accounting process is to implement controls that provide assurance that the financial statements are prepared in compliance with the relevant accounting laws and standards. It covers measures designed to ensure the complete, correct and timely transfer and presentation of information that is relevant to the preparation of the consolidated financial statements and the management report of the Merck Group.

The control system is subject to continuous further development and is an integral component of the accounting and financial reporting processes in all relevant local units and Merck Group functions.

With respect to the accounting process, the measures of the internal control system are intended to minimize the risk of a material misstatement in the consolidated accounting process of the Merck Group.

Key tools

The internal control system is geared to ensuring the accuracy of the consolidated accounting process and the implementation of internal controls for the preparation of compliant financial statements with reasonable assurance. The Group Accounting function centrally steers the preparation of the consolidated financial statements of Merck KGaA as the parent company of the Merck Group. This Group function defines the reporting requirements that all Merck subsidiaries must meet as a minimum requirement. At the same time, this function steers and monitors the scheduling and process-related requirements of the consolidated financial statements. The Group-wide accounting guidelines form the basis for the preparation of the statutory financial statements of the parent company as well as of the German and foreign subsidiaries; the guidelines are adapted to reflect changes in the financial regulatory environment and are updated in accordance with internal reporting requirements. One of the requirements of the Group-wide guidelines is to present internal business processes as the basis for proper settlement of intercompany balances. Additional controls have been implemented in the consolidation process.

Group Accounting also ensures the timely central management of changes to the equity holding structure and correspondingly adapts the Merck Group’s scope of consolidation. The individual companies have a local internal control system. Where financial processes are handled by a Shared Service Center, the internal control system of the Shared Service Center is additionally applied. They ensure that accounting complies with IFRS (International Financial Reporting Standards) and with the Merck Group accounting guidelines.

Group Accounting provides support to the local contacts and ensures a consistently high quality of reporting throughout the entire reporting process.

The accounting process is designed at all levels to ensure a clearly defined segregation of duties and assignment of responsibilities to the units involved in the accounting process at all times within the scope of continuous dual control.

For the assessment of balance sheet items, Group Accounting closely cooperates with Group Risk Management in order to correctly present potential balance sheet risks. For special issues, such as the measurement of intangible assets and pension obligations, external experts are additionally involved where necessary. For the Group accounting process, Merck uses in most countries a standard SAP software tool. Via a detailed authorization concept to limit user rights on a need-to-have basis, and in line with the principles of the separation of duties, the system contains both single-entity reporting and the consolidated financial statements.
The effectiveness of Merck’s internal control system with regard to accounting and the compliance of financial reporting by the individual companies is confirmed by both the local managing director and the local chief financial officer when they sign the single-entity reporting. All the structures and processes described are subject to regular review by Group Internal Auditing based on an annual audit plan set out by the Executive Board. The results of these audits are dealt with by the Executive Board, the Supervisory Board and the Finance Committee.

The internal control system at Merck makes it possible to lower the risk of material misstatements in accounting to a minimum. However, no internal control system – regardless of its design – can entirely rule out a residual risk.

Business-related risks and opportunities

Merck integrates its risk management into its ongoing business planning processes. Identified risks and opportunities are taken into account in internal planning provided that it can be assumed that these risks and opportunities are probable in the planning period. The risks and opportunities presented in the risk and opportunities report below are those possible future events that could respectively lead to a further negative or positive deviation from planning.

Potential extraordinary negative developments, such as changes in customer demand or new political conditions, are identified, described and assessed as part of the internal risk management process. We can therefore take countermeasures early on if any events lead to deviations from planning. Risks in connection with investment decisions are mitigated by the use of detailed guidelines.

During the planning processes, potential business opportunities are also analyzed and discussed alongside risks. As part of its Group strategy, Merck actively pursues the opportunities that arise, investing selectively in, for example, growth markets. Furthermore, deviations from the macroeconomic conditions assumed in planning, such as economic growth and expected segment-specific developments, e.g. change in the demand for key products of the Merck Serono division, can lead to positive deviations from the planned results.

Political and regulatory risks and opportunities

As a global company, Merck faces political and regulatory changes in a large number of countries and markets.

Risk of more restrictive regulatory requirements regarding drug pricing, reimbursement and approval

In its Pharmaceuticals business, Merck faced increasingly restrictive requirements in 2013 in terms of drug pricing, reimbursement and approval, a trend familiar in many countries. These requirements can negatively influence the profitability of Merck’s products and jeopardize the success of market launches and new approvals. Close communication with health and regulatory authorities serves as a preventive measure to avert risks. The risks are classified on a market- and product-specific basis; overall this is rated as a medium risk to Merck.
Risk of stricter regulations for the manufacture, testing and marketing of products

In its Chemicals business, Merck must adhere to a multitude of regulatory specifications regarding the manufacture, testing and marketing of many of its products. More stringent regulations worldwide can have a negative impact on Merck’s production costs and product portfolio. Specifically in the European Union, Merck is subject to the European chemicals regulation REACH, which is designed to ensure a high level of protection for people and the environment. It demands comprehensive tests for chemical products. Test procedures can be costly and time-intensive, and lead to a rise in production costs. Moreover, the use of chemicals in production could be restricted, which would make it impossible to continue manufacturing certain products. As Merck is constantly pursuing research and development in substance characterization, and in the possible substitution of critical substances, the occurrence of this risk is thought unlikely. Nevertheless, it is still classified as a medium risk given its potential impact on the net assets, financial position and results of operations.

Risk of destabilization of political systems and the establishment of trade barriers

Like changes in monetary policy, the destabilization of political systems and the possible establishment of trade barriers can lead to declines in sales in certain countries and regions. Diversification in terms of products, industries and regions enables the mitigation of potential negative effects. The effects of corresponding risks are taken into account to the best of ability in the business plans for the countries and regions concerned. In particular, our business can furthermore be affected by macroeconomic developments in, for example, Venezuela and Argentina. Corresponding sales strategy measures have been introduced in these countries to minimize the impact on business. Nevertheless, the residual net risk could have a substantial effect on the net assets, financial position and results of operations and its occurrence is considered possible. Merck rates this as a medium risk overall.

Opportunity of positive benefit/risk assessment of Erbitux® for patients with metastatic colorectal cancer (mCRC)

At the end of 2013, the European Commission approved the updated labeling for one of the main products of the Merck Serono division, Erbitux® (cetuximab) for metastatic colorectal cancer, to include patients with RAS wild-type tumors. In doing so the European Commission followed the positive opinion from the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) also issued at the end of 2013, which advocated the amendment of product information. The exact effect of the updated approval status can be quantified only with difficulty, but it could lead to slight additional increases in the sales assumed for Erbitux®.

Market risks and opportunities

Merck competes with numerous companies in the pharmaceutical, chemical and life science sectors. Rising competitive pressure can have a significant impact on the quantities sold and prices possible for Merck products and services.
Risk and opportunity of a changing market environment for multiple sclerosis products in the EU

In 2014, the Merck Serono division will face tougher competition as a result of significant changes in the market environment for multiple sclerosis products in the EU. Several new competitors to our product Rebif® are expected to enter the market. Strategies for defending market share have been launched and their impact as well as the development of the market, are being monitored on an ongoing basis. The Merck Serono division has made assumptions to this effect in its planning, however there could probably be an additional moderate impact nevertheless on the net assets, financial position and results of operations. This is rated as a medium risk. If there are delays in the market entry of competitors, a slight improvement in the sales situation for Rebif® compared to planning is possible.

Risk of greater competitive pressure due to biosimilars

Furthermore, biological products from the Merck Serono division could come under greater competitive pressure from biosimilars. Specific regulatory directives apply to the development and approval of competing biosimilars that use the reference data of biological products already approved. Frameworks have been drawn up in both the EU and the United States to enable biosimilars to enter the markets as soon as the exclusive rights of the original products expire. The products Rebif® and Gonal-f® could be affected in particular. The effects of corresponding risks are taken into account as far as possible in the plans for the countries and regions concerned.

Opportunity due to the existing partnership in the field of biosimilars

The prospects of the development and approval of biosimilars also entail opportunities for Merck. Over nearly the past two years, Merck has taken its first steps in this direction and, among other courses of action, has entered into a partnership with Dr. Reddy's Laboratories Ltd., Hyderabad, India, for the joint development of a portfolio of biosimilars in oncology. The cost of development has been taken into account in Merck's plans, while a significant contribution to sales development is not to be expected until the medium to long term.

Opportunity due to unexpectedly strong economic recovery in Europe and the United States

A stronger economic recovery in Europe and the United States than forecast by Merck, and the associated rise in investment activity by the private and public sectors is an opportunity for the Merck Millipore division in particular, as well as for the other divisions. Both public spending on academic institutions and the research costs of pharmaceutical companies recently came under heavy pressure as a result of the financial crisis and the high sovereign debt of many key countries. However, the probability of a more rapid recovery is low, and a possible effect is therefore also rated as immaterial.

Opportunity due to screen size growth in the display market

The development in the display market is currently being driven by growing screen sizes in particular. In addition, major events such as the FIFA World Cup 2014 in Brazil could stimulate consumer demand for the latest TVs. Therefore, we by all means see the possibility of a somewhat more positive development in the display market than forecast for 2014. However, the effect on sales and EBITDA pre one-time items in the Performance Materials division would be rather marginal in such a case as the market is dominated by other effects such as price pressure and continuing competition.
Opportunity due to positioning of core strategic brands in the Consumer Health division

There is the opportunity for the Consumer Health division in particular to further consolidate the position of its core strategic brands and to expand its presence in the emerging markets. An initiative has been launched for this purpose that can sustainably contribute to growth in sales and EBITDA pre one-time items. The transfer of the products Neurobion® and Floratil® to the division as of January 1, 2014 could provide additional impetus since this will enable Consumer Health to expand its focus on strategic brands.

Risks and opportunities of research and development

For Merck, innovation is a major element of the Group strategy. Research and development projects can experience delays, expected budgets can be exceeded, or targets remain unmet. Research and development are of special importance to the Pharmaceuticals business. Therefore, research and development projects are constantly monitored by the internal portfolio management system. In the course of portfolio management, we regularly evaluate and, if necessary, refocus research areas and all R&D pipeline projects.

Risks of discontinuing development projects and regulatory approval of developed medicines

Sometimes development projects are discontinued at a late phase of clinical development after high levels of investment. Decisions – such as those relating to the transition to the next clinical phase – are taken with a view to minimizing risk. Furthermore, there is the risk that the regulatory authorities either do not grant or delay approval, which can have an impact on earnings. Additionally, there is the danger that undesirable side effects of a pharmaceutical product could remain undetected until after approval or registration, which could result in a restriction of approval or withdrawal from the market.

Merck is currently not aware of any risks beyond general development risks that could significantly affect the net assets, financial position and results of operations.

Opportunities due to new initiatives in research and development

Merck has made major changes to pharmaceutical research and development in the past two years. A new organizational structure was implemented and the level of external research was raised. For example, the company’s own strategic venture capital fund MS Ventures was increased to €100 million and research collaborations in Israel were intensified. The Merck Serono pipeline was redesigned and new development agreements were entered into, for example with Threshold Pharmaceuticals Inc. Similarly, Merck is pursuing an innovative approach in the development and performance of clinical trials, and has entered into a strategic alliance with Quintiles, the world’s largest service provider for biopharmaceutical development and marketing. Owing to the relatively long cycles in active ingredient development, Merck expects that the effects of these changes will not be reflected in the results of the Merck Serono division until some point in the medium to long term, but feels that there are excellent prospects for future sales and profitability.
Risks and opportunities of product quality and availability

Risk of a temporary ban on products/production facilities or of non-registration of products due to non-compliance with quality standards

Merck is required to comply with the highest standards of quality in the manufacture of pharmaceutical products (Good Manufacturing Practice). In this regard Merck is subject to the supervision of the regulatory authorities.

Conditions imposed by national regulatory authorities could result in a temporary ban on products/production facilities, and possibly affect new registrations with the respective authority. Merck takes the utmost efforts to ensure compliance with regulations, regularly performs its own internal inspections and carries out external audits. Despite these quality assurance processes, the occurrence of a risk cannot be wholly ruled out, however it is considered unlikely. Depending on the product concerned and the severity of the objection, such a risk could have a critical negative impact on the net assets, financial position and results of operations. Therefore, Merck rates this as a medium risk.

Risk of an import ban on products to the United States due to an FDA warning letter

On December 15, 2011, Merck received a warning letter from the United States Food and Drug Administration (FDA) in connection with inspections of production facilities in Tiburtina (Italy) as well as Aubonne and Vevey (Switzerland). Rebif® and other products intended for sale in the United States are manufactured at these sites. Above all, the letter referred to various procedures in conjunction with the manufacture of Rebif® that, in the opinion of the FDA, were not fully in compliance with the standards of Good Manufacturing Practice. Over the past two years, Merck has worked closely with the FDA to eliminate these concerns. Corrective action was coordinated with the FDA and implemented in a timely manner. The FDA conducted follow-up inspections in 2013. The procedure had not yet been formally closed out by the FDA on the reporting date. However, in the successful follow-up inspections of all three production sites concerned, it was confirmed in writing that the action taken was considered adequate. Given the corrective action taken, the probability of occurrence of a possible import ban on the products concerned to the United States has been downgraded to unlikely. On the basis of the potentially damaging effect on the net assets, financial position and results of operations until the procedure is closed out by the FDA, Merck rates this as a medium risk.

Risks of dependency on suppliers

Quality controls along the entire value chain minimize the risks related to product quality and availability. This begins with the qualification of our suppliers and continues with comprehensive quality requirements for raw materials, purchased semi-finished goods and facilities as well as long-term strategic alliances for precursor products critical to supply and price. Merck is dependent on individual suppliers of precursor products for some of its main products. In the event that one of these suppliers curtails or discontinues production, or supply is disrupted, this would possibly have a critical impact on the Merck operations concerned. With long-term strategic alliances for precursor products critical to supply and price as well as alternative sourcing strategies, Merck minimizes the probability of occurrence of these risks and rates them as unlikely. Overall, these are classified as medium risks.
Damage and product liability risks

Further risks include the risk of operational failures due to force majeure, for example natural disasters such as floods or earthquakes, which could lead to a substantial interruption or restriction of business activities. Insofar as it is possible and economical to do so, the Group limits its damage risks with insurance coverage, the nature and extent of which is constantly adapted to current requirements. Although the occurrence of these risks is considered unlikely, an individual event could have a critical effect on the net assets, financial position and results of operations and is therefore classified as a medium risk.

Companies in the chemical and pharmaceutical industries are exposed to product liability risks in particular. Product liability risks can lead to considerable claims for damages and costs to avert damages. Merck has taken out the liability insurance that is standard in the industry for such risks. However, it could be that the insurance coverage available is insufficient for individual cases. Although the occurrence of product liability claims in excess of the existing insurance coverage is considered unlikely, individual cases could still have a critical effect on the net assets, financial position and results of operations. Merck therefore rates potential product liability risk as a medium risk.

Risks due to product-related crime and espionage

As a manufacturer and supplier of high-quality pharmaceuticals and chemicals, Merck – like other companies in the chemical and pharmaceutical industries – faces certain risks due to crime. These include, among others, theft, misuse and counterfeiting of products (including attempts at these crimes). This often goes hand in hand with an infringement of trademark rights. The professionalism and complexity of product-related crime has increased significantly in recent years. In the relevant cases, Merck works closely and trustfully with the competent prosecution authorities in the countries concerned. To combat product-related crime, several years ago Merck established an internal coordination network covering all functions and divisions (“Merck Anti-Counterfeiting Operational Network”) headed by Group Security, which provides a reliable interface to authorities, associations and partner companies. Particularly with regard to the unknown number of cases in the area of product-related crime, the material damage to Merck cannot be estimated. Its influence on business activities depends on the individual case in question as well as factors specific to regions and products. Product-related crime is therefore categorized as a medium risk at Merck.

At Merck, the undesirable loss of information by any possible form of offence is subsumed under the risk category “espionage”. Above all, particular importance is attached in this regard to the protection of sensitive business information, data protection and the protection of tangible and intangible expertise. On the one hand this intersects with risks resulting from digital data processing and communication, but it also covers threats that are not IT-based. With the aim of preventing unwanted diversion of information, a high-ranking Intellectual Property Management Committee (IPMC) was established in one division at Merck as a pilot scheme. Spearheaded by Group Security, it applies a holistic protection concept that, in addition to technical IT security, information and data protection measures, also comprises further targeted security measures. The risk of an unwanted loss of information due to espionage is classified as possible despite the measures taken and could significantly impact the net assets, financial position and result of operations.
Opportunities due to local presence in high-growth markets

In the coming years, Merck is still anticipating strong growth in the emerging markets in all divisions. In order to further enable this growth, Merck has initiated several investment projects, such as the construction of new production facilities for liquid crystals and the establishment of a new Merck Serono site in China. The greater local presence and customer proximity can lend Merck a key competitive edge and, in the medium to long term, offers the opportunity for significant additional growth in sales and EBITDA pre one-time items.

Financial risks and opportunities

As a corporate group that operates internationally and due to its presence in the capital market, Merck is exposed to various financial risks and opportunities. Above all, these are liquidity and counterparty risks, market opportunities and risks, risks of fluctuations in the market values of operational tangible and intangible assets, as well as risks and opportunities from pension obligations.

Risk and opportunity management in relation to the use of financial instruments

In the area of financial risks and opportunities, Merck uses an active management strategy to reduce the effects of fluctuations in exchange and interest rates. The management of financial risks and opportunities by using derivatives in particular is regulated by extensive guidelines. Speculation is prohibited. Derivative transactions are subject to constant risk controls. A strict separation of functions between trading, settlement and control functions is ensured.

Liquidity risks

In order to ensure its continued existence, a company must be able to fulfill its commitments from operating and financial activities at all times. Merck therefore has a central Group-wide liquidity management process to reduce potential liquidity risks. Furthermore, Merck has a multi-currency revolving credit facility of €2 billion with a term of five years and two extension options of one year each that, above and beyond the Group’s positive operating cash flow, ensures continuing solvency if any liquidity bottlenecks occur. As our loan agreements do not contain any financial covenants, these agreed lines of credit can be accessed even if Merck’s credit rating should deteriorate. In addition, in fiscal 2009 Merck set up a debt issuance program that forms the contractual basis for the issue of bonds. In 2013, the volume of this program was increased from €10 billion to €15 billion. The liquidity risk is rated as unlikely overall.

Counterparty risks

Counterparty risks arise from the potential default by a partner in connection with financial investments, loans and financing commitments on the one hand and receivables in operating business on the other.

As for counterparty risks from financial transactions, Merck reviews all positions relating to trading partners and their credit ratings on a daily basis. Merck manages financial risks of default by diversifying its financial positions and thereby by the active management of its trading partners. Significant financial transactions involving credit risk are entered into with banks and industrial companies that have a good credit rating. Moreover, Merck’s large banking syndicate – the multi-currency revolving credit facility of €2 billion was syndicated by 19 banks – reduces possible losses in the event of default.
The solvency and operational development of trading partners is regularly reviewed as part of the management of operational counterparty risks. Sovereign risks are also analyzed; this focuses in particular on Italy, Spain, Greece, and Portugal. The volume of receivables of each customer is capped in line with their credit ratings. Risk-mitigating measures, such as credit insurance, are utilized as appropriate. Nevertheless, defaults by isolated trading partners, even those with outstanding credit ratings, cannot be entirely ruled out, although rated as unlikely (further information can be found in “Credit risks” under “Management of financial risks” in the notes to the consolidated financial statements). Counterparty risk is classified as a medium risk overall.

Market opportunities and risks
As a result of its international business activities and global corporate structure, Merck is exposed to risks and opportunities from fluctuations in exchange rates. These result from financial transactions, operating receivables and liabilities, forecast future cash flows from sales and costs in foreign currency. Merck uses derivatives to manage and reduce the above risks and opportunities. The exchange rates for transactions already recognized, such as operating receivables and liabilities in foreign currency, are essentially hedged. In certain cases, the exchange rate for forecast sales and future costs in foreign currency are hedged up to 36 months in advance (further information can be found in “Derivative financial instruments” in the notes to the consolidated financial statements).

Future refinancing and cash investments are exposed to the risks and opportunities of interest rate fluctuations. These are also managed and reduced using derivatives. Currency risks are rated as possible and after hedging are classed as a medium risk; interest rate risks are considered unlikely and are classed as a low risk.

Risks of impairment on balance sheet items
The carrying amounts of individual balance sheet items are subject to the risk of changing market and business conditions and thus to changes in fair values as well. If required, impairment losses can result in significant non-cash reductions in earnings and affect the accounting ratios. This applies in particular to the high level of intangible assets including goodwill, which have become significantly more important in the consolidated financial statements as a result of the acquisitions of Serono SA in 2007 and the Millipore Corporation in 2010, and the associated purchase price allocation (further information can be found under “Intangible assets” in the notes to the consolidated financial statements). All relevant risks were assessed during the preparation of the consolidated financial statements and taken into account accordingly. Merck rates risks beyond this as low.

Risk and opportunities from pension obligations
Merck has commitments in connection with pension obligations. The present value of defined benefit obligations can be significantly increased or reduced by changes in the relevant valuation parameters, e.g. the interest rate or future salary increases. Pension obligations are regularly assessed as part of annual actuarial reports. Some of these obligations are covered by the pension provisions reported in the balance sheet, while other obligations are externally funded (further information can be found under “Provisions for pensions and other post-employment benefits” in the notes to the consolidated financial statements). To the extent that pension obligations are covered by plan assets consisting of interest-bearing securities, shares, real estate, and other financial assets, decreasing or negative returns on these assets can adversely affect the fair value
of plan assets and thus result in further additions to pension provisions. By contrast, rising returns increase the value of plan assets, thereby resulting in excess cover of plan liabilities. Merck increases the opportunities of fluctuations in the market value of plan assets on the one hand and reduces the risks on the other by using a diversified investment strategy. The risk of pension liabilities is considered possible and is classed as a medium risk.

Assessments by independent rating agencies

The capital market uses the assessments published by rating agencies to help lenders to assess the risks of a financial instrument. Merck is currently rated by Standard & Poor’s and Moody’s, and its ratings from these agencies rose in 2013 to the best level in the history of the Merck Group: While Standard & Poor’s issued a long-term rating of A with a stable outlook, Moody’s issued it an A3 rating with a stable outlook. In line with market procedures, Merck’s financing conditions are closely tied to its rating. The better a rating, the more favorably Merck can generally raise funds on the capital market or from banks.

Overview of rating development:

<table>
<thead>
<tr>
<th>Year</th>
<th>Standard &amp; Poor’s</th>
<th>Moody’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>BBB+</td>
<td>A</td>
</tr>
<tr>
<td>2009</td>
<td>BBB+</td>
<td>A</td>
</tr>
<tr>
<td>2010</td>
<td>BBB</td>
<td>BBB+</td>
</tr>
<tr>
<td>2011</td>
<td>BBB</td>
<td>BBB+</td>
</tr>
<tr>
<td>2012</td>
<td>BBB</td>
<td>BBB+</td>
</tr>
<tr>
<td>2013</td>
<td>BBB</td>
<td>BBB+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A3</td>
</tr>
</tbody>
</table>

Source: Merck KGaA

Legal risks

Merck generally strives to minimize and control its legal risks. Merck has taken the necessary precautions to identify threats and defend our rights where necessary. A compliance program for our employees is in place around the world which requires them to comply with laws and guidelines, and which provides them with the relevant training and support. At the heart of this program is the Merck Code of Conduct, which sets out guidelines for ethical behavior. This program helps to reduce the risk of major legal violations, for example of the regulations defined by antitrust or anticorruption law.

Nevertheless, Merck is still exposed to litigation risks or legal proceedings. In particular, these include risks in the areas of product liability, competition and antitrust law, pharmaceutical law, patent law, tax law, and environmental protection. As a research-based company, Merck has a valuable portfolio of industrial
property rights, patents and brands that can become the target of attacks and infringements. The outcome of future proceedings or those currently pending is difficult to foresee. Court or official rulings or settlements can lead to expenses with a significant impact on our business and earnings.

Tax risks are reviewed regularly and systematically by Group Tax. Corresponding standards and guidelines are used in order to identify tax risks at an early stage as well as to review, evaluate and correspondingly minimize them. Risk minimization measures are coordinated by Group Tax together with the subsidiaries abroad.

In our opinion, the lawsuits described below constitute the most significant legal risks. This should not be seen as an exhaustive list of all legal disputes currently ongoing. Generally, it is not possible to rule out that Merck will face third-party claims arising from the same issue despite the conclusion of legal proceedings.

**Risks from product-related and patent law disputes**

Rebif®: In Israel, Merck is party to three legal disputes with Israel Bio-Engineering Project Limited Partnership ("IBEP"). IBEP is asserting claims for intellectual property rights and the payment of license fees. The legal disputes are connected to the financing of the development of Rebif®, a drug for the treatment of multiple sclerosis, and other products in the early 1980s. Merck has taken appropriate accounting measures. In the liquidity assessment, Merck rates this risk high as potential critical negative effects cannot be ruled out.

Merck is also involved in a patent dispute in the United States with Biogen IDEC Inc. (Massachusetts, USA) ("Biogen"). Biogen claims that the sale of Rebif® in the United States infringes on a Biogen patent. The disputed patent was granted to Biogen in 2009 in the United States. Subsequently, Biogen sued Merck and other pharmaceutical companies for infringement of this patent. Merck defended itself against all allegations and brought a countersuit claiming that the patent was invalid and not infringed on by Merck’s actions. A “Markman hearing” was held in January 2012. The parties are now engaged in court-ordered mediation proceedings. Merck has taken appropriate accounting measures. Given the potential critical negative effects of the dispute in the liquidity assessment, Merck nevertheless classifies this as a high risk.

**Risks from antitrust law proceedings**

Raptiva®: In December 2011, the Brazilian federal state of São Paulo sued Merck for damages owing to alleged collusion between various pharmaceutical companies and an association of patients suffering from psoriasis and vitiligo. This collusion is alleged to have been intended to increase sales of the medicines from the companies involved to the detriment of patients and state coffers. Moreover, patients are also suing for damages in connection with the product Raptiva®. Merck has taken appropriate accounting measures for these issues. Risks in excess of this with a substantial negative effect on the net assets, financial position and results of operations cannot be ruled out, but are considered unlikely. This is rated as a medium risk.

**Risks from drug pricing by the divested Generics Group**

Merck continues to bear the risk of having to defend against certain litigation brought against the Generics Group, which was sold to Mylan, Inc. (USA) in 2007. In this context, Merck remains responsible for risks from cases in the United States concerning drug pricing. Merck has taken appropriate accounting measures on the basis of possible scenarios. Since, in the worst case scenario, this would result in a substantial impact on the net assets, financial position and results of operations, with the possibility of the net risk occurring, Merck rates this as a medium risk.
Paroxetine: In connection with the divested generics business, Merck is subject to antitrust investigations by the British Office of Fair Trading ("OFT") in the United Kingdom. In March 2013, the OFT informed Merck of the assumption that a settlement agreement entered into in 2002 between Generics (UK) Ltd. and Glaxo-SmithKline in connection with the antidepressant drug paroxetine violates British and European competition law. As the owner of Generics (UK) Ltd. at the time, Merck was allegedly involved in the settlement negotiations and is therefore liable. The investigations into Generics (UK) Ltd. started in 2011, without Merck being aware of this. It is considered likely that the OFT will impose a fine on Merck. Merck has taken appropriate accounting measures. Given the lawsuit's potential substantial negative impact in the liquidity assessment, Merck nevertheless classifies this as a medium risk.

Citalopram: In June 2013, the European Commission imposed a fine on Merck for various agreements between its former subsidiary Generics (UK) Ltd. and the Danish company Lundbeck, which related to the antidepressant citalopram, patented by Lundbeck. Sufficient appropriate accounting measures have been taken for the risk. Merck has filed an appeal with the European Court.

Risks and opportunities in human resources

Merck’s future growth is highly dependent on its innovative strength. Therefore, the expertise and engagement of employees in all areas in which Merck operates are crucial to the success of the company.

The markets relevant to Merck are characterized by intensive competition for qualified specialists and by demographic challenges. One of the key priorities for our company is therefore not just recruiting but also retaining specialists and talented employees in the long term. In this context, the focus on highly competitive and rapidly growing markets makes it especially necessary to have engaged employees. Fluctuation risks specific to countries and industries have to be identified ahead of time and specifically addressed in order to keep the skills and expertise critical to success and business within the company.

Merck addresses these challenges firstly with globally implemented talent and succession processes that systematically identify and promote the potential of employees. Furthermore, Merck uses targeted employee development programs to support young and experienced talented employees in their career development, particularly in our strategic markets, as well as to develop and retain expertise crucial to success within the company. These measures are supplemented by competitive compensation packages and attractive benefits that Merck regularly reviews through ongoing peer comparisons and audits, thereby securing and maintaining its financial appeal as an employer.

Sourcing, recruiting and retaining specialists and talent at Merck are among the company's top priorities. Nevertheless, employee-related risks that affect business activities are likely, even though their impact is difficult to assess. Merck rates this as a medium risk.

Increasing Merck’s employer appeal in strategic growth markets has great potential for future business performance. Based on the studies and findings available to date, our initial assessment of the opportunities leads to a rating similar to the previously described employee-related risks.

Merck can therefore continue to increase the employer appeal of the “Merck brand” with the selective use of employer branding initiatives in the context of a defined talent sourcing strategy, thereby having a direct positive influence on recruiting and retaining key specialists and talent. Furthermore, Merck intends to hone its talent and succession management even more closely to the requirements of specific markets.

Retaining employees is one of Merck’s declared aims
Risks and opportunities of information technology

Merck utilizes a wide range of IT systems and processes to provide optimum focus and appropriate support for its globalization. Trends in information technology offer various opportunities for Merck.

Opportunities from the use of mobile platforms and solutions
Mobility offers unique opportunities for reaching and networking employees, partners and customers, and stimulates synergies between value added for the company and individual interests. Mobility not only means the mobile use of online services; it is changing the way people see digital services and bringing business activities closer to employees, customers and partners without limiting them at all. The trend towards mobility suggests that mobile platforms and solutions will become important channels in terms of digital networking.

Opportunities from networked collaboration and digital media
New developments in the field of networked collaboration and digital media are opening up excellent opportunities for contact with employees, partners and customers, and establishing new channels for teamwork, interaction and communication. In R&D at Merck, these developments especially benefit collaboration within the company and with external partners. In addition, socially-driven information technology can also aid interaction in the field of life sciences and thereby foster innovation. Merck has launched a Group-wide program known as "Connect 15". Its objective is to harmonize corresponding IT systems, to simplify communications around the world and to facilitate cooperation between employees, external partners and customers. In the long term, the program offers the opportunity to reduce operating costs and to enhance productivity within the organization.

Opportunities due to further harmonization of IT systems
Harmonized IT systems that map standardized business processes allow management to steer business consistently worldwide. This enables efficient working, the fast and smooth integration of new businesses and the easier leverage of synergy effects. In addition, this trend is being driven by the growth of cloud solutions, which benefit from the use of configurable standard solutions. The effect of this harmonization will be seen firstly in the reduction of operating costs, while secondly the increased transparency will mean the opportunity to make decisions faster and to greater beneficial effect.

The value added by information technology in day-to-day work is countered by potential risks that arise directly from the advantages of the global availability of electronic data storage.

Risk from e-crime and cyber attacks
With the Internet as a means and the abuse of digital technologies as a new type of crime, e-crime as a whole is developing rapidly and poses a major challenge. This is giving rise to threats to Merck such as the failure of central IT systems, the exposure of confidential data from research and business activities, the manipulation of IT systems in chemical process steering, or greater burdens on or impairment of IT systems due to virus attacks. This scenario also includes the temporary takeover of exposed systems by hackers and consequently the possible revocation of drug registrations due to deficient validation of relevant IT systems.
The entire Merck Group has global security guidelines and information protection management for IT and "non-IT" areas, each with organizational and technical standards for access rights as well as information and data protection. Attention in the IT area is focused on hardening the corresponding systems and, for example, identifying cyber attacks. Group Security is a member of the Alliance for Cyber Security of the German Federal Office for Information Security. A pilot data leakage prevention project is currently being introduced at Merck to protect sensitive business information. The effectiveness of internal (IT) protection measures is monitored on an ongoing basis and reviewed by Group Security, Group Internal Auditing and third-party auditors.

The potential losses resulting from e-crime cannot be generally categorized, not least on account of the multitude of different possible ways it can be committed; its impact on the net assets, financial position and results of operations would depend on the individual case. Despite the protective measures already being taken by Merck to great effect, the occurrence of the risk of e-crime is considered possible, with an estimated substantial impact. It is therefore classed as a medium risk.

**Risks due to failure of business-critical IT applications or to failure of data center capacity**

IT applications used globally in process steering form the basis for the contractual delivery of products and solutions to the customers of the Merck Group around the world. Fluctuations in the quality of internal IT services can lead to the failure of business-critical IT applications, which would have a direct influence on Merck's ability to deliver. Similarly, the failure of a data center can impair service quality or trigger the complete failure of critical applications.

The primary objective of Information Services in the Merck Group is to maintain service quality in keeping with the service levels agreed with the Group functions and divisions. To achieve this objective, Merck uses a quality management system certified to ISO 20000:2005, which comprises steering measures to maintain a consistent standard of quality. In addition to day-to-day operating processes, this also provides directives on how to act in a crisis situation in the form of a regularly tested crisis management plan. As part of this crisis management, Merck operates several redundantly designed data centers so that service quality will be maintained even in the event of the failure of one data center.

Despite the mitigating measures taken, functional continuity plans and the unlikely probability of occurrence, the impact of a failure of business-critical IT applications owing to fluctuations in the quality of internal IT services and its influence on the net assets, financial position and results of operations is considered a medium risk.

**Environmental and safety risks**

As a company with global production operations, Merck is exposed to risks of possible damage to people, goods and its reputation. Audits, consulting and training on environmental protection and occupational health and safety minimize these risks to people and the environment. In order to ensure the continuity of plant and equipment, Merck monitors these risks both at our own sites as well as at suppliers and contract manufacturers. By adhering to high technical standards, our rules of conduct, and all legal requirements in environmental protection and occupational health and safety, we ensure the preservation of goods and assets. Sufficient appropriate accounting measures have been taken for the environmental risks known to us. Nevertheless, Merck classifies these as a medium risk since a critical negative impact to liquidity cannot be ruled out.
Overall view of the risk and opportunity situation and management assessment

Although the number of risks reported is higher than the specific opportunities, Merck considers the distribution of risks and opportunities to be balanced. A balanced overall view within the Group is also supported by the fact that total revenues and business success are built on a diversity of pharmaceutical and chemical products for a variety of industries. As the markets differ in their structure and economic cycles, this diversification helps to lower risk. The overall view of the opportunity and risk profile of the four divisions would also be further balanced by the proposed acquisition of AZ Electronic Materials moving forward. This diversification also reflects Merck’s strategy to continue its development as an integrated pharmaceutical and chemical company.

The most significant individual risks in the divisions have been named in the report above, with business-related risks being the most significant to us alongside legal risks.

Although the assessment of the individual risks has altered over the fiscal year as a result of changing external conditions, the risk situation of the Group as a whole is not significantly different compared to 2012. There have been no new additions in the area of high risks in particular. Merck has observed only minor changes in the area of medium risks. Thanks to the mitigating measures taken – such as the consistent implementation of management action (organizational responsibility and process improvements), the increased insurance coverage and accounting precautions – Merck’s significant risks in particular have been further minimized in net terms.

The overall view of the risk situation of the Group, which is derived from the summary of the risks described on the basis of their impact and probability of occurrence, leads Merck to the assessment that the risks are not of a nature to threaten the existence of the Group as a going concern, either individually or collectively. Merck is confident that it will continue to successfully master the challenges arising from the above risks in the future as well.

In terms of opportunities, we feel that the greatest potential lies in the business-related topics of the operational areas. Thanks in particular to the expansion of our business in emerging markets, the optimization of the Merck Serono R&D organization, the newly founded biosimilars initiative and other activities as part of the “Fit for 2018” transformation and growth program, Merck has launched changes that hold significant opportunities in the medium to long term beyond the underlying forecast period.

Merck pursues the opportunities that arise and shows their expected effects in the forecast development of its key performance indicators – sales, EBITDA pre one-time items and business free cash flow. Merck will actively seek out opportunities beyond this and move ahead their implementation. In the event that opportunities arise in addition to the forecast developments, or that these occur more quickly than anticipated, this could have correspondingly positive effects on Merck’s net assets, financial position and results of operations.
Report on Expected Developments

The following report provides a forecast for the development of the Merck Group and its divisions in 2014 focusing on the three most significant financial key performance indicators (KPIs) for the Merck Group and its businesses: sales, EBITDA pre one-time items and business free cash flow. We take into account the company’s weighing up of risks and opportunities in accordance with our operational plans and medium-term assumptions.

In December 2013 Merck made an offer to AZ shareholders to acquire AZ Electronic Materials. From today’s perspective the acquisition is expected to close in the course of 2014 (the successful completion of the transaction is conditional upon antitrust clearance, among other things). The following report provides on the one hand the expected developments of the Merck Group excluding the impact from a potential acquisition of AZ Electronic Materials. On the other hand, we provide separately a forecast for the Merck Group and for the Performance Materials division, which would be affected by the acquisition of AZ Electronic Materials assuming the first-time consolidation of AZ Electronic Materials in the Merck Group in the second quarter of 2014.

Forecast for the Merck Group

We foresee stable sales for the Merck Group in 2014 as slight organic growth is offset by an unfavorable impact from foreign exchange developments, which are anticipated to impact the sales of all divisions. While we expect the U.S. dollar-euro exchange rate to remain at around the 2013 level, an unfavorable foreign exchange development for the Merck Group is expected to stem from Emerging Markets and Japan.

<table>
<thead>
<tr>
<th>€ million</th>
<th>Actual results 2013</th>
<th>Forecast 2014</th>
<th>Key assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>10,700.1</td>
<td></td>
<td>Slight organic growth offset by currency headwinds in all divisions</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>3,253.3</td>
<td>stable</td>
<td>Organic development of the divisions: Merck Serono stable as Rebif® sales decline is offset by Emerging Markets growth, moderate organic growth in Merck Millipore and Consumer Health, volume growth in Performance Materials, which will be offset by price erosion</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>2,960.0</td>
<td>slight decrease</td>
<td>Positive full-year impact from realized efficiencies offset by major investments in Biosimilars and the loss of royalty income</td>
</tr>
</tbody>
</table>

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Merck Serono sales are expected to remain stable excluding foreign exchange effects. While Rebif® sales are expected to decline, we should see ongoing positive growth momentum from our Emerging Markets region. For the Consumer Health and Merck Millipore divisions, we expect moderate organic growth rates, while the positive volume growth in the Performance Materials division might be offset by price erosion, which is expected to occur next year.

From the second quarter of 2013 onwards, Merck saw the decline in royalty income at Merck Serono, which will fully come through in the course of 2014. The net decrease in EBITDA pre one-time items from expired royalty income and related royalty expenses with respect to Avonex® and Enbrel® amounts to approximately € 75 million. This reduction will be more pronounced due to the settlement agreement on the patent dispute with AbbVie concerning Humira®, which was reached at the beginning of 2014. On the other hand, the commercial agreement reached with Bristol-Myers Squibb in 2012 on the co-promotion of Glucophage® in China is expected to partly mitigate the negative impact.

Despite the Rebif® sales decline, the significant reduction in royalty income and the anticipated unfavorable foreign exchange environment, Merck aims to achieve in 2014 EBITDA pre one-time items at the level of 2013. In the course of 2013 Merck realized most of the efficiencies from the "Fit for 2018" transformation and growth program, which will have a positive incremental effect reducing the cost base on a full-year basis in 2014. EBITDA pre one-time items of Corporate and Other is expected to remain stable. Restructuring costs on the current portfolio are planned to decrease from € 166 million in 2013 to approximately € 100 million in 2014. We expect an underlying improved tax ratio of 23% to 25% in 2014.

As publicly stated over the last two years, Merck has embarked on a transformation journey that will last several years. The focus of this transformation journey will now shift more toward organic and inorganic growth. Therefore, Merck plans to accelerate R&D activities on strategic growth initiatives such as Biosimilars and OLED (organic light-emitting diodes) and to direct marketing and selling resources even more to growth markets. Merck’s ambition to take M&A initiatives has become clear through the announcement of the intention to acquire AZ Electronic Materials. Merck’s business free cash flow is expected to decrease slightly in comparison with 2013 as higher investments in property, plant and equipment in strategic projects such as the construction of a pharmaceutical production facility in China are planned.

The Merck Executive Board decided to transfer two product groups, Neurobion® (a vitamin B-based analgesic) and Floratil® (a probiotic anti-diarrheal), from the Merck Serono division to the Consumer Health division as of January 1, 2014. This move, which transfers the sales and all related expenses for both product groups, will enable a better strategic focus for both divisions, while fostering synergies in the organization. Consequently, approximately € 265 million in sales, around € 100 million in EBITDA pre one-time items and around € 77 million in business free cash flow will be shifted from Merck Serono to Consumer Health based on 2013 results. Within Consumer Health, we expect these two product groups to grow moderately in line with the existing Consumer Health portfolio in 2014.
While the acquisition of AZ Electronic Materials is anticipated to lead to a moderate increase in sales and EBITDA pre one-time items and to a slight increase in business free cash flow of the Merck Group in 2014 compared to 2013, a significant increase is expected in sales, EBITDA pre one-time items as well as business free cash flow for the Performance Materials division.

Forecast for the Merck Serono division

<table>
<thead>
<tr>
<th>€ million</th>
<th>Actual results 2013</th>
<th>Forecast 2014</th>
<th>Key assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>5,953.6</td>
<td></td>
<td>Balanced product portfolio and solid organic growth in Emerging Markets expected to offset Rebif® decline in the U.S. and Europe and expected biosimilar entries for Fertility in Europe</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>1,955.0</td>
<td></td>
<td>Unfavorable impact from foreign exchange development will lead to slight decrease in nominal sales</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>1,875.7</td>
<td></td>
<td>Neurobion® and Floratil® transfer to Consumer Health division will reduce sales by ~€ 265 million based on actual 2013 results</td>
</tr>
</tbody>
</table>

Due to the aforementioned decision to transfer two product groups, Neurobion® and Floratil®, from the Merck Serono division to the Consumer Health division as of January 1, 2014, the base for the Merck Serono division will decrease by approximately € 265 million in sales, around € 100 million in EBITDA pre one-time items and around € 77 million in business free cash flow, based on 2013 results of the transferred brands. Accordingly, the 2014 forecast for the Merck Serono division is based on the 2013 results reduced by the transfer.
Stable organic sales are expected for 2014, while an unfavorable expected impact from foreign exchange development might negatively weigh on the reported numbers. We assume that Rebif®, Merck Serono’s top-selling product, will continue to face severe competitive pressure in the United States and that it will also start to lose market share in Europe as a result of the market entry of new products in the multiple sclerosis segment. Sales of the oncology drug Erbitux® are expected to grow moderately fueled by the recent update of the metastatic colorectal cancer labeling to patients with RAS wild-type tumors as well as due to continued good performance in Japan. For Gonal-f®, the largest drug in the Fertility franchise, Merck expects only a marginal improvement in 2014 coming from market expansions in Emerging Markets but offset by expected launches of biosimilar products in Europe. Slight growth is assumed for the CardioMetabolic Care and Endocrinology franchises.

We forecast Merck Serono’s EBITDA pre one-time items to decrease slightly compared to 2013 driven by the reduction in royalties from Avonex®, Enbrel® and Humira® amounting to a net EBITDA pre one-time items effect of €115 million versus 2013.

In the United States, Merck distributes Rebif® under a co-promotion agreement with the pharmaceutical company Pfizer until end of 2015. Based on the agreement Merck pays commission expenses, which are expected to decline in 2014 in line with lower Rebif® sales. From 2016 onwards Merck intends to take over the entire Rebif® distribution in the United States and consequently no longer be subject to commission expenses.

While the worldwide pharmaceutical market is expected to recover and to grow at mid-single-digit rates in 2014 according to IMS Health, geographic growth remains unevenly distributed. Mature markets show tentative signs of recovery, but remain sluggish. Austerity measures are expected to continue to put pressure on the health care industry in Europe, which is still Merck’s dominant regional market. By contrast, many Emerging Markets such as China and Brazil will grow at double-digit rates and remain growth drivers for the pharmaceutical industry.

Owing to geographic developments, Merck Serono intends to strengthen its profitability position in Europe and the United States, to further redirect its resources to Emerging Markets and to grow in these developing economies. At the same time cost development will be monitored closely.

As part of Merck’s strategy we will forge ahead with the build-up of Merck Serono’s Biosimilars unit and therefore plan an increase in our divisional R&D expenses. Driven by the initiation of further growth projects such as the construction of a production facility in China, Merck Serono’s investment in property, plant and equipment will increase in 2014. As a result of the lower EBITDA pre one-time items and these investments, a moderate decrease is expected for Merck Serono’s divisional business free cash flow.
Forecast for the Consumer Health division

<table>
<thead>
<tr>
<th>€ million</th>
<th>Actual results 2013</th>
<th>Forecast 2014</th>
<th>Key assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>476.9</td>
<td></td>
<td>Moderate organic growth driven by strategic core brands and all geographical markets, slightly offset by unfavorable foreign exchange development</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>72.5</td>
<td>moderate increase on a comparable basis</td>
<td>Neurobion® and Floratil® transfer from Merck Serono will increase sales by ~€ 265 million based on actual 2013 results; the two product groups are expected to grow in line with existing portfolio</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>83.9</td>
<td>slight increase on a comparable basis</td>
<td>Slight increase in marketing and selling as well as R&amp;D expenses in order to support growth in Emerging Markets and to invest in other growth projects</td>
</tr>
</tbody>
</table>

With the decision by the Merck Executive Board to transfer the two product groups, Neurobion® and Floratil®, from the Merck Serono to the Consumer Health division as of January 1, 2014, the base for the Consumer Health division will increase by approximately € 265 million in sales, around € 100 million in EBITDA pre one-time items and around € 77 million in business free cash flow, based on the actual 2013 results of the transferred brands. Accordingly, the 2014 forecast for the Consumer Health division is based on the combined 2013 result.

After having set up a new regional operating model and significantly improving its cost structures over the past two years, the Consumer Health division will continue to focus its activities on the development and selective expansion of core strategic brands and on strengthening its position in key markets. The division’s goal is to achieve meaningful market shares in all relevant combinations of strategic core brands and focus markets. In doing that, profitable growth is expected from all regions, including Emerging Markets, where Consumer Health is presently underrepresented with its main consumer brands such as Bion®, Nasivin® or Femibion®.
As a consequence of a continued effort on focusing the portfolio and marketing efforts on core brands and markets, Merck expects sales of the Consumer Health division to increase moderately in 2014 and to develop in line with the over-the-counter (OTC) drug market in countries where Merck competes.

We expect the EBITDA pre one-time items of the Consumer Health division to increase moderately as marketing and selling expenses will be slightly increased to support growth in Emerging Markets and R&D spending will be raised to invest in developing a robust innovation pipeline beyond 2014. Business free cash flow is expected to be slightly above the level of 2013 as it is assumed that the EBITDA pre one-time items increase will be partly offset by increases in working capital proportionate to higher sales.

Forecast for the Performance Materials division

<table>
<thead>
<tr>
<th></th>
<th>€ million</th>
<th>Actual results 2013</th>
<th>Forecast 2014</th>
<th>Key assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,642.1</td>
<td></td>
<td></td>
<td>Slight organic growth of divisional sales offset by slight contraction due to foreign exchange development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at best</td>
<td></td>
<td>Volume growth but normal price erosion in Liquid Crystals unit for established products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at previous year level</td>
<td></td>
<td>Pigments &amp; Cosmetics to increase slightly</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>779.7</td>
<td></td>
<td></td>
<td>Decline in Liquid Crystal product prices may put pressure on the gross margin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at best</td>
<td></td>
<td>EBITDA pre one-time items expected at best at the previous year’s level</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at previous year level</td>
<td></td>
<td>Development driven by EBITDA pre one-time items</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>787.8</td>
<td>moderate decrease</td>
<td></td>
<td>Investments in property, plant and equipment in 2014 will be raised to support the “Fit for 2018” transformation and growth program</td>
</tr>
</tbody>
</table>

After a strong 2013, the Performance Materials division will be able to maintain its leadership position in the liquid crystals market and to deliver slight growth in the Pigments & Cosmetics business unit in 2014.
We expect in 2014 at best stable sales from the Liquid Crystals business unit. Despite volume growth, prices for established products will decline further. Volumes in the display industry are forecast to increase in 2014 after a moderate development in 2013 according to market researchers from Display Search. LC will remain by far the leading technology and display size will remain the main growth driver. New, innovative liquid crystal technologies will continue to strengthen the market. For example, Merck is advancing nicely with the development of SA-VA technology, which is likely to enter the market in 2015. Display production focus will be shifting gradually to China, where Merck’s new facility in Shanghai will be inaugurated in 2014 to support growth close to main customers.

For Merck’s Pigments & Cosmetics business unit, the markets are assumed to continue to offer attractive growth rates in the future. As in Merck’s other divisions, the need for innovative products and the shift in demand to Emerging Markets and thereby in particular to China, can be observed. Sales by the Pigments & Cosmetics business unit are expected to increase slightly driven by Xirallic® effect pigments.

Overall Merck expects at best stable sales for the Performance Materials division in 2014 as stable organic growth might be offset by a slight contraction of reported sales due to an unfavorable foreign exchange development. Lower prices in Liquid Crystals and additional volumes will put some pressure on the divisional gross margin, whereas marketing & selling expenses and administration costs will be maintained largely at the 2013 level. R&D expenses will be slightly increased with a focus on investments in the OLED area and future LC technologies. As a result of this, we forecast for 2014 at best an EBITDA pre one-time items for Performance Materials at the level of 2013. Business free cash flow is expected to decrease moderately as the division raises its investments in property, plant and equipment in 2014 to support the “Fit for 2018” transformation and growth program and to optimize its capacities.

If the acquisition of AZ Electronic Materials takes place, Merck expects a significant increase in sales, EBITDA pre one-time items as well as business free cash flow for the Performance Materials division in 2014 compared to 2013.

### Forecast for the Merck Millipore division

#### Merck Millipore | Forecast 2014

<table>
<thead>
<tr>
<th>€ million</th>
<th>Actual results 2013</th>
<th>Forecast 2014</th>
<th>Key assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>2,627.5</td>
<td>slight increase</td>
<td>Moderate organic growth, slightly offset by foreign exchange development</td>
</tr>
<tr>
<td>EBITDA pre one-time items</td>
<td>642.8</td>
<td>slight increase</td>
<td>Growth fueled by Process Solutions and Lab Solutions, Bioscience continues to be challenged by sluggish demand</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>493.8</td>
<td>stable</td>
<td>Marginal addition to marketing and selling as well as R&amp;D expenses, improvement driven by slight sales increase</td>
</tr>
</tbody>
</table>

The Merck Millipore division is expected to remain on a healthy growth path throughout 2014. All business units have been forecast to contribute to a slight increase in sales.
Healthy growth of Merck Millipore is driven by the Process Solutions and Lab solutions business units.

The pharmaceutical market is expected to recover and to grow at middle single-digit rates compared to 2013 according to IMS Health, strongly driven by sales of biotech products. After two years of decline, R&D spending by the pharmaceutical industry is expected to resume according to Evaluate Pharma. The Process Solutions business unit, which supplies consumables and services to major pharmaceutical and biotech manufacturing companies, is expected to deliver solid organic sales growth fueled by these favorable market dynamics.

Merck expects solid performance in the Lab Solutions business unit in 2014 as the global laboratory products market is expected to grow by +1.5% to +2.0% compared to last year (Frost & Sullivan market research).

The Bioscience business unit, whose main customer groups are academic and government laboratories and institutions as well as pharmaceutical and biotechnological research organizations, is likely to continue to face a challenging economic environment in 2014. Sluggish development is forecast in the major markets of Europe and North America due to budget sequestration measures, while Emerging Markets are expected to drive growth.

Marketing and selling expenses and R&D expenses are planned to develop in line with sales, leading to a further slight improvement of divisional EBITDA pre one-time items. Investments in property, plant and equipment will be at higher levels in 2014 as the division is in the process of enhancing its production and supply network. As a result, business free cash flow is projected to remain stable at the level of 2013.

Summary

The Merck Executive Board continues to see neither any major technology shifts in its Chemical businesses nor any major new product launches in the Pharmaceutical business in 2014. Merck will continue with the implementation of the “Fit for 2018” transformation and growth program and enter a phase of continuous improvement. We plan to accelerate our R&D activities on strategic business initiatives such as Biosimilars and OLED and to direct our marketing and selling resources to growth markets.

We forecast slight organic sales growth for the Merck Group driven by the Merck Millipore and Consumer Health divisions for 2014. Despite the Rebif® sales decline, the significant reduction in royalty income and an anticipated unfavorable foreign exchange environment, we aim to achieve the 2013 level of Group EBITDA pre one-time items. Business free cash flow is expected to decrease slightly as several strategic growth projects will require investments in property, plant and equipment.
The following information is provided in accordance with Section 315 (4) of the German Commercial Code and the explanatory report pursuant to Section 176 (1) sentence 1 of the German Stock Corporation Act (AktG).

As of the balance sheet date, the company’s subscribed capital is divided into 64,621,125 no-par bearer shares plus one registered share. Each share therefore corresponds to €2.60 of the share capital. The holder of the registered share is E. Merck Beteiligungen KG. It is entitled and obliged to appoint one-third of the members of the Supervisory Board representing the limited liability shareholders. If the holder of the registered share is a general partner, he or she has no such right of appointment. The transfer of the registered share requires the company’s approval. The approval is granted at the sole discretion of the personally liable general partner with an equity interest, namely E. Merck KG.

On December 31, 2013, no shareholders owned direct or indirect investments exceeding more than 10% of the voting rights.

According to the Articles of Association of Merck, the general partners not holding an equity interest who form the Executive Board are admitted by E. Merck KG with the consent of a simply majority of the other general partners. A person may only be a general partner not holding an equity interest if he or she is also a general partner of E. Merck KG. In addition, at the proposal of E. Merck KG and with the approval of all general partners not holding an equity interest, further persons who are not general partners not holding an equity interest may be appointed to the Executive Board.

The Articles of Association can be amended by a resolution by the Annual Meeting that requires the approval of the general partners. The resolutions of the General Meeting are, notwithstanding any statutory provisions to the contrary, adopted by a simple majority of the votes cast. Where the law requires a capital majority in addition to the voting majority, resolutions are adopted by a simple majority of the share capital represented in the vote. The Articles of Association of the company specify the authorized share capital. The Executive Board is authorized, with the approval of the Supervisory Board and of E. Merck KG, to increase the share capital on one or several occasions until April 26, 2018 by up to a total of €56,521,124.19 by issuing new shares against cash or contributions in kind. The Executive Board is authorized to exclude, with the approval of the Supervisory Board, the statutory subscription right of the limited liability shareholders in the case of capital increases against cash contributions if the issue price of the new shares is not significantly lower than the stock exchange price of already listed shares carrying the same rights, as defined in section 203 (1) and (2) and section 186 (3) sentence 4 of the German Stock Corporation Act (AktG), at the time when the Executive Board finally fixes the issue price, and if the proportion of the share capital represented by the new shares for which the subscription right is excluded does not exceed 10% of the share capital available at the time of the resolution of the Annual General Meeting or – if this amount is lower – of the share capital available at the time of exercising this authorization. This upper limit shall be reduced by the prorated amount of shares that are sold during the term of the authorized capital under exclusion of shareholders’ subscription rights pursuant to section 71 (1) no. 8 sentence 5 and section 186 (3) sentence 4 of the German Stock Corporation Act, as well as shares that must be issued to redeem option or convertible bonds, as long as the bonds have been issued during the term of this authorization under exclusion of subscription rights. In addition, with the approval of the Supervisory Board, the subscription right of the shareholders can be excluded in order to enable E. Merck KG to exercise its right pursuant to Article 32 (3) of the Articles of Association to participate in a capital increase by issuing shares or freely transferable share subscription rights and to enable E. Merck KG to exercise its right pursuant to Article 33 of the Articles of Association to convert its equity interest into share capital. Moreover, with the approval of the Supervisory Board, the subscription right of the shareholders can be excluded as far as this is necessary, in order to grant subscription rights for new shares to holders of warrants and convertible bonds issued by the company or its subsidiaries,
to the extent to which they would be entitled after exercising their option and conversion rights or fulfilling their option and conversion obligations. Lastly, with the approval of the Supervisory Board, the subscription right of the shareholders can be excluded in order to exclude fractional amounts from the subscription right.

The Articles of Association also encompass conditional capital. Accordingly, the share capital is contingently increased by up to € 66,406,298.40 divided into 25,540,884 shares. The contingent capital increase serves to grant exchange rights to E. Merck KG in accordance with Article 33 of the Articles of Association to enable the conversion of its equity interest. The company is not authorized to acquire its own shares.

The company has not entered into any material agreements subject to a change of control pursuant to a takeover offer nor has it concluded any compensation agreements with the members of the Executive Board or employees in the event of a takeover offer.

Subsequent Events

Subsequent to the balance sheet date, no events of special importance occurred that could have a material impact on the financial position and results of operations of the Merck Group.
Corporate Governance

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151 Statement on Corporate Governance
172 Report of the Supervisory Board
175 Objectives of the Supervisory Board with respect to its composition
Capital structure and corporate bodies of Merck KGaA

Merck KGaA
Total capital
€ 565,211,241.95

Executive Board of Merck KGaA
General partners with no equity interest

Shareholders hold the share capital
€ 168,014,927.60

The general partner E. Merck KG holds the equity interest
€ 397,196,314.35

Board of Partners of E. Merck KG

→ see “Merck KGaA” (p. 151)
Statement on Corporate Governance

The Statement on Corporate Governance contains the Statement of Compliance, relevant information on practices within the company as well as a description of the procedures of the corporate bodies.

Joint Report of the Executive Board and the Supervisory Board according to section 3.10 of the German Corporate Governance Code including Statement of Compliance

The German Corporate Governance Code is geared toward the conditions found in a German stock corporation (“Aktiengesellschaft” or “AG”) and does not take into consideration the special characteristics of a corporation with general partners (“Kommanditgesellschaft auf Aktien” or “KGaA”) such as Merck KGaA. Given the structural differences between an AG and a KGaA, several recommendations of the German Corporate Governance Code are to be applied to a KGaA only in a modified form. Major differences between the two legal forms exist in terms of liability and management. While, in the case of an AG, only the AG is liable as a legal entity, the general partners of a KGaA also have unlimited personal liability for the company’s obligations (section 278 (1) of the German Stock Corporation Act – “AktG”). At Merck KGaA, this pertains to both E. Merck KG – which pursuant to Art. 8 (8) of the Articles of Association is excluded from management and representation – as well as to the managing general partners, who together make up the Executive Board of Merck KGaA. The members of the Executive Board of Merck KGaA are therefore subject to unlimited personal liability. Unlike an AG, their executive authority is not conferred by the Supervisory Board, but rather by their status as general partners.

Consequently, in addition to other responsibilities typical of the supervisory board of an AG (see description of the procedures of the Supervisory Board on page 165), the supervisory board of a KGaA does not have the authority to appoint the management board, draw up management board contracts, or specify compensation of the management board. This legal form also involves special features with regard to the General Meeting. For example, in a KGaA, many of the resolutions made require the consent of the general partners (section 285 (2) AktG), particularly also the adoption of the annual financial statements (section 286 (1) AktG).

Merck KGaA applies the Code analogously where these regulations are compatible with the legal form of a KGaA. In order to enable shareholders to compare the situation at other companies more easily, to a broad extent we base corporate governance on the conduct recommendations made by the Government Commission of the German Corporate Governance Code and forego having our own, equally permissible, code. The recommendations of the Code, the intent and meaning of which are applied, were complied with in the period between the last Statement of Compliance and June 9, 2013, i.e. during the period of validity of the version of the Code dated May 15, 2012, with two exceptions, and in the period between the last Statement of Compliance and April 26, 2013 with one further exception. The recommendations of the Code have been complied with since the change in the Code announced on June 10, 2013 with two exceptions. In the future, the recommendations of the Code will again be adhered to with two exceptions. Further details can be found on page 153.

For a clearer understanding, the following gives a general explanation of application of German company law at Merck with additional references to the General Meeting and shareholder rights.

Merck KGaA

The general partner E. Merck KG holds around 70% of the total capital of Merck KGaA (equity interest); the shareholders hold the remainder, which is divided into shares (share capital). E. Merck KG is excluded from the management of business activities. The general partners with no equity interest (Executive Board) manage the business activities. Nevertheless, due to its substantial capital investment and unlimited personal liability,
E. Merck KG has a strong interest in the businesses of Merck KGaA operating efficiently in compliance with procedures, and exercises its influence accordingly. Merck KGaA’s participation in the profit/loss of E. Merck KG in accordance with Articles 26 et seq. of the Articles of Association further harmonizes the interests of the shareholders and of E. Merck KG. E. Merck KG appoints and dismisses the Executive Board. In addition, E. Merck KG has created bodies – complementing the expertise and activities of the Supervisory Board – to monitor and advise the Executive Board. This task applies primarily to the Board of Partners of E. Merck KG. Based on the provisions of the German Stock Corporation Act, the Articles of Association of Merck KGaA and the rules of procedure of the various committees, Merck KGaA has a set of rules for the Executive Board and its supervision that meet the requirements of the Code. The investors, who bear the entrepreneurial risk, are protected as provided for by the Code.

The General Meeting of Merck KGaA
The eighteenth General Meeting of Merck KGaA was held on April 26, 2013 in Frankfurt am Main, Germany. At 67.54%, the proportion of share capital represented at the meeting was stable, exceeding the proportion of 63.5% in 2012.

In particular, the Annual General Meeting passes resolutions concerning the approval of the annual financial statements, the appropriation of net retained profit, the approval of the actions of the Executive Board members and the Supervisory Board members, as well as the choice of the auditor. Changes to the Articles of Association likewise require the adoption of a resolution by the General Meeting.

The shareholders of Merck KGaA exercise their rights at the General Meeting. They may exercise their voting rights personally, through an authorized representative, or through a proxy appointed by the company. The proxy is in attendance throughout the duration of the General Meeting. All the documents and information concerning upcoming General Meetings (including a summary explanation of shareholder rights) are posted on our website. Moreover, the General Meeting is webcast live on the Internet from its commencement until the end of the speech by the Chairman of the Executive Board. The introductory speeches by the Chairman of the Executive Board and the Chairman of the Supervisory Board are recorded in order to make them available to interested members of the public at any time after the meeting. In this way, we are satisfying the high transparency requirements of the Merck Group.
Statement of Compliance

In accordance with section 161 AktG applying the provisions of the German Corporate Governance Code correspondingly, the Executive Board and the Supervisory Board issued the following statement of compliance with the recommendations of the Government Commission of the German Corporate Governance Code:

"Declaration of the Executive Board and the Supervisory Board of Merck KGaA on the recommendations of the Government Commission of the German Corporate Governance Code pursuant to section 161 AktG.

Since the last statement of compliance on March 6, 2013, the Merck Group has complied with the recommendations of the Government Commission of the German Corporate Governance Code in the version dated May 15, 2012 and published in the official section of the German Federal Gazette during its period of validity with the following exception:

Contrary to section 5.4.1 sentence 2 of the German Corporate Governance Code, an age limit is not taken into account when proposing candidates for election to the Supervisory Board pursuant to the published objectives of the Supervisory Board. The age of Supervisory Board members is not a criterion for their qualifications and competence. Moreover, we do not wish to forego the many years of experience of Supervisory Board members.

Contrary to section 5.3.1 of the German Corporate Governance Code, the Supervisory Board has not established an audit committee. However, an audit committee does exist in the form of the Finance Committee of the Board of Partners of E. Merck KG, which to a large extent exercises the duties described in section 5.3.2 of the Code. Due to the relatively limited authority of the supervisory board of a KGaA in comparison with that of an AG, this therefore satisfies the requirements of the German Corporate Governance Code.

Since the announcement of the amendment of 5.4.6 (2) of the German Corporate Governance Code on June 15, 2012, up until April 26, 2013 the compensation of the Supervisory Board of the company did not correspond to the current recommendations to the extent that, apart from reimbursement for expenses and fixed compensation, performance-related compensation was granted based on the dividend of the current fiscal year. With the version of the German Corporate Governance Code dated May 15, 2012, the recommendation was introduced that performance-related compensation should be oriented toward the sustainable development of the company. The 2013 Annual General Meeting passed a resolution on a new compensation system that, since April 27, 2013, has stipulated exclusively fixed compensation in line with the recommendations of the German Corporate Governance Code in force since June 15, 2012.

During the period from June 10, 2013 until the issuance of this Statement of Compliance, the recommendations of the Government Commission of the German Corporate Governance Code in the version dated May 13, 2013 and announced by the German Federal Ministry of Justice on June 10, 2013 in the official section of the German Federal Gazette were complied with apart from the aforementioned exceptions to 5.4.1 sentence 2 and 5.3.1.

In view of future compliance with the current recommendations of the Government Commission of the German Corporate Governance Code, the Executive Board and the Supervisory Board declare the following: With the exception of the aforementioned deviations from section 5.4.1 sentence 2 (age limit) and section 5.3.1 (audit committee), the company will comply with the recommendations of the Code in the version dated May 13, 2013."

Darmstadt, February 28, 2014

For the Executive Board

s. Karl-Ludwig Kley

For the Supervisory Board

s. Rolf Krebs
Compensation report

(The compensation report is part of the audited Notes to the Group accounts)

Compensation of members of the Executive Board of Merck KGaA

Contrary to management board members of German stock corporations, the members of the Executive Board of Merck KGaA are not employed officers of the company. Rather, they are personally liable general partners of both Merck KGaA and the general partner E. Merck KG, and in this capacity they receive profit-based compensation from E. Merck KG. Given this context, the stipulations of the German Corporate Governance Code concerning the compensation of management board members of publicly listed German stock corporations as well as the individual disclosure thereof do not apply to the Executive Board members of Merck KGaA. Nevertheless, Merck KGaA has decided to disclose the individual compensation of each Executive Board member in the following report.

Contrary to publicly listed German stock corporations, at Merck KGaA it is not the Supervisory Board, but the Board of Partners of E. Merck KG that decides on the amount and composition of compensation. E. Merck KG has transferred the execution of this right to its Personnel Committee. Among other things, the Personnel Committee is responsible for the following decisions: contents of contracts with Executive Board members, granting of loans and advance salary payments, approval for taking on honorary offices, board positions and other sideline activities, as well as the division of responsibilities within the Executive Board of Merck KGaA. The compensation system defined by the Personnel Committee for Executive Board members takes into account various aspects relevant to compensation, including the responsibilities and duties of the individual Executive Board members and their status as personally liable partners, their individual performance, the economic situation, performance and prospects of the company, normal compensation levels (by way of peer comparison) and the rewards structure otherwise in place in the company. The relationship between Executive Board compensation and the compensation of top management and the workforce as a whole is also taken into account, also in a multi-year assessment. The Personnel Committee regularly commissions an independent compensation consultant to review the appropriateness of compensation.

Features of the compensation system

The compensation paid to the Executive Board members of Merck KGaA in fiscal 2013 comprises fixed components, variable compensation components and additions to pension provisions. Benefits in kind and other benefits are additionally granted.

Fixed compensation

Fixed compensation is paid in the form of 12 equivalent monthly installments. The table on page 157 provides an overview of the amount of the fixed compensation paid in 2012 and 2013.
Variable compensation

Variable compensation is based on the three-year rolling average of profit after tax of the E. Merck Group. The Board of Partners of E. Merck decides at its own discretion on consideration of exceptional factors that amount to more than 10% of the Group profit. The members of the Executive Board receive individually fixed per mille rates based on the net income of the E. Merck Group.

Additionally, in exceptional cases the Personnel Committee of E. Merck KG, which is responsible for the compensation of the Executive Board, may grant one-time payments voluntarily and at its own discretion. In such cases, the Personnel Committee ensures that the one-time payments do not exceed the respective total compensation of the individual Executive Board member composed of fixed and variable compensation (excluding the one-time payment).

Additional variable compensation (Merck Long-Term Incentive Plan)

In 2012, a long-term variable compensation component known as the Merck Long-Term Incentive Plan was added to the variable compensation of the members of the Executive Board. It aims to enhance the sustainability of the compensation system and to align it not only with target achievement based on key performance indicators, but above all with a sustainable performance of Merck shares.

Subject to the resolution of the Personnel Committee each year, under the Merck Long-Term Incentive Plan the members of the Executive Board could be eligible to receive a certain number of virtual shares – Merck Share Units (MSUs) – at the end of a three-year performance cycle. The number of MSUs that could be received depends on the total value defined for the respective person and the average closing price of Merck shares in Xetra® trading during the last 60 trading days prior to January 1 of the respective fiscal year (reference price). In order to participate in the Plan, members of the Executive Board must personally own an investment in Merck shares equivalent to 10% of their respective fixed annual compensation, taking into account the equity interest held in E. Merck KG as a personally liable general partner. It is not permitted to sell these shares during the performance cycle. After termination of the three-year performance cycle, the number of MSUs to be granted then is determined based on the development of two key performance indicators (KPIs). These are:

a) the performance of the Merck share price compared to the DAX® with a weighting of 70%, and
b) the development of the EBITDA pre margin during the performance cycle as a proportion of a defined target value with a weighting of 30%.

Depending on the development of the KPIs, at the end of the respective performance cycle, the members of the Executive Board are granted between 0% and 150% of the MSUs they could be eligible to receive.

Based on the number of MSUs granted, the members of the Executive Board receive a cash payment at a defined point in time in the year following the expiration of the three-year performance cycle. The value of an MSU corresponds to the average closing price of Merck shares in Xetra® trading during the last 60 trading days prior to January 1 after the performance cycle. The payment amount is limited to three times the reference price. The members of the Executive Board invest 50% of the payment amount in Merck shares. One third of these shares may be sold at the earliest one year after termination of the performance cycle, another third after two years, and another third after three years.
In fiscal 2013, the following total values were specified for members of the Executive Board, which resulted in the respective number of MSUs they were eligible to receive based upon the definitive reference price of Merck shares (60 trading days preceding January 1, 2013) of €100.11: Karl-Ludwig Kley €1.5 million (14,984 MSUs), Kai Beckmann €1.0 million (9,990 MSUs), Stefan Oschmann €1.0 million (9,990 MSUs), Bernd Reckmann €1.0 million (9,990 MSUs), and Matthias Zachert €1.0 million (9,990 MSUs). For fiscal 2014, the Personnel Committee authorized the Chairman of the Personnel Committee to assign potential numbers of MSUs to the Executive Board members for a performance cycle from January 1, 2014 to December 31, 2016. The following total values were defined as the initial basis: Karl-Ludwig Kley €1.5 million, Kai Beckmann €1.0 million, Stefan Oschmann €1.0 million, and Bernd Reckmann €1.0 million.

**Additional benefits**

The members of the Executive Board also receive certain additional benefits, mainly contributions to insurance policies as well as a company car, which they are entitled to use privately. Overall, the value of other additional benefits totaled €120 thousand in 2013 (2012: €122 thousand). Of this amount, in 2013 €28 thousand was attributable to Karl-Ludwig Kley (2012: €28 thousand); €23 thousand to Kai Beckmann (2012: €23 thousand); €19 thousand to Stefan Oschmann (2012: €21 thousand); €26 thousand to Bernd Reckmann (2012: €26 thousand); and €24 thousand to Matthias Zachert (2012: €24 thousand).
Total compensation

Accordingly, the following total compensation results for the members of the Executive Board of Merck KGaA broken down by performance-independent and performance-related components:

<table>
<thead>
<tr>
<th>Current members</th>
<th>Performance-independent components</th>
<th>Performance-related components</th>
<th>Share-based compensation expensed in the period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed compensation</td>
<td>Additional benefits</td>
<td>Number of MSUs</td>
</tr>
<tr>
<td>Karl-Ludwig Kley</td>
<td>2013 1,100 28</td>
<td>4,334</td>
<td>14,984</td>
</tr>
<tr>
<td></td>
<td>2012 1,100 28</td>
<td>2,795</td>
<td>21,562</td>
</tr>
<tr>
<td>Kai Beckmann</td>
<td>2013 800 23</td>
<td>2,895</td>
<td>9,990</td>
</tr>
<tr>
<td></td>
<td>2012 800 23</td>
<td>1,746</td>
<td>14,375</td>
</tr>
<tr>
<td>Stefan Oschmann</td>
<td>2013 1,000 19</td>
<td>3,534</td>
<td>9,990</td>
</tr>
<tr>
<td></td>
<td>2012 1,000 21</td>
<td>2,295</td>
<td>14,375</td>
</tr>
<tr>
<td>Bernd Reckmann</td>
<td>2013 1,000 26</td>
<td>3,534</td>
<td>9,990</td>
</tr>
<tr>
<td></td>
<td>2012 1,000 26</td>
<td>2,295</td>
<td>14,375</td>
</tr>
<tr>
<td>Matthias Zachert</td>
<td>2013 1,000 24</td>
<td>3,284</td>
<td>9,990</td>
</tr>
<tr>
<td></td>
<td>2012 1,000 24</td>
<td>2,045</td>
<td>14,375</td>
</tr>
<tr>
<td>Total</td>
<td>2013 4,900 120</td>
<td>17,581</td>
<td>54,944</td>
</tr>
<tr>
<td></td>
<td>2012 4,900 122</td>
<td>11,176</td>
<td>79,062</td>
</tr>
</tbody>
</table>

1 The one-time payments for 2013 granted to Karl-Ludwig Kley, Kai Beckmann, Stefan Oschmann, Bernd Reckmann and Matthias Zachert are included in the variable compensation components for 2013.
2 Number of the potential MSUs subject to target achievement. For details on the calculation thereof, see page 156. The actual number of MSUs to be granted after the expiration of the three-year performance cycle may deviate from this.
3 Fair value on the date of the grant (date of the legally binding entitlement). The amount of a payment is not predefined. Payment is subject to target achievement and is only made on a specified date after the expiration of a three-year performance cycle. The fair value of the obligations was calculated using a Monte Carlo simulation based on the previously described KPIs. The expected volatilities are based on the implicit volatility of Merck shares and the DAX® index in accordance with the remaining term of the LTIP tranche. The dividend payments incorporated into the valuation model orient towards medium-term dividend expectations.
4 In accordance with IFRS the expense recorded for 2013 includes the values for the 2012 and 2013 LTIP tranches.
5 The Personnel Committee of E. Merck KG decided on February 6, 2014 that Matthias Zachert will only receive payments under the LTIP for the 2012 tranche. The (9,990) MSUs granted in 2013 will not lead to a payment.
Pension provisions

The individual contractual pension obligations grant the members of the Executive Board entitlement to a lifelong old-age pension or surviving dependents' pension in the event of reaching the individual contractually agreed age limit, permanent disability, or death.

The amount of the old-age pension is determined by a percentage share of pensionable compensation defined by the Personnel Committee.

The individual values are presented in the following table:

<table>
<thead>
<tr>
<th>Pensionable compensation (€ thousand)</th>
<th>Percentage entitlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karl-Ludwig Kley</td>
<td>700</td>
</tr>
<tr>
<td>Kai Beckmann</td>
<td>300</td>
</tr>
<tr>
<td>Stefan Oschmann</td>
<td>500</td>
</tr>
<tr>
<td>Bernd Reckmann</td>
<td>500</td>
</tr>
<tr>
<td>Matthias Zachert</td>
<td>400</td>
</tr>
</tbody>
</table>

The percentage entitlement increases up until retirement by two percentage points per year of service up to 70% for Kai Beckmann, Bernd Reckmann and Matthias Zachert. Their pension entitlements were correspondingly increased in fiscal 2013.

The following amounts were added to pension provisions in 2013:

<table>
<thead>
<tr>
<th>Additions to pension provisions</th>
<th>2013</th>
<th>2012</th>
<th>Ammount of pension provisions as of Dec. 31, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ thousand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karl-Ludwig Kley</td>
<td>803</td>
<td>2,023</td>
<td>8,093</td>
</tr>
<tr>
<td>Kai Beckmann</td>
<td>-47</td>
<td>653</td>
<td>2,431</td>
</tr>
<tr>
<td>Stefan Oschmann</td>
<td>483</td>
<td>156</td>
<td>1,137</td>
</tr>
<tr>
<td>Bernd Reckmann</td>
<td>-15</td>
<td>1,446</td>
<td>5,740</td>
</tr>
<tr>
<td>Matthias Zachert</td>
<td>280</td>
<td>195</td>
<td>628*</td>
</tr>
<tr>
<td>Total</td>
<td>1,504</td>
<td>4,473</td>
<td>18,029</td>
</tr>
</tbody>
</table>

*Due to Matthias Zachert’s departure, he will no longer have any entitlement to pension payments.

The surviving dependents' pension grants the spouse a lifelong surviving dependents' pension amounting to 60% of the pension entitlement, dependent children either a half-orphan’s or an orphan’s pension maximally until the age of 25.

As an alternative to an old-age pension, upon reaching the age limit specified in their individual contracts, it is planned to offer the members of the Executive Board the possibility to receive their pension entitlement in the form of a one-time lump-sum payment calculated in accordance with actuarial principles.
Benefits in the event of termination of the duties as an Executive Board member

The employment contracts of Karl-Ludwig Kley, Kai Beckmann, Stefan Oschmann and Bernd Reckmann each contain a post-contractual non-competition clause. An amount equal to 50% of the average contractual benefits paid to the respective Executive Board member within the past 12 months prior to leaving the company shall be provided as compensation for each year of the two-year non-competition period. During the period of the non-competition clause, other employment income as well as pension payments will be credited toward this compensation. Within certain time limits, E. Merck KG has the possibility to dispense with adherence to the non-competition clause with the consequence that the obligation to make the compensation payments shall cease to apply.

Above and beyond existing pension obligations, no further obligations additionally exist in the event of the termination of the contractual relationships of the Executive Board members.

Miscellaneous

The members of the Executive Board do not receive additional compensation for serving on the boards of Group companies.

Should members of the Executive Board be held liable for financial losses while executing their duties, under certain circumstances this liability risk is covered by a D&O insurance policy from Merck KGaA. The D&O insurance policy has a deductible in accordance with the legal requirements and the recommendations of the German Corporate Governance Code.

Payments to former Executive Board members and their surviving dependents

Pension payments to former members of the Executive Board or their surviving dependents amounted to €7,494 thousand in 2013 (2012: €10,478 thousand). Pension provisions totaling €103,615 thousand exist for pension entitlements of this group of persons (2012: €108,473 thousand).

Compensation of the Supervisory Board members of Merck KGaA

The compensation of the Supervisory Board members is defined by Article 20 of the Articles of Association of Merck KGaA. On April 26, 2013 the Annual General Meeting proposed a new compensation system in order to align it with the changes in the German Corporate Governance Code announced on June 15, 2012.

The rules that still applied until April 26, 2013 provided for the following: Apart from reimbursement of their expenses, the members of the Supervisory Board received fixed and variable compensation.

The fixed compensation amounted to €7,000 per year. The Chairman received double this amount and the Vice Chairman receives one and a half times this amount.

The members of the Supervisory Board also received €550 for each percent of the dividend resolved by the General Meeting in excess of 6% of the share capital, with a corresponding portion for fractions of a percent. The Chairman receives double this amount and the Vice Chairman received one and a half times this amount.

Supervisory Board members who had only been in office for part of the fiscal year received lower compensation in proportion to their term of office. The company reimburses the value-added tax levied on the compensation.
The rules applicable since April 27, 2013 stipulate that only fixed compensation be paid. The members of the Supervisory Board will now receive annual fixed compensation of € 47,000. The Chairman receives double and the Vice Chairman receives one and a half times this amount. In addition, the members receive additional compensation of € 750 per meeting.

Supervisory Board compensation for fiscal 2013 for the period from January 1, 2013 to April 26, 2013 was determined by the compensation rules applicable until April 26, 2013. For the period from April 27, 2013 to December 31, 2013, it is determined by the compensation rules applicable since April 27, 2013, whereupon the amounts stipulated in both provisions shall be respectively pro-rated in proportion to the amount of time. As of fiscal 2014, Supervisory Board compensation will be determined solely by the compensation rules applicable since April 27, 2013.

The individual values are presented in the following table:

<table>
<thead>
<tr>
<th>Compensation of the Supervisory Board members of Merck KGaA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compensation</strong></td>
</tr>
<tr>
<td><strong>Fixed compensation</strong></td>
</tr>
<tr>
<td>As of April 27, 2013</td>
</tr>
<tr>
<td>Until April 27, 2013</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td><strong>Variable compensation</strong></td>
</tr>
<tr>
<td>As of April 27, 2013</td>
</tr>
<tr>
<td>Until April 27, 2013</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td><strong>Compensation for meeting attendance</strong></td>
</tr>
<tr>
<td>As of April 27, 2013</td>
</tr>
<tr>
<td>Until April 27, 2013</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td><strong>Total compensation</strong></td>
</tr>
<tr>
<td>As of April 27, 2013</td>
</tr>
<tr>
<td>Until April 27, 2013</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

1 As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 150,000 for performing this function in 2013 (2012: € 150,000).
2 As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 140,000 for performing this function in 2013 (2012: € 140,000).
3 As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 120,000 for performing this function in 2013 (2012: € 120,000).
4 As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 80,000 for performing this function in 2013 (2012: € 80,000).
5 Member of the Supervisory Board since January 31, 2013.
6 Supervisory Board members who left the Supervisory Board in 2012 are not listed in the table. Therefore, the total compensation shown here for fiscal 2012 deviates from the actual amount of total compensation paid and reported in the Annual Report for 2012, which was € 694,031.
Ownership, purchase or sale of shares in the company by members of the Executive Board and of the Supervisory Board

As of December 31, 2013, the members of the Executive Board and of the Supervisory Board either directly or indirectly held 13,692 shares of Merck KGaA. Their total ownership represents less than 1% of the issued shares of Merck KGaA. Transactions executed by members of the Executive Board and of the Supervisory Board are disclosed on the Merck website at www.merckgroup.com/investors → Corporate Governance → Directors’ Dealings.

Information on Corporate Governance Practices

Reporting

It is Merck KGaA’s objective to provide the latest information to all shareholders, media, financial analysts and interested members of the public, while creating the greatest possible transparency. For this reason, Merck uses a wide range of communication platforms to engage in a timely dialogue with all interested parties about the situation of the company and business changes. Merck’s principles include providing factually correct, comprehensive and fair information.

Information subject to disclosure requirements, as well as information that is not, can be accessed worldwide on the Merck KGaA website (www.merckgroup.com), which is the company’s most important publication platform. Apart from a detailed financial calendar, quarterly and half-year financial reports covering the past three years are available here in German and English. In addition, in line with the legal requirements, ad hoc announcements are published on the website. These contain information on circumstances that could impact the Merck share price.

Regular press conferences, investor meetings on the occasion of investor conferences as well as road shows offer another platform for dialogue. The company presentations prepared for this purpose are also available on the Merck KGaA website. In addition, the Investor Relations team is always available to private and institutional investors who wish to receive further information.

To ensure the greatest possible transparency, all documents concerning the General Meeting are available on the company website. Additionally, some parts of the General Meeting are webcast live on the Internet.

Dealing with insider information

Dealing properly with insider information is very important to us. Our insider committee examines the existence of insider information, ensures compliance with legal obligations, and prepares any necessary measures. The members of the insider committee are appointed by the Executive Board; at least two members work in Group Legal & Compliance. The insider committee meets at regular intervals, yet also meets when circumstances require. The Chief Financial Officer is vested with the authority to make the final decision on handling potential insider information.

In order to ensure a high level of protection for insider information, in 2011 the Executive Board issued an internal insider guideline applicable throughout the Merck Group worldwide. This guideline informs employees about their responsibilities under insider trading laws and gives clear instructions for compliant behavior. In addition, it describes the function of the insider committee in detail. Moreover, our Code of Conduct, which is binding on all employees, also contains an explicit, detailed reference to the ban on using insider information. Within the scope of obligatory training courses on the Code of Conduct, all employees are instructed on the subject of insider trading.
Accounting and audits of financial statements

Merck KGaA prepares its consolidated financial statements and Group management report in accordance with International Financial Reporting Standards (IFRS), as applicable in the EU, as well as the supplementary rules applicable under section 315a (1) of the German Commercial Code (HGB) and as stipulated by our Articles of Association. The Group financial statements and the Group management report are prepared by the Executive Board and examined by an auditor, taking into account the generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW).

The Supervisory Board commissioned KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, to audit the Group financial statements and the Group management report for 2013. The auditor responsible for auditing the consolidated financial statements changes regularly in accordance with the statutory requirements. Manfred Jenal is currently leading the audit engagement. Neither party identified any conflicts of interest. Moreover, the Supervisory Board agreed with KPMG AG that the auditor shall inform the Supervisory Board without delay of any grounds for bias or disqualification occurring during the audit if these cannot be immediately rectified. Additionally, the auditor must immediately report to the Supervisory Board any findings and issues which emerge during the audit that have a direct bearing upon the tasks of the Supervisory Board. The auditor shall inform the Supervisory Board or note in the audit report any circumstances determined during the audit that would render inaccurate the Statement of Compliance made by the Executive Board and the Supervisory Board. It has also been agreed with the auditor that in order to assess whether the Executive Board has fulfilled its obligations in accordance with section 91 (2) AktG, the audit will also cover the company’s early warning risk identification system. Moreover, the auditor is required to examine and evaluate the accounting-relevant internal control system insofar as this is necessary and appropriate for assessing the accuracy of financial reporting.

Values and compliance

Based on a corporate culture that places the fundamental company values – courage, achievement, responsibility, respect, integrity and transparency – at the center of our entrepreneurial actions, the Code of Conduct helps those involved in the business process to implement the values when dealing with one another on a daily basis.

Merck has created the Code of Conduct as a set of rules and regulations intended to help our employees to act responsibly and to make the right decisions in their daily work.

The Code of Conduct explains the principles for dealings with business associates, general partners, colleagues, and employees, as well as the communities in which we operate. Thus, it supports all employees in acting ethically – not only in their dealings with one another, but also outside the company. The Code of Conduct is thus the main set of rules of our compliance program.

To Merck, compliance means observing legal and company-internal regulations and the basic ethical principles anchored in the company values. With the Code of Conduct and the various unit-specific ethical compliance rules, the values are integrated into daily work and business practice. The Code of Conduct is binding on all employees, both at headquarters as well as the subsidiaries. The Compliance Office monitors observance of the Code of Conduct with support from corresponding auditing and training programs throughout the Group. All employees are called upon to report compliance violations to their supervisor, Legal, HR or other relevant departments. Merck created the position of Group Compliance Officer (GCO) in 2002. This employee is responsible for setting up, maintaining and further developing our global compliance program. By taking appropriate measures, the GCO and his team, including regional compliance officers, help to lower the risk of serious legal violations of, for instance, antitrust law or anticorruption rules. The role of the Group Compliance Officer is reflected in the subsidiaries, which ensure that compliance
measures are implemented in the countries. By reorganizing the Compliance function, as of 2013 Compliance tasks in the regions are largely performed by full-time Compliance Officers. As a result, a higher level of compliance expertise is based locally and the increasing tasks, above all in the pharmaceutical sector, are taken into account. At the same time, the management structure was streamlined and the reporting lines for the countries were consolidated regionally. Regular regional and global compliance meetings are held to promote the exchange of information within the compliance organization. Newcomer training seminars were introduced in 2010 for newly appointed compliance officers. These seminars serve to build up compliance expertise and strengthen cooperation within the compliance organization. This Group-wide network is used to steer the global compliance program.

Within the scope of this program, a high degree of importance is attached to regular compliance seminars of the Merck Compliance Training Plan, which are conducted as web-based training courses and on-site events. By presenting various training topics, particularly on the Code of Conduct, corruption, antitrust and competition law as well as health care compliance, they serve to sensitize employees and management to the consequences of compliance violations and to show ways of avoiding them. Since Merck set up a central SpeakUp line, employees have been able to report compliance violations by telephone or via a web-based application in their respective national language. The SpeakUp line is available 24 hours a day, free of charge. Case numbers enable anonymous, two-way communication. The reports received are individually reviewed. If a compliance violation exists, corresponding corrective action is taken based on concrete action plans. If necessary, disciplinary measures are taken. These can range from a simple warning up to the dismissal of the employee who violated a compliance rule. In 2010, Merck set up a compliance committee to guide these processes. The Compliance Committee consists of members from various Group functions; they are involved in reviewing compliance violations and introducing countermeasures. The joint work in the Compliance Committee enables processes between the various Group functions to be optimized. Further significant elements of the Compliance program include requirements on locally identifying and assessing risks and reporting these, both within the subsidiary abroad and to the Group functions. Group Compliance regularly reviews and assesses the implementation status of the Compliance program at the subsidiaries abroad. In cooperation with Group Internal Auditing, the Compliance Office regularly reviews the implementation of Group-wide compliance measures at the subsidiaries abroad. The audits regularly focus on the local compliance structure, the compliance measures taken, as well as the existence of corresponding compliance guidelines and processes.

The Compliance department reports regularly to the Executive Board, informing it of the status of compliance activities (including training status), compliance risks as well as serious compliance violations.

The Executive Board informs the supervisory bodies at least once a year about the key compliance issues.
Risk and opportunity management
The Executive Board, the Supervisory Board and the Finance Committee are regularly informed about the current risk portfolio of the Group and the individual companies. More detailed information can be found in the Report on Risks and Opportunities on page 120 et seq.

Avoidance of conflicts of interest
Within the framework of their work, all Executive Board and Supervisory Board members of Merck KGaA are exclusively committed to the interests of the company and pursue neither personal interests nor grant unjustified advantages to third parties.

Before an Executive Board member takes on honorary offices, board positions or other sideline activities, this must be approved by the Personnel Committee of the Board of Partners of E. Merck KG. The Chairman of the Executive Board, Karl-Ludwig Kley, and the Chief Financial Officer, Matthias Zachert, are both members of the Executive Board of E. Merck KG. This does not, however, lead to conflicts of interest.

In its report to the General Meeting, the Supervisory Board discloses any conflicts of interest involving its members and how they were dealt with. Consultancy agreements as well other service and work contracts of a Supervisory Board member with Merck require the approval of the Supervisory Board. In fiscal 2013, there were neither conflicts of interest nor consultancy agreements or other service or work contracts with Merck KGaA involving Supervisory Board members.

Adherence to environmental and safety standards
At Merck, closed-loop thinking guides the way in which we address environmental concerns and environmental protection issues. To this end, we integrate precautionary measures into our planning processes. Our Environment, Health and Safety Policy with its principles and strategies implements the guidelines formulated by the national and international associations of the chemical industry in the Responsible Care guidelines. The Responsible Care Global Charter developed by the International Council of Chemical Associations (ICCA) in 2006 puts even more emphasis than before on overall responsibility for products, supply chains and the community. Merck signed this expanded version of Responsible Care for the entire Group in February 2007.

We report our ecological, economic and social performance transparently in accordance with the internationally recognized principles of the Global Reporting Initiative (GRI), taking into account the requirements of the German Sustainability Code and the principles of the UN Global Compact.

One of our major climate protection objectives is to achieve a 20% reduction in our greenhouse gas emissions by 2020 measured against the 2006 baseline.

Many guidelines specify how the sites and employees of the Merck Group are to observe the principles in their daily work. The Group function Environment, Health, Safety, Security & Quality steers these global activities and ensures compliance with regulatory requirements, standards and business needs throughout the entire Group. In this way, Group-wide risks are minimized and continuous improvement is promoted in the areas of Environment, Health, Safety, Security, and Quality. Corporate Responsibility reports are also published at regular intervals.

1Mr. Zachert will leave the Executive Board of E. Merck KG as of March 31, 2014.
Procedures of the Executive Board, Supervisory Board, Board of Partners and its Committees

Members of the Executive Board of Merck KGaA

Notes on memberships of statutory supervisory boards and comparable German and foreign supervisory bodies (section 285 No. 10 HGB in conjunction with section 125 (1) sentence 5 AktG).

<table>
<thead>
<tr>
<th>Member</th>
<th>Memberships of (a) statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations</th>
</tr>
</thead>
</table>
| Karl-Ludwig Kley | (a) – Bertelsmann SE & Co. KGaA, Gütersloh  
- Bertelsmann Management SE, Gütersloh  
- BMW AG, Munich (Vice Chairman)  
- Deutsche Lufthansa AG, Cologne (since May 7, 2013)  
- 1. FC Köln GmbH & Co KGaA, Cologne (Chairman)  
(until June 30, 2013) |
| Kai Beckmann | Darmstadt, Head of Group Human Resources  
no board positions |
| Stefan Oschmann | Munich, Responsible for the Merck Serono and Consumer Health divisions  
no board positions |
| Bernd Reckmann | Seelheim-Jugenheim, Responsible for the Performance Materials and Merck Millipore divisions  
no board positions |
| Matthias Zachert¹ | Bonn, Chief Financial Officer  
no board positions |

¹ Matthias Zachert will leave the Executive Board of Merck KGaA as of March 31, 2014.

The general partners with no equity interest [Executive Board] manage the business activities in accordance with the laws, the Articles of Association and the rules of procedure. They are appointed by E. Merck KG in accordance with the consent of a simple majority of the other general partners. The members of the Executive Board are jointly responsible for the entire management of the company. Certain tasks are assigned to individual Executive Board members based on a responsibility distribution plan. Each Executive Board member promptly informs the other members of any important actions or operations in his respective business area. The Executive Board is responsible for preparing the annual financial statements of Merck KGaA and of the Group as well as for approving the quarterly and half-year financial statements of the Merck Group. In addition, the Executive Board ensures that all legal provisions, official regulations and the company’s internal policies are abided by, and works to achieve compliance with them by all the companies of the Merck Group. A Group-wide guideline defines in detail which transactions require prior Executive Board approval.

The Executive Board provides the Supervisory Board with regular, up-to-date and comprehensive reports about all company-relevant issues concerning strategy, planning, business developments, the risk situation, risk management and compliance. The rules of procedure of the Executive Board and of the Supervisory Board as well as a Supervisory Board resolution regulate further details on the information and reporting duties of the Executive Board vis-à-vis the Supervisory Board.
The Executive Board informs the Board of Partners and the Supervisory Board at least quarterly of the progress of business and the situation of the company. In addition, the Executive Board informs the aforementioned boards at least annually of the company’s annual plans and strategic considerations.

The Executive Board passes its resolutions in meetings that are normally held twice a month.

**Supervisory Board**

<table>
<thead>
<tr>
<th>Member</th>
<th>Memberships of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) other statutory supervisory boards and</td>
</tr>
<tr>
<td></td>
<td>(b) comparable German and foreign supervisory</td>
</tr>
<tr>
<td></td>
<td>bodies of corporations</td>
</tr>
<tr>
<td>Rolf Krebs</td>
<td>(a) – Ganymed Pharmaceuticals AG, Mainz (Chairman)</td>
</tr>
<tr>
<td></td>
<td>– Merz GmbH &amp; Co. KGaA, Frankfurt</td>
</tr>
<tr>
<td></td>
<td>– Merz Pharmaceuticals GmbH, Frankfurt</td>
</tr>
<tr>
<td></td>
<td>(b) – E. Merck KG, Darmstadt</td>
</tr>
<tr>
<td>Heiner Wilhelm</td>
<td>no board positions</td>
</tr>
<tr>
<td>Reinheim, Chairman of the</td>
<td></td>
</tr>
<tr>
<td>Works Council of the</td>
<td></td>
</tr>
<tr>
<td>Darmstadt site of Merck KGaA</td>
<td></td>
</tr>
<tr>
<td>(until April 30, 2013); as</td>
<td></td>
</tr>
<tr>
<td>May 1, 2013, Senior Manager</td>
<td></td>
</tr>
<tr>
<td>Industrial Relations; Vice</td>
<td></td>
</tr>
<tr>
<td>Chairman</td>
<td></td>
</tr>
<tr>
<td>Crocifissa Attardo</td>
<td>(b) – BKK Merck</td>
</tr>
<tr>
<td>Darmstadt, Full-time member</td>
<td></td>
</tr>
<tr>
<td>of the Works Council of</td>
<td></td>
</tr>
<tr>
<td>Merck Darmstadt/Gernsheim</td>
<td></td>
</tr>
<tr>
<td>Mechtild Auge</td>
<td>no board positions</td>
</tr>
<tr>
<td>Wehrheim, Full-time member</td>
<td></td>
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<tr>
<td>of the Works Council of</td>
<td></td>
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<tr>
<td>Merck Darmstadt/Gernsheim</td>
<td></td>
</tr>
<tr>
<td>Johannes Baillou</td>
<td>(b) – E. Merck KG, Darmstadt¹</td>
</tr>
<tr>
<td>Vienna, Austria, Managing</td>
<td>(Vice Chairman)</td>
</tr>
<tr>
<td>Partner of Bondi Immobilien-</td>
<td></td>
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<tr>
<td>Consulting GmbH, Vienna</td>
<td></td>
</tr>
<tr>
<td>Frank Binder</td>
<td>(a) – Landbell AG für Rückhol-Systeme, Mainz (Chairman)</td>
</tr>
<tr>
<td>Monaco, Chief Executive</td>
<td></td>
</tr>
<tr>
<td>Officer of Lloyd Yachts SAM,</td>
<td>(b) – E. Merck KG, Darmstadt¹</td>
</tr>
<tr>
<td>Monaco</td>
<td></td>
</tr>
<tr>
<td>Wolfgang Büchele</td>
<td>(b) – E. Merck KG, Darmstadt¹</td>
</tr>
<tr>
<td>Römerberg, Chief Executive</td>
<td></td>
</tr>
<tr>
<td>Officer of Kemira Oy, Finland</td>
<td></td>
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<tr>
<td>Michael Fletterich</td>
<td>no board positions</td>
</tr>
<tr>
<td>Gernsheim, Chairman of the</td>
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<tr>
<td>Works Council of Merck</td>
<td></td>
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<tr>
<td>Darmstadt/Gernsheim</td>
<td></td>
</tr>
<tr>
<td>Jens Frank (since January</td>
<td>no board positions</td>
</tr>
<tr>
<td>31, 2013)</td>
<td></td>
</tr>
<tr>
<td>Rossdorf, Full-time member</td>
<td></td>
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<tr>
<td>of the Works Council of</td>
<td></td>
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<tr>
<td>Merck Darmstadt/Gernsheim</td>
<td></td>
</tr>
<tr>
<td>Edelfrau Glänzer</td>
<td>(a) – B. Braun Melsungen AG, Melsungen</td>
</tr>
<tr>
<td>Hannover, Vice Chairman of</td>
<td>(Vice Chairman)</td>
</tr>
<tr>
<td>the Managing Board of</td>
<td></td>
</tr>
<tr>
<td>Industriegewerkschaft</td>
<td></td>
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<tr>
<td>Bergbau, Chemie, Energie (IG</td>
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<tr>
<td>BCE)</td>
<td></td>
</tr>
<tr>
<td>Jürgen Glaser</td>
<td>(b) – BKK Merck</td>
</tr>
<tr>
<td>Bingen, Regional Director of</td>
<td></td>
</tr>
<tr>
<td>the IG BCE Darmstadt</td>
<td></td>
</tr>
<tr>
<td>Michaela Freifrau von Glenck²</td>
<td>no board positions</td>
</tr>
<tr>
<td>Zurich, Teacher</td>
<td></td>
</tr>
<tr>
<td>Hans-Jürgen Leuchs</td>
<td>(b) – E. Merck KG, Darmstadt¹</td>
</tr>
<tr>
<td>Ingelheim, Graduate chemist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Zeton B.V., Enschede, Netherlands</td>
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<tr>
<td></td>
<td>– Zeton International Inc., Burlington ONT, Canada</td>
</tr>
</tbody>
</table>
### Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations

<table>
<thead>
<tr>
<th>Member</th>
<th>Memberships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albrecht Merck</td>
<td>(a) – E.ON SE, Düsseldorf</td>
</tr>
<tr>
<td></td>
<td>(b) – E. Merck KG, Darmstadt¹</td>
</tr>
<tr>
<td>Karl-Heinz Scheider</td>
<td>(a) – Henkel AG &amp; Co KGaA, Düsseldorf</td>
</tr>
<tr>
<td></td>
<td>(b) – E. Merck KG, Darmstadt¹</td>
</tr>
<tr>
<td>Theo Siegert</td>
<td>(a) – DKSH Holding Ltd., Zurich, Switzerland</td>
</tr>
</tbody>
</table>

¹Internal board position
²Members appointed by E. Merck KG according to Article 6 (5) of the Articles of Association

### Tasks of the Supervisory Board of Merck KGaA

The Supervisory Board performs a monitoring function. It supervises the management of the company by the Executive Board. In comparison with the supervisory board of a German stock corporation, the role of the supervisory board of a corporation with general partners (KGaA) is limited. This is due to the fact that the members of the Executive Board are personally liable partners and therefore are themselves responsible for the management of the company. In particular, the Supervisory Board is not responsible for appointing and dismissing general partners or for regulating the terms and conditions of their contracts. This is the responsibility of E. Merck KG. Nor does the Supervisory Board have the authority to issue rules of procedure for the Executive Board or a catalogue of business transactions requiring approval. This authority likewise belongs to E. Merck KG (Article 13 (3) sentence 1 and (4) sentence 1 of the Articles of Association). However, the fact that the Supervisory Board has no possibilities to directly influence the Executive Board restricts neither its information rights nor audit duties. The Supervisory Board must monitor the Executive Board in terms of legality, regularity, usefulness, and economic efficiency. In particular, the Supervisory Board has the duty to examine the reports provided by the Executive Board. This includes regular reports on the intended business policy, as well as other fundamental issues pertaining to corporate planning, especially financial, investment and HR planning, the profitability of the Merck Group; the progress of business; the risk situation; risk management (including compliance), and the internal auditing system. In addition, by means of consultation with the Executive Board, it creates the basis for supervision of the management of the company by the Supervisory Board according to section 111 (1) of the German Stock Corporation Act (AktG).

The Supervisory Board examines the annual financial statements and management report of Merck KGaA as well as the Group financial statements and the Group management report, taking into account in each case the reports of the auditor. Moreover, the Supervisory Board discusses the quarterly reports and the half-year financial report, taking into account in the latter case the report of the auditor on the audit review of the abridged financial statements and the interim management report of the Group. The adoption of the annual financial statements is not the responsibility of the Supervisory Board, but of the General Meeting. The Supervisory Board normally meets four times a year. Further meetings may be convened if demanded by a member of either the Supervisory Board or the Executive Board. As a rule, resolutions of the Supervisory Board are passed at meetings. At the instruction of the chairman, in exceptional cases a resolution may be passed by other means, details of which are given in the rules of procedure.

The members of the Board of Partners of E. Merck KG and of the Supervisory Board may be convened to a joint meeting if so agreed by the chairmen of the two boards.
The rules of procedure prescribe that the Supervisory Board may form committees as and when necessary. The Supervisory Board has formed a Nomination Committee comprising three shareholder representatives. Its members are Johannes Baillou, Rolf Krebs and Theo Siegert. The Nomination Committee is responsible for proposing to the Supervisory Board suitable candidates for its proposal to the Annual General Meeting. Apart from legal requirements and the recommendations of the German Corporate Governance Code, the “Objectives of the Supervisory Board with respect to its composition” are to be taken into consideration as well. Owing to the aforementioned limited authority, and since a corresponding need has not yet arisen, the Supervisory Board currently has no further committees. The German Stock Corporation Act prescribes that the Supervisory Board of a publicly listed company must have at least one independent member on its Supervisory Board who has professional expertise in accounting or auditing. Theo Siegert satisfies these requirements and is furthermore the Chairman of the Finance Committee of the Board of Partners of E. Merck KG.

Board of Partners of E. Merck KG
Some of the responsibilities that lie with the supervisory board of a German stock corporation are fulfilled at Merck by E. Merck KG. This applies primarily to the Board of Partners of E. Merck KG. Therefore, the Board of Partners and the composition and procedures of its committees are described in the following.

The Board of Partners has nine members. During fiscal 2013 and up until January 26, 2014, the Board of Partners was composed as follows:

<table>
<thead>
<tr>
<th>Member</th>
<th>Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank Stangenberg-Haverkamp</td>
<td>(a) – Fortas AG, Rösrath (Chairman) – M.A.X. Automation AG, Düsseldorf (until November 5, 2013) (b) – Oras Invest Ltd, Helsinki/Finland (Member of the Board of Directors) – Travel Asset Group Ltd., London, United Kingdom (Chairman)</td>
</tr>
<tr>
<td>Johannes Baillou</td>
<td>(a) – Merck KGaA, Darmstadt</td>
</tr>
<tr>
<td>Jon Baumhauer</td>
<td>no board positions</td>
</tr>
<tr>
<td>Frank Binder</td>
<td>(a) – Merck KGaA, Darmstadt – Landbell AG für Rückhol-Systeme, Mainz (Chairman)</td>
</tr>
<tr>
<td>Wolfgang Büchele</td>
<td>(a) – Merck KGaA, Darmstadt</td>
</tr>
<tr>
<td>Rolf Krebs</td>
<td>(a) – Merck KGaA, Darmstadt – Ganymed Pharmaceuticals AG, Mainz (Chairman) – Merz GmbH &amp; Co. KGaA, Frankfurt – Merz Pharmaceuticals GmbH, Frankfurt</td>
</tr>
</tbody>
</table>

Frank Stangenberg-Haverkamp: Darmstadt, Vice Chairman of the Executive Board and General Partner of E. Merck KG, Chairman
Johannes Baillou: Vienna, Austria, Managing Partner of Bondi Immobilien-Consulting GmbH, Vienna
Jon Baumhauer: Munich, Chairman of the Executive Board and General Partner of E. Merck KG
Frank Binder: Monaco, Managing Director of Lloyd Yachts SAM, Monaco
Wolfgang Büchele: Römerberg, Chief Executive Officer of Kemira Oyj, Finland
Rolf Krebs: Mainz, Physician
Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations

<table>
<thead>
<tr>
<th>Member</th>
<th>Memberships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hans-Jürgen Leuchs</td>
<td>(a) – Merck KGaA, Darmstadt (b) – Zeton B.V., Enschede, Netherlands – Zeton International Inc., Burlington ONT, Canada</td>
</tr>
<tr>
<td>Albrecht Merck</td>
<td>(a) – Merck KGaA, Darmstadt (b) – Zeton B.V., Enschede, Netherlands – Zeton International Inc., Burlington ONT, Canada</td>
</tr>
<tr>
<td>Theo Siegert</td>
<td>(a) – Merck KGaA, Darmstadt (b) – Zeton B.V., Enschede, Netherlands – Zeton International Inc., Burlington ONT, Canada</td>
</tr>
</tbody>
</table>

On January 26, 2014 a new election of the Board of Partners was held. The Board of Partners now consists of the following members:

<table>
<thead>
<tr>
<th>Member</th>
<th>Memberships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johannes Baillou</td>
<td>(a) – Merck KGaA, Darmstadt (b) – Fortas AG, Rösrath (Chairman) – M.A.X. Automation AG, Düsseldorf (until November 5, 2013) (Member of the Board of Directors) – Oras Invest Ltd, Helsinki/Finland (Member of the Board of Directors)</td>
</tr>
<tr>
<td>Frank Stangenberg-Haverkamp</td>
<td>(a) – Merck KGaA, Darmstadt (b) – Travel Asset Group Ltd., London, United Kingdom (Chairman)</td>
</tr>
<tr>
<td>Wolfgang Büchele</td>
<td>(a) – Merck KGaA, Darmstadt</td>
</tr>
<tr>
<td>Siegfried Karjetta</td>
<td>no board positions</td>
</tr>
<tr>
<td>Albrecht Merck</td>
<td>(a) – Merck KGaA, Darmstadt</td>
</tr>
<tr>
<td>Helga Rübsamen-Schaeff</td>
<td>no board positions</td>
</tr>
<tr>
<td>Gregor Schulz</td>
<td>(b) – Biotest US Corporation, Boca Raton/USA (President) – Biotest Pharmaceuticals Corporation, Boca Raton/USA – Biotest (UK) Ltd, Solihull/UK – Biotest Serale NV, Even/Belgium</td>
</tr>
<tr>
<td>Theo Siegert</td>
<td>(a) – Merck KGaA, Darmstadt (b) – Zeton B.V., Enschede, Netherlands – Zeton International Inc., Burlington ONT, Canada</td>
</tr>
<tr>
<td>Tobias Thelen</td>
<td>no board positions</td>
</tr>
</tbody>
</table>
The Board of Partners supervises the Executive Board in its management of the company. It informs itself about the business matters of Merck KGaA, and may inspect and examine the company's accounts and other business documents, and the assets for this purpose. According to Article 13 (4) of the Articles of Association of Merck KGaA, the Executive Board requires the approval of E. Merck KG for transactions that are beyond the scope of the Group's ordinary business activities. For such transactions to be approved, approval must first be obtained from the Board of Partners of E. Merck KG. The Board of Partners convenes as and when necessary; however, it meets at least four times a year. The members of the Executive Board of Merck KGaA are invited to all meetings of the Board of Partners, unless the Board of Partners resolves otherwise in individual cases. The members of the Board of Partners may convene a joint meeting with the Supervisory Board of Merck KGaA if so agreed by the chairmen of the two boards.

The Board of Partners may confer the responsibility for individual duties to committees. Currently the Board of Partners has three committees in place: the Personnel Committee, the Finance Committee, and the Research and Development Committee.

**Personnel Committee**

The Personnel Committee has four members. During fiscal 2013 and up until January 26, 2014 these were: Frank Stangenberg-Haverkamp (Chairman), Jon Baumhauer, Rolf Krebs and Theo Siegert. As of January 26, 2014, the Personnel Committee comprises Frank Stangenberg-Haverkamp (Chairman), Johannes Baillou, Wolfgang Büchele and Theo Siegert.

The Personnel Committee meets at least twice a year. Further meetings are convened as and when necessary. Meetings of the Personnel Committee are attended by the Chairman of the Executive Board of Merck KGaA unless the Committee decides otherwise.

The Personnel Committee is responsible for, among other things, the following decisions concerning members and former members of the Executive Board: contents of and entry into employment contracts and pension contracts, granting of loans and advance payments, changes to the compensation structure and adaptation of compensation, approval for taking on honorary offices, board positions and other sideline activities, as well as division of responsibilities within the Executive Board of Merck KGaA. The Personnel Committee passes its resolutions by a simple majority – in matters concerning the Chairman of the Executive Board unanimity is required. The Chairman of the Committee regularly informs the Board of Partners of its activities.

**Finance Committee**

The Finance Committee has four members. During fiscal 2013 and up until January 26, 2014, these were: Theo Siegert (Chairman), Johannes Baillou, Wolfgang Büchele and Frank Stangenberg-Haverkamp. As of January 26, 2014, the Finance Committee comprises Theo Siegert (Chairman), Johannes Baillou, Wolfgang Büchele and Tobias Thelen.

The Finance Committee holds at least four meetings a year, at least one of which is a joint meeting with the auditor of Merck KGaA. Further meetings are convened as and when necessary. Meetings of the Finance Committee are attended by the Chief Financial Officer of Merck KGaA. Other members of the Executive Board of Merck KGaA may attend the meetings upon request by the Committee. These meetings regularly include the Chairman of the Executive Board. The Finance Committee is responsible for, among other things, analyzing and discussing the annual financial statements and the respective report of the auditor of the annual financial statements and management report, as well as the half-year financial report [including the report of the auditors for the audit review of the abridged financial statements and interim management report contained in the half-year report] and the quarterly reports. Furthermore, the Finance Committee
recommends to the Chairman of the Supervisory Board annual audit focuses for the auditors. It also recom-
mends an auditor for the annual financial statements and management report as well as auditors for the audit
review of the abridged financial statements and interim management report contained in the half-year
financial report for the Board’s corresponding suggestion to the General Meeting. In addition, the Finance
Committee is concerned with the financial position, results of operations and liquidity of Merck, as well as
accounting, internal auditing, risk management and compliance issues. Upon request of the Board of Partners,
the Finance Committee examines investment projects that must be approved by the Board of Partners and
provides recommendations pertaining thereto.

Research and Development Committee
During fiscal 2013 and up until January 26, 2014, the Research and Development Committee had three
members: Rolf Krebs (Chairman), Hans-Jürgen Leuchs and Frank Stangenberg-Haverkamp. Since January 26,
2014, the Research and Development Committee has consisted of four people, namely Johannes Baillou,
Siegfried Karjetta, Helga Rübsamen-Schaeff, and Gregor Schulz.

The Research and Development Committee is convened as and when necessary, but holds meetings at
least twice a year. Meetings of the Research and Development Committee are attended by members of the
Executive Board of Merck KGaA upon request of the Committee. These meetings regularly include the
Chairman of the Executive Board as well as the members of the Executive Board responsible for the Pharma-
ceuticals and Chemicals divisions. The Chairman of the Research and Development Committee is responsible,
among other things, for analyzing and discussing the research activities of Pharmaceuticals and Chemicals.
The Pharmaceuticals and Chemicals divisions present the status of their respective research to the Research
and Development Committee in special meetings. The Committee deals thoroughly with the pharmaceutical
research progress report and with developments of new medicines in Phases II and III of clinical research. The
Chairman of the Committee reports to the Board of Partners on the insights gained from the meetings held.
Report of the Supervisory Board

The Supervisory Board again properly executed its duties in 2013 in accordance with the law as well as the company’s Articles of Association and rules of procedure. In particular, the Supervisory Board monitored the work of the Executive Board diligently and regularly.

Cooperation with the Executive Board
The cooperation with the Executive Board was characterized by intensive, trustworthy exchange. During fiscal 2013, the Executive Board provided the Supervisory Board with regular written and verbal reports on the business development of Merck KGaA and the Merck Group. In particular, the Supervisory Board was informed about the market and sales situation of the company against the background of macroeconomic development, the financial position of the company and its subsidiaries, along with their earnings development, as well as corporate planning. Within the scope of quarterly reporting, the sales and operating results were presented for the Merck Group as a whole, and broken down by division. Aside from the Supervisory Board meetings, the Chairman of the Supervisory Board also maintained and continues to maintain a regular exchange of information with the Chairman of the Executive Board.

Key topics of the Supervisory Board meetings
Five Supervisory Board meetings were held in fiscal 2013. Four of the meetings were ordinary Supervisory Board meetings while the fifth one on December 3, 2013 was an extraordinary meeting. At these meetings, the Supervisory Board discussed the reports of the Executive Board in detail and discussed company developments and strategic issues together with the Executive Board.

At the meeting held on March 6, 2013, the Executive Board first reported on business performance in the fourth quarter of 2012. Moreover, the status of the “Fit for 2018” program was dealt with, as was the report by the head of Group Internal Auditing on the activities of Internal Auditing in 2012. In addition, the Supervisory Board intensively addressed the annual financial statements and consolidated financial statements for 2012 and the corresponding management reports. The auditor explained the audit report. The Executive Board reported on the financial statements. Furthermore, the Supervisory Board resolved upon its objectives, the Statement of Compliance with the German Corporate Governance Code as well as the Statement on Corporate Governance, which simultaneously includes the joint report of the Executive Board and Supervisory Board. The Supervisory Board also approved the proposals to be made to the Annual General Meeting. Lastly, the Executive Board presented the plans for fiscal 2013.

The meeting held on May 7, 2013 focused on current business developments in the first quarter of 2013. The report of the Research and Development Committee of the Board of Partners of E. Merck KG was a further focus of the meeting. The Supervisory Board also dealt with the report of the Group compliance officer and the report of the Group data privacy officer.

At its meeting on July 31, 2013, the Supervisory Board focused intensively on the report of the Executive Board on business performance in the second quarter of 2013. In addition, KPMG explained the report on the first half of 2013. Risk management within the company was a further topic. The head of Risk Management presented the status report for the first half of 2013. No risks that threaten the continued existence of the company were identified.

At its fourth meeting on November 12, 2013, the Supervisory Board discussed the results of the efficiency review conducted in 2013. Furthermore, the Supervisory Board dealt with the report of the Executive Board on the third quarter of 2013. The 2013 status reports by the head of Internal Auditing and the Group compliance officer were additional topics of focus. The report of the Research and Development Committee Chemicals and the report on the Group Executive Conference were also discussed. In particular, the reports focused on Merck’s strategic direction.
Annual financial statements

The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, and the management reports for Merck KGaA and the Merck Group, including the accounts, were audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin. The auditors issued an unqualified audit opinion on the annual financial statements and management report for Merck KGaA in accordance with German Auditing Standards. For the consolidated financial statements prepared in accordance with International Financial Reporting Standards, the auditors issued the auditor’s report, reproduced in the Annual Report of the Merck Group. In addition, the auditors audited the calculation of Merck KGaA’s participation in the profits of E. Merck KG in accordance with Art. 27 (2) of the Articles of Association. The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, the management reports for Merck KGaA and the Merck Group, and the proposal by the Executive Board for the appropriation of the net retained profit were presented and distributed to the Supervisory Board, together with the auditor’s reports.

In accordance with Art. 14 (2) of the Articles of Association, the Supervisory Board also examined the annual financial statements of Merck KGaA and the management report for Merck KGaA, the proposal for the appropriation of net retained profit and the auditor’s report presented in accordance with Article 27 (2) of the Articles of Association. It also examined the consolidated financial statements of the Merck Group as well as the management report for the Merck Group, and took note of the auditor’s report of KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin.

The discussion of the relevant agenda item at the Supervisory Board’s meeting on February 28, 2014 to approve the financial statements was also attended by the auditors who sign the audit opinion on the annual financial statements of Merck KGaA and the consolidated financial statements of the Merck Group. These auditors furthermore reported on their audit at this meeting.

The Supervisory Board took note of and approved the results of the audit. On completion of its examination, the Supervisory Board raised no objections and thus approved the annual financial statements and management report for Merck KGaA, the consolidated financial statements of the Merck Group and the management report for the Merck Group prepared by the Executive Board, as well as the report presented by the auditors in accordance with Article 27 (2) of the Articles of Association. Following its own examination of the situation, the Supervisory Board gave its consent to the proposal of the Executive Board for the appropriation of net retained profit.

Corporate governance and Statement of Compliance

Corporate governance is a topic of high priority for the Supervisory Board. In its own estimation, the Supervisory Board has an adequate number of independent members. There were no conflicts of interest, as defined by the German Corporate Governance Code, involving Supervisory Board members during 2013. After addressing corporate governance topics in detail, the Executive Board and Supervisory Board resolved to adopt and issue the updated Statement of Compliance on February 17, 2014 (Executive Board) and on February 28, 2014 (Supervisory Board) and jointly issued it on February 28, 2014 in accordance with section 161 of the German Stock Corporation Act. The statement is permanently available on the website of Merck KGaA (www.merckgroup.com → Investors → Corporate Governance). More information about corporate governance at Merck KGaA, including the compensation of the Executive Board and Supervisory Board is given in the Statement of Compliance on pages 151 et seq. of the Annual Report.
Committees
Apart from the Nomination Committee, the Supervisory Board of Merck KGaA currently has no further committees on account of the special features that apply to the Supervisory Board of a corporation with general partners (KGaA) under German company law and because a corresponding need for this has not emerged to date. The members of the Nomination Committee held meetings on November 8, 2013, and on February 6, 2014. In order to prepare for the election of the shareholder representative members of the Supervisory Board by the Annual General Meeting on May 9, 2014, they spoke with one another about the professional and personal qualifications of suitable candidates for the Supervisory Board. No report is given on the work of further committees.

Personnel matters
With the exception of Theo Siegert, who was absent from the meeting on May 7, 2013, all the Supervisory Board members attended all the ordinary Supervisory Board meetings. With the exception of Jens Frank and Karl-Heinz Scheider, all Supervisory Board members also attended the extraordinary Supervisory Board meeting. The following changes in the composition of the Supervisory Board took place in 2013: Effective January 31, 2013, Mr. Jens Frank was appointed by the court as a new member of the Supervisory Board. On conclusion of the Annual General Meeting on April 26, 2013, the terms of office of the Supervisory Board members elected at the 2008 Annual General Meeting Johannes Baillou, Frank Binder, Rolf Krebs and Theo Siegert as well as the Supervisory Board members elected at the 2009 Annual General Meeting Wolfgang Büchele and Hans-Jürgen Leuchs expired. All of these Supervisory Board members were reelected by the 2013 Annual General Meeting to serve until the end of the next Annual General Meeting. There were no new appointments to bodies beyond those described in the foregoing.

Darmstadt, February 28, 2014
The Supervisory Board of Merck KGaA

Rolf Krebs
Chairman
Objectives of the Supervisory Board with respect to its composition

Initial situation
According to section 5.4.1 (2) and (3) of the German Corporate Governance Code, the Supervisory Board shall specify concrete objectives regarding its composition which, while considering the specifics of the enterprise, take into account the international activities of the enterprise, potential conflicts of interest, the number of independent Supervisory Board members, an age limit to be specified for the members of the Supervisory Board, and diversity.

General notes on the composition of the Supervisory Board
The Supervisory Board of Merck KGaA currently consists of 16 members, eight of whom represent the shareholders and a further eight who represent the employees. The eight employee representative members are elected by employee delegates pursuant to the provisions of the German Co-determination Act (Mitbestimmungsgesetz "MitbestG"). These consist of six company employees, including a senior executive, as well as two union representatives. The Supervisory Board has no statutory proposal right with respect to electing the delegates or employee representatives. Owing to a delegation right of E. Merck Beteiligungen KG, two of the eight shareholder representatives are specified. The Supervisory Board likewise has no statutory proposal right with respect to exercising this delegation right. The remaining six shareholder representatives are elected by the General Meeting. In accordance with section 124 (3) sentence 1 AktG, the Supervisory Board shall propose to the General Meeting Supervisory Board members for election. These proposals require a majority of the votes of the shareholder representative members of the Supervisory Board. The next scheduled election to the Supervisory Board shall take place at the upcoming 2014 General Meeting. The General Meeting is not required to follow the election proposals. The appointment objectives that the Supervisory Board sets forth below therefore do not represent requirements to be met by those eligible to elect or to delegate members. Instead, they are intended to express the objectives pursued by the Supervisory Board in office with regard to its advisory and monitoring functions.

Objectives of the Supervisory Board with respect to its composition
In accordance with section 5.4.1 (2) of the German Corporate Governance Code, the Supervisory Board has specified the following objectives with respect to its composition and reports on the status of their implementation below.

Expertise and diversity
Professional qualifications and personal expertise are the two most important prerequisites for appointments to seats on the Supervisory Board. When proposing Supervisory Board candidates for election or delegation, the Supervisory Board will always give top priority to these prerequisites, which are essential for fulfilling its legal duties.

Overall, the Supervisory Board’s policy is to optimally meet its monitoring and advisory duties by having a diversity of members. Diversity includes, in particular, internationality as well as different experience backgrounds and career paths. The proportion of women on the Supervisory Board is also considered to be an aspect of diversity. When preparing proposals for election or delegation, due consideration shall be given in individual cases to the extent to which different, yet complementary professional profiles, career and life experiences as well as appropriate representation of both genders can benefit the work of the Supervisory Board. Additionally, the Supervisory Board shall support the Executive Board in its efforts to increase diversity within the company.
In-depth knowledge of the fields relevant to the company
The Supervisory Board shall have at least four members with in-depth knowledge and experience of fields that are important to the company, including at least one expert in pharmaceuticals and one in chemicals.

Merck is currently meeting this objective for the composition of the Supervisory Board. At present, the Supervisory Board has more than four members who have in-depth knowledge and experience of the pharmaceutical and chemical industries. More than four Supervisory Board members also have executive experience in companies that operate specifically in the pharmaceutical and/or chemical sectors.

Management experience
The Supervisory Board shall have at least three members who have experience in managing or supervising a medium or large-sized company.

The Supervisory Board has more than three members who have the corresponding experience. This includes both Supervisory Board members who were or still are management board members or directors in such companies, as well as Supervisory Board members who have gained experience in supervisory bodies of German and/or foreign companies of this size.

Family company
The Supervisory Board shall have at least one member who has experience in managing medium- or large-sized family-owned companies.

The Supervisory Board currently has multiple members who have the appropriate management experience in family-owned companies of this size.

Internationality
The Supervisory Board shall have at least three members with business experience in the main sales markets of Merck KGaA. Currently, the main sales markets of Merck KGaA are Europe, North and Latin America, and Asia-Pacific.

The present composition of the Supervisory Board satisfies this objective. More than three Supervisory Board members have entrepreneurial experience in Europe, covering a wide range of countries. More than three Supervisory Board members have experience in management positions in companies that operate globally. Two of these members worked in the United States, one in the United Kingdom, and one was responsible for the Asian region.

Women on the Supervisory Board
Four women are currently members of the Supervisory Board of Merck KGaA. This corresponds to 25% of the Supervisory Board. When nominating candidates for election to the Supervisory Board or making proposals for delegation, the Supervisory Board shall examine whether the percentage of women can be increased by suitable candidates.

The Supervisory Board currently consists of 25% women, which it considers a satisfactory percentage. This is based on both the percentage of women in management positions at Merck, as well as the fact that the supervisory boards of other companies have a comparable percentage of women.
Number of independent members/no material conflicts of interest

The Supervisory Board is to have an adequate number of independent members. Assuming that the status of being an employee representative per se does not justify doubts of the independence criteria within the meaning of section 5.4.2 of the German Corporate Governance Code, normally all employee representatives should be independent within the meaning of the Code. In any case, at least four of the shareholder representatives on the Supervisory Board should be independent. According to the Articles of Association of Merck KGaA, six members representing the shareholders are to be elected by the General Meeting and two members are to be delegated. Taking this into account, the Supervisory Board considers four shareholder representatives to be an appropriate number of independent members. In the Supervisory Board’s estimation, the objectives concerning independent members are currently met. In particular, the Supervisory Board does not believe that membership of the Board of Partners of E. Merck KG conflicts with independence. The Board of Partners exists complementary to the competencies and the activities of the Supervisory Board. It is not to be expected that this will lead to material and not merely temporary conflicts of interest. It should also be taken into account that due to its substantial capital investment and unlimited personal liability, E. Merck KG has a strong interest in the businesses of Merck KGaA operating efficiently and in compliance with procedures, counteracting from the outset conflicts of interest between E. Merck KG and Merck KGaA and thus also corresponding conflicts of interest between the members of the respective corporate bodies.

Moreover, no one shall be proposed for election to the Supervisory Board who simultaneously serves on a body of or advises a major competitor of the company, or owing to another function, e.g. advisor to major contract partners of the company, could potentially become involved in a conflict of interest. No Supervisory Board member serves on a body of or advises a major competitor, or provides consultancy services thereto. No Supervisory Board member performs a function that could lead to a lasting conflict of interest.

No age limit

An age limit for Supervisory Board members is not specified since age is not a criterion for qualifications and expertise. Moreover, we do not wish to forgo the many years of experience of Supervisory Board members.

The achievement of the aforementioned objectives shall be pursued initially until 2015, taking into account applicable law within the scope of elections and re-elections, delegations as well as court appointments of replacement members if these become necessary. All Supervisory Board members will correspondingly influence those eligible to elect or delegate. Taking into consideration the aforementioned criteria and in accordance with its duties under German stock corporation law, the Supervisory Board proposes to the General Meeting the candidates it believes to be best suited in each case and will continue to do so in the future.

Every year, the Supervisory Board will provide information in the Annual Report on the status of implementing its objectives.
### Merck

**Consolidated Income Statement**

<table>
<thead>
<tr>
<th>€ million</th>
<th>Note</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>22</td>
<td>10,700.1</td>
<td>10,740.8</td>
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<tr>
<td>Royalty, license and commission income</td>
<td>23</td>
<td>395.0</td>
<td>432.1</td>
</tr>
<tr>
<td>Total revenues</td>
<td></td>
<td><strong>11,095.1</strong></td>
<td><strong>11,172.9</strong></td>
</tr>
</tbody>
</table>

| Cost of sales | 24 | -2,992.5 | -3,157.7 |
| Gross margin | | **8,102.6** | **8,015.2** |

| Marketing and selling expenses | 25 | -2,326.5 | -2,410.8 |
| Royalty, license and commission expenses | 26 | -567.0 | -579.8 |
| Administration expenses | 27 | -562.4 | -552.2 |
| Other operating expenses and income | 28 | -718.1 | -1,125.9 |
| Research and development costs | 29 | -1,504.3 | -1,511.3 |
| Amortization of intangible assets | 30 | -813.5 | -871.6 |
| Operating result | | **1,610.8** | **963.6** |

| Financial result | 31 | -222.2 | -254.6 |
| Profit before income tax | | **1,388.6** | **709.0** |

| Income tax | 32 | -179.5 | -130.0 |
| Profit after tax | | **1,209.1** | **579.0** |

| of which attributable to Merck KGaA shareholders (net income) | | **1,202.2** | **566.7** |
| of which attributable to non-controlling interests | 33 | 6.9 | 12.3 |

<p>| Earnings per share (in €) | 34 | [5.53] | [2.61] |
| basic | | [5.53] | [2.61] |
| diluted | | [5.53] | [2.61] |</p>
<table>
<thead>
<tr>
<th>€ million</th>
<th>Note</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profit after tax</strong></td>
<td></td>
<td>1,209.1</td>
<td>579.0</td>
</tr>
<tr>
<td><strong>Items of other comprehensive income that will not be reclassified to profit or loss in subsequent periods:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remeasurement of the net defined benefit liability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in remeasurement</td>
<td>49</td>
<td>98.8</td>
<td>−304.3</td>
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<tr>
<td>Deferred taxes</td>
<td>32</td>
<td>−16.3</td>
<td>37.2</td>
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<tr>
<td>Changes recognized in equity</td>
<td></td>
<td>82.5</td>
<td>−267.1</td>
</tr>
<tr>
<td><strong>Items of other comprehensive income that may be reclassified to profit or loss in subsequent periods:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value adjustments</td>
<td></td>
<td>1.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Reclassification to profit or loss</td>
<td></td>
<td>−1.6</td>
<td>−</td>
</tr>
<tr>
<td>Deferred taxes</td>
<td>32</td>
<td>−0.4</td>
<td>−</td>
</tr>
<tr>
<td>Changes recognized in equity</td>
<td></td>
<td>−0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
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<tr>
<td>Fair value adjustments</td>
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<tr>
<td>Reclassification to profit or loss</td>
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<td>78.4</td>
</tr>
<tr>
<td>Reclassification to assets</td>
<td></td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>Deferred taxes</td>
<td>32</td>
<td>−25.3</td>
<td>−16.9</td>
</tr>
<tr>
<td>Changes recognized in equity</td>
<td></td>
<td>73.7</td>
<td>65.1</td>
</tr>
<tr>
<td>Exchange differences on translating foreign operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes taken directly to equity</td>
<td></td>
<td>−204.9</td>
<td>−34.6</td>
</tr>
<tr>
<td>Reclassification to profit or loss</td>
<td></td>
<td>−8.9</td>
<td>−</td>
</tr>
<tr>
<td>Changes recognized in equity</td>
<td></td>
<td>−213.8</td>
<td>−34.6</td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td></td>
<td>−140.3</td>
<td>30.9</td>
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<tr>
<td><strong>Comprehensive income</strong></td>
<td></td>
<td>1,151.3</td>
<td>342.8</td>
</tr>
<tr>
<td>of which attributable to Merck KGaA shareholders</td>
<td></td>
<td>1,154.6</td>
<td>333.7</td>
</tr>
<tr>
<td>of which attributable to non-controlling interests</td>
<td>33</td>
<td>−3.3</td>
<td>9.1</td>
</tr>
</tbody>
</table>
## Merck
### Consolidated Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>35</td>
<td>980.8</td>
<td>729.7</td>
</tr>
<tr>
<td>Current financial assets</td>
<td>36</td>
<td>2,410.5</td>
<td>1,797.9</td>
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<tr>
<td>Trade accounts receivable</td>
<td>37</td>
<td>2,021.4</td>
<td>2,114.6</td>
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<tr>
<td>Inventories</td>
<td>38</td>
<td>1,474.2</td>
<td>1,533.9</td>
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<td>Other current assets</td>
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<td>360.7</td>
<td>271.5</td>
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<tr>
<td>Income tax receivables</td>
<td>40</td>
<td>109.8</td>
<td>178.5</td>
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<tr>
<td>Assets held for sale</td>
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<td>27.1</td>
<td>–</td>
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<tr>
<td><strong>Total current assets</strong></td>
<td></td>
<td>7,384.5</td>
<td>6,626.1</td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible assets</td>
<td>41</td>
<td>9,867.2</td>
<td>10,944.5</td>
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<tr>
<td>Property, plant and equipment</td>
<td>42</td>
<td>2,647.2</td>
<td>2,953.6</td>
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<tr>
<td>Non-current financial assets</td>
<td>43</td>
<td>77.8</td>
<td>97.1</td>
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<tr>
<td>Other non-current assets</td>
<td>39</td>
<td>105.5</td>
<td>75.4</td>
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<tr>
<td>Deferred tax assets</td>
<td>32</td>
<td>736.4</td>
<td>946.6</td>
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<tr>
<td><strong>Total non-current assets</strong></td>
<td></td>
<td>13,434.1</td>
<td>15,017.2</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td></td>
<td>20,818.6</td>
<td>21,643.3</td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current financial liabilities</td>
<td>44</td>
<td>440.4</td>
<td>1,091.4</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>45</td>
<td>1,364.1</td>
<td>1,288.3</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>46</td>
<td>1,134.5</td>
<td>1,096.2</td>
</tr>
<tr>
<td>Income tax liabilities</td>
<td>47</td>
<td>465.1</td>
<td>401.4</td>
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<tr>
<td>Current provisions</td>
<td>48</td>
<td>494.7</td>
<td>684.3</td>
</tr>
<tr>
<td>Liabilities directly related to assets held for sale</td>
<td>4</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td></td>
<td>3,898.8</td>
<td>4,561.6</td>
</tr>
<tr>
<td><strong>Non-current liabilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current financial liabilities</td>
<td>44</td>
<td>3,257.5</td>
<td>3,362.1</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>46</td>
<td>5.6</td>
<td>9.4</td>
</tr>
<tr>
<td>Non-current provisions</td>
<td>48</td>
<td>1,011.1</td>
<td>891.7</td>
</tr>
<tr>
<td>Provisions for pensions and other post-employment benefits</td>
<td>49</td>
<td>910.9</td>
<td>1,211.7</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>32</td>
<td>665.5</td>
<td>1,192.0</td>
</tr>
<tr>
<td><strong>Total non-current liabilities</strong></td>
<td></td>
<td>5,850.6</td>
<td>6,666.9</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity capital</td>
<td>50</td>
<td>565.2</td>
<td>565.2</td>
</tr>
<tr>
<td>Reserves</td>
<td></td>
<td>9,341.1</td>
<td>8,552.3</td>
</tr>
<tr>
<td>Gains/losses recognized immediately in equity</td>
<td></td>
<td>1,113.7</td>
<td>1,243.9</td>
</tr>
<tr>
<td><strong>Equity attributable to Merck KGaA shareholders</strong></td>
<td></td>
<td>11,020.0</td>
<td>10,361.4</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td></td>
<td>49.2</td>
<td>53.4</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td></td>
<td>20,818.6</td>
<td>21,643.3</td>
</tr>
</tbody>
</table>
### Merck
#### Consolidated Cash Flow Statement

<table>
<thead>
<tr>
<th>€ million</th>
<th>Note</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit after tax</td>
<td></td>
<td>1,209.1</td>
<td>579.0</td>
</tr>
<tr>
<td>Depreciation/amortization/impairment losses/reversals of impairments</td>
<td></td>
<td>1,458.4</td>
<td>1,396.6</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td></td>
<td>–58.4</td>
<td>140.6</td>
</tr>
<tr>
<td>Changes in trade accounts receivable</td>
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<td>–45.0</td>
<td>186.2</td>
</tr>
<tr>
<td>Changes in trade accounts payable</td>
<td></td>
<td>128.2</td>
<td>198.8</td>
</tr>
<tr>
<td>Changes in provisions</td>
<td></td>
<td>–203.0</td>
<td>378.6</td>
</tr>
<tr>
<td>Changes in other assets and liabilities</td>
<td></td>
<td>–260.4</td>
<td>–383.5</td>
</tr>
<tr>
<td>Neutralization of gain/loss on disposals of assets</td>
<td></td>
<td>–27.5</td>
<td>–31.6</td>
</tr>
<tr>
<td>Other non-cash income and expenses</td>
<td></td>
<td>24.1</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Net cash flows from operating activities</strong></td>
<td>= 53</td>
<td>2,225.5</td>
<td>2,472.2</td>
</tr>
<tr>
<td>Investments in intangible assets</td>
<td></td>
<td>–109.6</td>
<td>–144.2</td>
</tr>
<tr>
<td>Investments in property, plant and equipment</td>
<td></td>
<td>–407.0</td>
<td>–329.1</td>
</tr>
<tr>
<td>Acquisitions</td>
<td></td>
<td>–15.1</td>
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</tr>
<tr>
<td>Investments in non-current financial assets</td>
<td></td>
<td>–15.0</td>
<td>–72.4</td>
</tr>
<tr>
<td>Investments in current financial assets</td>
<td></td>
<td>–625.6</td>
<td>–685.2</td>
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<tr>
<td>Disposal of non-current assets</td>
<td></td>
<td>297.8</td>
<td>93.6</td>
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<tr>
<td><strong>Net cash flows from investing activities</strong></td>
<td>= 54</td>
<td>–874.5</td>
<td>–1,157.9</td>
</tr>
<tr>
<td>Dividend payments to Merck KGaA shareholders</td>
<td></td>
<td>–109.9</td>
<td>–96.9</td>
</tr>
<tr>
<td>Dividend payments to non-controlling interests</td>
<td></td>
<td>–3.7</td>
<td>–5.7</td>
</tr>
<tr>
<td>Dividend payments to E. Merck KG</td>
<td></td>
<td>–304.5</td>
<td>–326.5</td>
</tr>
<tr>
<td>New borrowings of financial liabilities from E. Merck KG</td>
<td></td>
<td>128.8</td>
<td>32.6</td>
</tr>
<tr>
<td>Payments from transactions with no change of control</td>
<td></td>
<td>–0.3</td>
<td>–15.0</td>
</tr>
<tr>
<td>Repayment of bonds</td>
<td></td>
<td>–750.0</td>
<td>–1,000.0</td>
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<tr>
<td>New borrowings of other current and non-current financial liabilities</td>
<td></td>
<td>64.6</td>
<td>37.5</td>
</tr>
<tr>
<td>Repayments of other current and non-current financial debt liabilities</td>
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<td>–97.7</td>
<td>–145.4</td>
</tr>
<tr>
<td><strong>Net cash flows from financing activities</strong></td>
<td></td>
<td>–1,072.7</td>
<td>–1,519.4</td>
</tr>
<tr>
<td>Changes in cash and cash equivalents</td>
<td></td>
<td>278.3</td>
<td>–205.1</td>
</tr>
<tr>
<td>Changes in cash and cash equivalents due to currency translation</td>
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<td>–27.2</td>
<td>–3.0</td>
</tr>
<tr>
<td>Cash and cash equivalents as of January 1</td>
<td></td>
<td>729.7</td>
<td>937.8</td>
</tr>
<tr>
<td>Cash and cash equivalents as of December 31</td>
<td></td>
<td>980.8</td>
<td>729.7</td>
</tr>
<tr>
<td>Plus cash and cash equivalents included in assets held for sale</td>
<td></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents as of December 31 (consolidated balance sheet)</strong></td>
<td>= 35</td>
<td>980.8</td>
<td>729.7</td>
</tr>
</tbody>
</table>

*Previous year’s figures have been adjusted, see the Notes to the consolidated cash flow statement.*
# Merck
## Consolidated Statement of Changes in Net Equity

For details see Note [50]

<table>
<thead>
<tr>
<th></th>
<th>€ million</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ million</td>
<td>General partner’s equity</td>
<td>Subscribed capital</td>
<td>Capital reserves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Merck KGaA</td>
<td>Merck KGaA</td>
<td>(share premium)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Merck KGaA</td>
</tr>
<tr>
<td><strong>Balance as of January 1, 2012</strong></td>
<td></td>
<td>397.2</td>
<td>168.0</td>
<td>3,813.7</td>
</tr>
<tr>
<td><strong>Profit after tax</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Comprehensive income</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>566.7</td>
</tr>
<tr>
<td><strong>Dividend payments</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–66.9</td>
</tr>
<tr>
<td><strong>Profit transfers to/from E. Merck KG including changes in reserves</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–304.5</td>
</tr>
<tr>
<td><strong>Transactions with no change of control</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–15.3</td>
</tr>
<tr>
<td><strong>Changes in scope of consolidation/Other</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–3.2</td>
</tr>
<tr>
<td><strong>Balance as of December 31, 2012</strong></td>
<td></td>
<td>397.2</td>
<td>168.0</td>
<td>3,813.7</td>
</tr>
<tr>
<td><strong>Balance as of January 1, 2013</strong></td>
<td></td>
<td>397.2</td>
<td>168.0</td>
<td>3,813.7</td>
</tr>
<tr>
<td><strong>Profit after tax</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Comprehensive income</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Dividend payments</strong></td>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Profit transfers to/from E. Merck KG including changes in reserves</strong></td>
<td></td>
<td>–</td>
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<td>–</td>
</tr>
<tr>
<td><strong>Transactions with no change of control</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Changes in scope of consolidation/Other</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Balance as of December 31, 2013</strong></td>
<td></td>
<td>397.2</td>
<td>168.0</td>
<td>3,813.7</td>
</tr>
<tr>
<td></td>
<td>Available-for-sale financial assets</td>
<td>Derivative financial instruments</td>
<td>Currency translation difference</td>
<td>Equity attributable to Merck KGaA shareholders</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Gains/losses recognized in equity</td>
<td>0.8</td>
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<td>10,448.0</td>
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<tr>
<td></td>
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<td>0.4</td>
<td>65.1</td>
<td>-31.8</td>
<td>333.7</td>
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<td>-</td>
<td>-96.9</td>
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<td></td>
<td>1.2</td>
<td>-29.5</td>
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<td>10,361.4</td>
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<tr>
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<td>1.2</td>
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<td>10,361.4</td>
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<td></td>
<td></td>
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<td>1,154.6</td>
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<td>-383.0</td>
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<tr>
<td></td>
<td>1.0</td>
<td>44.2</td>
<td>1,068.5</td>
<td>11,020.0</td>
</tr>
</tbody>
</table>
Merck
Notes to the Group accounts
General

(1) Company information

The accompanying consolidated financial statements as at December 31, 2013 have been prepared with Merck KGaA, Frankfurter Strasse 250, 64293 Darmstadt, which manages the operations of the Merck Group, as parent company. In accordance with the provisions of the German financial reporting disclosure law (Publizitätsgesetz), consolidated financial statements are also prepared for E. Merck KG, the ultimate parent company and general partner of Merck KGaA with an equity interest of 70.27% as of December 31, 2013. These include Merck KGaA and its subsidiaries. The authoritative German versions of these financial statements are filed with the German Federal Gazette (Bundesanzeiger) and can be accessed at www.bundesanzeiger.de.

(2) Reporting principles

The consolidated financial statements of the Merck Group have been prepared in accordance with consistent accounting policies and in euros, the reporting currency. Pursuant to section 315a of the German Commercial Code (HGB), the International Financial Reporting Standards in force on the reporting date and adopted by the European Union as issued by the International Accounting Standards Board and the IFRS Interpretations Committee (IFRS and IAS, as well as IFRIC and SIC) have been applied.

The following rule was applied in advance as of fiscal 2013:
- Amendment to IAS 36 “Impairment of Assets”
This amendment was published in May 2013 by the International Accounting Standards Board, adopted by the European Union on December 20, 2013, and is effective for reporting periods beginning on or after January 1, 2014. The changes that early application involves are described in Note [5] “Accounting policies”.

The following rules take effect as of fiscal 2013:
- IFRS 13 “Fair Value Measurement”
- Amendment to IAS 1 “Presentation of Financial Statements”
- Amendment to IAS 12 “Income Taxes”
- Revised version of IAS 19 “Employee Benefits”
- Amendments to IFRS 1 “First-time Adoption of International Financial Reporting Standards”
- Amendment to IFRS 7 “Financial Instruments: Disclosures”
- IFRIC 20 “Stripping Costs in the Production Phase of a Surface Mine”

As of fiscal 2012, Merck began applying the revised version of IAS 19 “Employee Benefits” in advance.

IFRS 13 “Fair Value Measurement” provides a uniform definition of fair value as well as principles for measuring fair value. It stipulates how fair value is to be measured when another standard requires fair value measurement or disclosures about fair value. Moreover, the application of IFRS 13 leads to more extensive disclosures in the notes to the accounts.
In accordance with the amendment to IAS 1, the components of the statement of comprehensive income have been grouped into items based on whether they will be reclassified to profit or loss in the future or will never be reclassified to profit or loss.

The disclosures required by IFRS 7 about the effect of netting arrangements on the financial position have been included in the consolidated financial statements.

Apart from the early application of the revised version of IAS 19, none of the other new standards had a material effect on the consolidated financial statements.

The following standards take effect as of fiscal 2014:
- IFRS 10 “Consolidated Financial Statements”
- IFRS 11 “Joint Arrangements”
- IFRS 12 “Disclosure of Interests in Other Entities”
- Amendments to IAS 27 “Separate Financial Statements”
- Amendment to IAS 28 “Investments in Associates and Joint Ventures”
- Amendment to IAS 32 “Financial Instruments: Presentation”
- Amendment to IAS 39 “Financial Instruments: Recognition and Measurement”
- Amendments to IFRS 10 “Consolidated Financial Statements”
- Amendment to IFRS 11 “Joint Arrangements”
- Amendments to IFRS 12 “Disclosure of Interests in Other Entities”

Merk currently does not expect the new rules to have any material effects on the consolidated financial statements. In particular, the rules contained in IFRS 10 to IFRS 12 will not lead to any material changes based on the current equity holding structures.

As of the balance sheet date, the following standards were published by the International Accounting Standards Board and the IFRS Interpretations Committee, but not yet adopted by the European Union:
- IFRS 9 “Financial Instruments”
- Amendment to IAS 19 “Employee Benefits”
- Amendment to IAS 39 “Financial Instruments: Recognition and Measurement”
- Amendments to IFRS 7 “Financial Instruments: Disclosures”
- Amendments to IFRS 9 “Financial Instruments”
- Annual Improvements to IFRSs 2010–2012 Cycle
- Annual Improvements to IFRSs 2011–2013 Cycle
- IFRIC 21 “Levies”

The impact that IFRS 9, which will become effective as of 2015 at the earliest, will have on the consolidated financial statements is currently being examined. At the present time, the other new rules are not expected to have any material effects on the consolidated financial statements.
Scope of consolidation

(3) Changes in the scope of consolidation

Including the parent company Merck KGaA, Darmstadt, 191 (2012: 203) German and foreign companies were fully consolidated in the annual financial statements of the Merck Group. Of these companies, 165 (2012: 178) are located abroad. No companies were consolidated using the equity method or the proportionate consolidation method as of the balance sheet date. Overall, the following changes in the scope of consolidation had no material impact on the financial statements: Six newly established companies were included in the consolidated financial statements for the first time. Owing to eleven liquidations and four mergers and three disposals, 18 companies were deconsolidated.

Due to secondary importance, 22 (2012: 28) subsidiaries were not consolidated. Overall, the impact of these subsidiaries on sales, profit after tax, assets and equity was less than 1% relative to the entire Merck Group. The interests in subsidiaries not consolidated due to secondary importance were classified as available-for-sale financial assets and presented under non-current financial assets. The list of shareholdings presents all of the companies included in the consolidated financial statements as well as all of the shareholdings of the Merck KGaA (see Note [71]).

(4) Acquisitions and divestments, as well as assets held for sale and disposal groups

No acquisitions or divestments were made in fiscal 2013.

With respect to acquisitions made in 2012, no subsequent purchase price allocation adjustments occurred.

On December 20, 2013, Merck published an offer to acquire the entire share capital of AZ Electronic Materials S.A., Luxembourg, (AZ), by way of a cash payment. Among other things, the successful completion of the transaction is subject to antitrust clearances as well as the achievement of a minimum acceptance level of 95% of the share capital. The expected purchase price payment is being reported under other financial obligations (see Note [61]).

On January 8, 2014, Merck announced its intention to sell the Discovery and Development Solutions business field of the Merck Millipore division to Eurofins Scientific S.A., Luxembourg. The amount of the assets to be sold were shown as a disposal group and include property, plant and equipment in the amount of € 3.7 million, inventories in the amount of € 1.8 million and goodwill allocated to the business field in the amount of € 16.2 million. The transaction is expected to be concluded in the first quarter of 2014.

On December 13, 2013, Merck signed a contract with Theratechnologies Inc., Canada, regarding the termination of the research and development cooperation and the sale of the marketing rights to Egrifta® (tesamorelin for injection) in the United States. The transfer of the assets assigned to the Merck Serono division is effective as of March 3, 2014. In the consolidated balance sheet as of December 31, 2013, an intangible asset in the amount of € 5.4 million relating to this transfer was presented under the balance sheet item "assets held for sale".
(5) Accounting and measurement principles

With the exception of the two changes described in the following, the accounting and measurement principles have remained unchanged in comparison with the previous year.

In May 2013, the International Accounting Standards Board approved the amended version of IAS 36 “Impairment of Assets,” which was adopted by the European Union on December 20, 2013. The amended standard is effective for fiscal years beginning on or after January 1, 2014. Merck made use of the possibility to apply the standard earlier, and has been applying the rules contained in the amended IAS 36 since January 1, 2013. The amendments to IAS 36 rescind the consequences of IAS 36 caused by the adoption of IFRS 13 “Fair Value Measurement”. At Merck, the changes related to the amended standard mean that the recoverable amount of cash-generating units with a significant carrying amount of goodwill are only to be disclosed if during the period an impairment or reversal of an impairment was recognized.

Apart from this change, in fiscal 2013 the expenses for Group functions to the operating divisions in the Segment reporting are no longer allocated to the operating segments, but rather disclosed fully in the column “Corporate and Other”. This change in disclosure relates exclusively to Segment Reporting and has no impact on the amounts disclosed in the consolidated income statement. A complete presentation of this disclosure change can be found under Note [62].
The main assets and liabilities disclosed in the consolidated balance sheet are measured as follows:

<table>
<thead>
<tr>
<th>Balance sheet items</th>
<th>Measurement principle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>Nominal value</td>
</tr>
<tr>
<td>Financial assets (current/non-current)</td>
<td></td>
</tr>
<tr>
<td>Held to maturity investments</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>Fair value</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Assets from derivatives (financial transactions)</td>
<td>Fair value</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Inventories</td>
<td>Lower of cost and net realizable value</td>
</tr>
<tr>
<td>Other assets (current/non-current)</td>
<td></td>
</tr>
<tr>
<td>Assets from derivatives (operating business)</td>
<td>Fair value</td>
</tr>
<tr>
<td>Receivables from non-income-related taxes</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Other receivables</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Income tax receivables</td>
<td>Expected tax refunds based on tax rates that have been enacted or substantively enacted by the end of the reporting period</td>
</tr>
<tr>
<td>Assets held for sale</td>
<td>Lower of carrying amount and fair value less costs to sell</td>
</tr>
<tr>
<td>Intangible assets</td>
<td></td>
</tr>
<tr>
<td>With finite useful lives</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>With indefinite useful lives</td>
<td>Amortized cost (subsequent measurement: impairment only approach)</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>Undiscounted measurement based on tax rates that are expected to apply to the period when the asset is realized or the liability is settled</td>
</tr>
<tr>
<td><strong>EQUITY AND LIABILITIES</strong></td>
<td></td>
</tr>
<tr>
<td>Financial liabilities (current/non-current)</td>
<td></td>
</tr>
<tr>
<td>Bonds</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Liabilities to related parties</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Bank loans and overdrafts</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Liabilities from derivatives (financial transactions)</td>
<td>Fair value</td>
</tr>
<tr>
<td>Finance lease liabilities</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Other liabilities (current/non-current)</td>
<td></td>
</tr>
<tr>
<td>Liabilities from derivatives (operating business)</td>
<td>Fair value</td>
</tr>
<tr>
<td>Liabilities from non-income-related taxes</td>
<td>Settlement amount</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>Settlement amount</td>
</tr>
<tr>
<td>Income tax liabilities</td>
<td>Expected tax payments based on tax rates that have been enacted or substantively enacted by the end of the reporting period</td>
</tr>
<tr>
<td>Liabilities in connection with assets held for sale</td>
<td>Fair value less costs to sell</td>
</tr>
<tr>
<td>Provisions (current/non-current)</td>
<td>Present value of the expenditures expected to be required to settle the obligation</td>
</tr>
<tr>
<td>Provisions for pensions and other post-employment benefits</td>
<td>Projected unit credit method</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>Undiscounted measurement based on tax rates that are expected to apply to the period when the asset is realized or the liability is settled</td>
</tr>
</tbody>
</table>
Management judgments and sources of estimation uncertainty

The preparation of the consolidated financial statements requires management to make judgments and assumptions as well as estimates to a certain extent. This affects the amount of assets and liabilities, disclosures on contingent assets and liabilities, as well as reported income and expenses. Actual values may differ from the estimates made and assumptions and judgments may subsequently prove inaccurate. This is of fundamental importance for the understanding of these consolidated financial statements and the assessment of the underlying risks. The relevant assumptions and estimates for the preparation of the consolidated financial statements are reviewed on an ongoing basis. Changes in estimates are considered in the period of the change and in subsequent periods if the change relates to both the reporting period and also future periods. Judgments, forward-looking assumptions and sources of estimation uncertainty with the greatest potential effects on these consolidated financial statements are presented below.

Sales deductions

Merck grants its customers various kinds of rebates and discounts. In addition, expected product returns, state compulsory charges and rebates from health plans and programs are also deducted from sales. The most significant portion of these deductions from sales is attributable to the Merck Serono division. The most complex and most substantial rebates in this division relate to government rebate programs in North America such as the U.S. Federal Medicare Program and the U.S. Medicaid Drug Rebate Program. Other significant sales deductions in the division result from compulsory government rebate programs in certain European countries.

Insofar as sales deductions were not already made on payments received, Merck determines the level of required sales deductions on the basis of current experience and recognizes them as a liability or provision. The sales deductions reduce gross sales revenues. Adjustments of liabilities and provisions can lead to increases or reductions of sales in later periods.

Impairment tests of goodwill and other intangible assets with indefinite useful lives

The goodwill (carrying amount as of December 31, 2013: € 4,583.2 million/2012: € 4,695.7 million) and other intangible assets with indefinite useful lives (carrying amount as of December 31, 2013: € 214.9 million/2012: € 156.6 million) reported in the consolidated financial statements are tested for impairment when a triggering event arises or at least once a year.

The impairment tests include assumptions and estimates of the amount of future cash flows and the discount rate. Here, to be mentioned in particular are assumptions and estimates regarding future customers, saleable quantities, achievable prices, corresponding cost developments, the long-term growth rate and the weighted average cost of capital (WACC) used for discounting. All of these assumptions are considered a source of estimation uncertainty due to their inherent uncertainty. Changes in the long-term growth rate and the discount rate especially have an influence on the determination of value in use. Information on the sensitivity of these two factors can be found in Note [41].

Especially due to the acquisition of Serono SA and the Millipore Corporation, the goodwill reported in the consolidated financial statements represents a significant factor. Although Merck expects no materially significant impairment of the goodwill in the near future, such impairment cannot be ruled out for the future in the event of unfavorable developments in the earnings situations of the relevant cash-generating units.
Determination of the level of amortization of intangible assets with finite useful lives
In addition to goodwill and other intangible assets with indefinite useful lives, Merck has a significant amount of intangible assets with finite useful lives (carrying amount as of December 31, 2013: €5,026.8 million/2012: €6,056.8 million). Substantial assumptions and estimates are required to determine the appropriate level of amortization of these intangible assets. This relates in particular to the determination of the underlying remaining useful life. The parameter is reviewed by Merck and adjusted if necessary at least at the end of every fiscal year. In these estimates, Merck considers factors including the typical product life cycles for each asset and publicly available information about the estimated useful lives of similar assets. Despite these analyses, the assumed useful lives can prove false at a later date because of the high degree of uncertainty.
If the amortization of intangible assets from market authorizations, patents, licenses and similar rights, capitalized brand names and trademarks had been 10% higher, for example due to shortened remaining useful lives, profit before income tax would have been €81.4 million lower in fiscal 2013 (2012: reduction of €87.2 million). In fiscal 2013, a reduction of the useful lives of the intangible assets reported in connection with the drug Rebif® by one year would have lowered profit before income tax by €61.4 million (2012: €52.6 million).

In- and out-licensing of intangible assets
Merck regularly acquires intellectual property from research institutions, biotechnology companies and other contract partners. Such acquisitions typically involve the agreement of up-front payments and payments for the achievement of certain milestones. In this context, Merck has to judge to what extent up-front or milestone payments represent compensation for assets to be capitalized or how far these payments represent remuneration for purchased services (ongoing research and development expense).
Merck also acts as the seller of intellectual property in out-licensing agreements and usually receives up-front and milestone payments on this basis. In this context, it must be assessed to what extent all significant risks and rewards of the intangible asset in question are transferred to the acquirer and consequently whether revenue is required to be recognized.

Identification of impairment of non-financial assets
Judgments by company management are required in the identification of existing indications of impairment of intangible assets and property, plant and equipment. As of December 31, 2013, the carrying amounts of these assets amounted to €12,514.4 million (2012: €13,898.1 million). Merck uses external and internal information to identify indications of impairment. For example, the approval of a competing pharmaceutical product or the closure of a location can be an indicator of impairment. Nevertheless, Merck’s analysis of indications of impairment can prove too optimistic, too pessimistic or incorrect in hindsight due to the high degree of uncertainty. This would result in impairment tests being carried out too late, too early or erroneously not carried out at all.
Impairment of financial assets
On every reporting date, Merck reviews whether there is any objective evidence that a financial asset is impaired and, if this is the case, carries out the impairment to the extent estimated as necessary. Particularly important in this context are impairment losses on trade receivables whose carrying amount was €2,021.4 million in 2013 (2012: €2,114.6). Of these trade receivables, €209.1 million related to receivables in Italy, Spain, Greece and Portugal (2012: €258.1 million), which are a particular focus as part of the management of operating counterparty risks.

Significant indicators for the identification of impaired receivables and the subsequent impairment tests are in particular payment default or delay in the payment of interest or principal, negative changes in economic or regional economic framework conditions as well as considerable financial difficulties of a debtor. These estimates are discretionary and can later prove to be incorrect.

Other provisions
As a global pharmaceutical and chemical group, Merck is exposed to a multitude of litigation risks. In particular, these include risks from product liability, competition and antitrust law, pharmaceutical law, patent law, tax law and environmental protection. Merck is engaged in legal proceedings and official investigations, the outcomes of which are uncertain. A detailed description of the most important legal matters as of the balance sheet date can be found in Note [48]. The provisions recognized for legal disputes mainly relate to the Merck Serono division and amounted to €772.3 million as of the reporting date (2012: €678.9 million). To assess the existence of a reporting obligation and to quantify pending outflows of resources, Merck draws on the knowledge of the legal department as well as any other outside counsel.

In spite of this, both the assessment of the existence of a present obligation and the estimate of the probability of a future outflow of resources are highly subject to uncertainty. Equally, the evaluation of a possible payment obligation is to be considered a major source of estimation uncertainty.

To a certain extent, Merck is obliged to take measures to protect the environment and reported provisions for environmental protection of €111.2 million as of December 31, 2013 (2012: €106.7 million). The underlying obligations were located mainly in Germany and the United States. Provisions were recognized primarily for obligations from soil remediation and groundwater protection in connection with the discontinued crop protection business.

The calculation of the present value of the future settlement amount requires, among other things, estimates of the future settlement date, the actual severity of the identified contamination, the applicable remediation methods and the associated future costs. The measurement is carried out regularly in consultation with independent experts. In spite of this, the determination of the future settlement amount of the provisions for environmental protection measures is subject to a considerable degree of uncertainty.
Provisions for pensions and other post-employment benefits
Merck maintains several defined benefit pension plans, particularly in Germany, Switzerland and the United Kingdom. The determination of the present value of the obligation from these defined benefit pension plans primarily requires estimates of the discount rate, future salary increases, future pension increases and future cost increases for medical care.

Detailed information on the existing pension obligations and a sensitivity analysis of the parameters named above are provided in Notes [21] and [49]. As of the reporting date, the amount recorded on the balance sheet for provisions for pensions and other post-employment benefits was € 910.9 million (2012: € 1,211.7 million). The present value of the defined benefit pension obligation was € 2,736.8 million as of December 31, 2013 (2012: € 2,830.1 million).

Income taxes
The calculation of the reported assets and liabilities from deferred and current income taxes requires extensive discretionary judgments, assumptions and estimates. The tax liabilities and the provisions for tax obligations resulted in total income tax liabilities of € 465.1 million as of December 31, 2013 (2012: € 401.4 million). The carrying amounts of deferred tax assets and liabilities amounted to € 736.4 million and € 665.5 million, respectively, as of the reporting date (2012: € 946.6 and € 1,192.0 million, respectively). The recognized income tax liabilities and provisions are partially based on estimates and interpretations of tax laws and ordinances in different jurisdictions.

With regard to deferred tax items, there is a high degree of uncertainty concerning the date on which an asset is realized or a liability settled and concerning the tax rate applicable on this date. This particularly relates to deferred tax liabilities recognized in the context of the acquisitions of Serono SA and the Millipore Corporation. The recognition of deferred tax assets from loss carryforwards requires an estimate of the probability of the future realizability of loss carryforwards. Factors considered in this estimate are results history, results planning and any tax planning strategy of the respective Group company.

Other judgments, assumptions and sources of estimation uncertainty
Merck makes other judgments, assumptions and estimates in the following areas:

- Identification, recognition and measurement of assets, liabilities and contingent liabilities in the context of business combinations
- Classification of financial assets and financial liabilities
- Determination of the fair value of financial instruments classified as available for sale and of derivative financial instruments
- Determination of the fair value of the liability for share-based compensation
- Determination of the fair value of plan assets
(7) Consolidation methods

The consolidated financial statements are based on the single-entity financial statements of the consolidated companies as of the balance sheet date, which were prepared applying consistent accounting policies in accordance with IFRS.

Acquisitions are accounted for using the purchase method in accordance with IFRS 3. Subsidiaries acquired and consolidated for the first time were measured at the carrying values at the time of acquisition on the basis of financial statements prepared for this purpose. Differences resulting in this connection are recognized as assets and liabilities to the extent that their fair values differ from the values actually carried in the financial statements. A remaining positive difference is recognized as goodwill within intangible assets, and is subjected to an impairment test if there are indications of impairment, or at least once a year.

In cases where a company was not acquired in full, non-controlling interests are measured using the fair value of the proportionate share of net assets. The option to measure non-controlling interests at fair value (full goodwill method) was not utilized.

When additional shares in non-controlling interest are acquired, the purchase price amount that exceeds the carrying amount of this interest is recognized immediately in equity.

Interests in associates over which Merck has significant influence are – as far as they are material – included in accordance with IAS 28 using the equity method of accounting.

Intragroup sales, expenses and income, as well as all receivables and payables between the consolidated companies, were eliminated. The effects of intragroup deliveries reported under non-current assets and inventories were adjusted by eliminating any intragroup profits. In accordance with IAS 12, deferred taxes are applied to these consolidation measures.

(8) Currency translation

The functional currency concept applies to the translation of financial statements of consolidated companies prepared in foreign currencies. The subsidiaries of the Merck Group generally conduct their operations independently. The functional currency of these companies is normally the respective local currency. Assets and liabilities are measured at the closing rate, and income and expenses are measured at weighted average annual rates in euros, the reporting currency. Any currency translation differences arising during consolidation of Group companies are taken directly to equity. If Group companies are deconsolidated, existing currency differences are reversed and reclassified to profit or loss. The local currency is not the functional currency at only a few subsidiaries.
When the financial statements of consolidated companies are prepared, business transactions that are conducted in currencies other than the functional currency are recorded using the current exchange rate on the date of the transaction. Foreign currency monetary items (cash and cash equivalents, receivables and payables) in the year-end financial statements of the consolidated companies prepared in the functional currency are translated at the respective closing rates. Exchange differences from the translation of monetary items are recognized in the income statement with the exception of net investments in a foreign operation. Hedged items are likewise carried at the closing rate. The resulting gains or losses are eliminated in the income statement against offsetting amounts from the fair value measurement of derivatives.

Currency translation was based on the following key exchange rates:

<table>
<thead>
<tr>
<th>Currency</th>
<th>Average annual rate</th>
<th>Closing rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>British pound (GBP)</td>
<td>0.848</td>
<td>0.814</td>
</tr>
<tr>
<td>Chinese renminbi (CNY)</td>
<td>8.178</td>
<td>8.143</td>
</tr>
<tr>
<td>Japanese yen (JPY)</td>
<td>129.016</td>
<td>103.233</td>
</tr>
<tr>
<td>Swiss franc (CHF)</td>
<td>1.228</td>
<td>1.205</td>
</tr>
<tr>
<td>Taiwan dollar (TWD)</td>
<td>39.471</td>
<td>38.187</td>
</tr>
<tr>
<td>U.S. dollar (USD)</td>
<td>1.330</td>
<td>1.293</td>
</tr>
</tbody>
</table>

(9) Recognition of sales and other revenue

Sales are recognized net of sales-related taxes as well as sales deductions. They are recognized once the goods have been delivered or the services have been rendered, the significant risks and rewards of ownership have been transferred to the purchaser, the amount of revenue can be measured reliably, and it is probable that the economic benefits will flow to the entity. When sales are recognized, estimated amounts are taken into account for expected sales deductions, for example rebates, discounts and returns.

In addition to revenue from the sale of goods, sales also include revenue from services, but the volume involved is insignificant. Long-term, customer-specific manufacturing contracts do not exist.

Depending on the substance of the relevant agreements, royalty, license and commission income is recognized either immediately or is recognized when the contractual obligation is fulfilled.

Dividend income is recognized when the shareholders’ right to receive the dividend is established. This is normally the date of the dividend resolution. Interest income is recognized in the period in which it is earned.

(10) Research and development costs

Research and development costs comprise the costs of research departments and process development, the costs of clinical trials as well as the expenses incurred as a result of research and development collaborations.
The costs of research cannot be capitalized and are expensed in full in the period in which they are incurred. As internally generated intangible assets, it is necessary to capitalize development expenses if the cost of the internally generated intangible asset can be reliably determined and the asset can be expected to lead to future economic benefits. The condition for this is that the necessary resources are available for the development of the asset, technical feasibility of the asset is given, its completion and use are intended, and marketability is given. Owing to the high risks up to the time that pharmaceutical products are approved, these criteria are not met in the pharmaceutical business. Costs incurred after regulatory approval are usually insignificant and are therefore not recognized as intangible assets. Owing to the risks existing up until market launch, development expenses in the Performance Materials and Merck Millipore divisions can likewise not be capitalized.

In addition to own research and development, Merck is also a partner in collaborations aimed at developing marketable products. These collaborations typically involve payments for the achievement of certain milestones. Here, assessments are made as to whether these upfront or milestone payments represent compensation for services rendered (research and development expense) or whether the payments represent the acquisition of an asset that has to be capitalized. Reimbursements for R&D are offset against research and development costs.

\[ 11 \] Financial instruments: Principles

A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. A distinction is made between non-derivative and derivative financial instruments.

Derivatives can be embedded in other financial instruments or in non-financial instruments. Under IFRS, an embedded derivative must be separated from the host contract and accounted for separately at fair value if the economic characteristics of the embedded derivative are not closely related to the economic characteristics of the host contract. Merck did not have any separable embedded derivatives during the fiscal year. Issued compound financial instruments with both an equity and a liability component must be recognized separately depending on their characteristics. Merck was not a party to hybrid or compound financial instruments during the fiscal year.

As a rule, Merck accounts for regular way purchases or sales of financial instruments at the settlement date and derivatives at the trade date.

Financial assets and financial liabilities are generally measured at fair value on initial recognition, if necessary including transaction costs.

Financial assets are derecognized in part or in full if the contractual rights to the cash flows from the financial asset have expired or if control and substantially all the risks and rewards of ownership of the financial asset have been transferred to a third party. Financial liabilities are derecognized if the contractual obligations have been discharged, cancelled, or expired. Cash and cash equivalents are carried at nominal value.
12 Financial instruments: Categories and classes of financial instruments

Financial assets and liabilities are classified into the following IAS 39 measurement categories and IFRS 7 classes. The classes required to be disclosed in accordance with IFRS 7 consist of the measurement categories set out here. Additionally, cash and cash equivalents with an original maturity of up to 90 days, finance lease liabilities, and derivatives designated as hedging instruments are also classes in accordance with IFRS 7. There were no reclassifications between the aforementioned measurement categories during the fiscal year.

Financial assets and financial liabilities at fair value through profit or loss

"Financial assets and financial liabilities at fair value through profit or loss" can be both non-derivative and derivative financial instruments. Financial instruments in this category are subsequently measured at fair value. Gains and losses on financial instruments in this measurement category are recognized directly in the income statement. This measurement category includes an option to designate non-derivative financial instruments as "at fair value through profit or loss" on initial recognition (fair value option) or as "financial instruments held for trading". We did not apply the fair value option during the fiscal year. Merck only assigns derivatives to the "held for trading" measurement category. Special accounting rules apply to derivatives that are designated as hedging instruments in a hedging relationship.

Held to maturity investments

"Held to maturity investments" are non-derivative financial assets with fixed or determinable payments and a fixed maturity that are quoted in an active market. To be able to assign a financial asset to this measurement category, the entity must have the positive intention and ability to hold it to maturity. These investments are subsequently measured at amortized cost. If there is objective evidence that such an asset is impaired, an impairment loss is recognized in profit or loss. Subsequent reversals of impairment losses are also recognized in profit or loss up to the amount of the original cost of the asset. At Merck, this measurement category is used for current and non-current financial assets.

Loans and receivables

"Loans and receivables" are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are subsequently measured at amortized cost. If there is objective evidence that such assets are impaired, an impairment loss is recognized in profit or loss. Subsequent reversals of impairment losses are also recognized in profit or loss up to the amount of the original cost of the asset. Long-term non-interest-bearing and low-interest receivables are measured at their present value. Merck primarily assigns trade receivables, loans, and miscellaneous other current and non-current receivables to this measurement category. Merck uses a separate allowance account for impairment losses on trade and other receivables.
Available-for-sale financial assets

"Available-for-sale financial assets" are those non-derivative financial assets that are not assigned to the measurement categories "financial assets and financial liabilities at fair value through profit or loss," "held-to-maturity investments" or "loans and receivables". Financial assets in this category are subsequently measured at fair value. Changes in fair value are recognized immediately in equity and are only transferred to the income statement when the financial asset is derecognized. If there is objective evidence that such an asset is impaired, an impairment loss is recognized immediately in the income statement, including any amounts already recognized in equity. Reversals of impairment losses on previously impaired equity instruments are recognized immediately in equity. Reversals of impairment losses on previously impaired debt instruments are recognized in profit or loss up to the amount of the impairment loss. Any amount in excess of this is recognized directly in equity. At Merck, this measurement category is used in particular for securities and financial assets, as well as interests in subsidiaries that are not consolidated due to secondary importance (affiliates). Financial assets in this category for which no fair value is available or fair value cannot be reliably determined are measured at cost less any cumulative impairment losses. Impairment losses on financial assets carried at cost may not be reversed.

Other liabilities

Other liabilities are non-derivative financial liabilities that are subsequently measured at amortized cost. Differences between the amount received and the amount to be repaid are amortized to profit or loss over the maturity of the instrument. Merck primarily assigns financial liabilities, trade payables, and miscellaneous other non-derivative current and non-current liabilities to this category.

(13) Financial instruments: Derivatives and hedge accounting

Merck uses derivatives solely to economically hedge recognized assets or liabilities and forecast transactions. The hedge accounting rules in accordance with IFRS are applied to some of these hedges. A distinction is made between fair value hedge accounting and cash flow hedge accounting. Designation of a hedging relationship requires a hedged item and a hedging instrument. At Merck, all hedges relate to recognized or highly probable hedged items. Merck currently only uses derivatives as hedging instruments.

The hedging relationship must be effective at all times, i.e. the change in fair value of the hedging instrument fully offsets changes in the fair value of the hedged item. Merck uses the dollar offset method to measure hedge effectiveness. Derivatives that do not or no longer meet the documentation or effectiveness requirements for hedge accounting, whose hedged item no longer exists, or for which hedge accounting rules are not applied are reported as "financial assets and liabilities at fair value through profit or loss." Changes in fair value are then recognized in profit or loss.
As a rule, the purpose of a fair value hedge is to offset the exposure to changes in the fair value of recognized hedged items (financial assets or financial liabilities) through offsetting changes in the fair value of a hedging instrument. Gains and losses on the hedging instrument resulting from changes in fair value are recognized in profit or loss, net of deferred taxes. Offsetting gains and losses on the hedged item that are attributable to the hedged risk are also recognized in profit or loss, irrespective of the item’s allocation to a measurement category.

At Merck, cash flow hedges normally relate to highly probable forecast transactions in foreign currency and to future interest payments. In cash flow hedges, the effective portion of the gains and losses on the hedging instrument is recognized in equity until the hedged item occurs. This is also the case if the hedging instrument expires, is sold, or is terminated before the hedged transaction occurs. The ineffective portion of a cash flow hedge is recognized directly in profit or loss.

(14) Other non-financial assets and liabilities

Other non-financial assets are carried at amortized cost. Allowances are recognized for any credit risks. Long-term non-interest-bearing and low-interest receivables are carried at their present value. Other non-financial liabilities are carried at the amount to be repaid.

(15) Inventories

Inventories are carried at the lower of cost or net realizable value. When determining cost, the “first-in, first-out” (FIFO) and weighted average cost formulas are used. In addition to directly attributable unit costs, manufacturing costs also include overheads attributable to the production process, which are determined on the basis of normal capacity utilization of the production facilities.

Inventories are written down if the net realizable value is lower than the acquisition or manufacturing cost carried in the balance sheet.

Since the products are not manufactured within the scope of long-term production processes, the manufacturing cost does not include any borrowing cost.

Inventory prepayments are recorded under other current assets.

(16) Intangible assets

Acquired intangible assets are recognized at cost and are classified as assets with finite and indefinite useful lives. Self-developed intangible assets are only capitalized if the requirements specified by IAS 38 have been met. Intangible assets with indefinite useful lives acquired in the course of business combinations are recognized at fair value on the acquisition date.
Intangible assets with indefinite useful lives
Intangible assets with indefinite useful lives are not amortized; however they are tested for impairment when a triggering event arises or at least once a year. Here, the respective carrying amounts are compared with the recoverable amount of the cash-generating unit. Impairment losses recognized on indefinite-life intangible assets other than goodwill are reversed if the original reasons for impairment no longer apply.

Goodwill is allocated to cash-generating units and tested for impairment either annually or if there are indications of impairment. A cash-generating unit is a division as presented in the Segment reporting. The carrying amounts of the cash-generating units are compared with their recoverable amounts and impairment losses are recognized where the recoverable amount is lower than the carrying amount. The recoverable amount of a cash-generating unit is determined as the higher of fair value less costs to sell and value in use estimated using the discounted cash flow method. When testing for potential goodwill impairments, Merck determines the recoverable amount by discounting expected cash flows and therefore uses the value-in-use method.

Intangible assets with finite useful lives
Intangible assets with a finite useful life are amortized using the straight-line method. The useful lives of marketing authorizations, acquired patents, licenses and similar rights, brand names, trademarks and software are between 3 and 15 years. Amortization of intangible assets other than software is reported under amortization of intangible assets in the income statement. This item primarily comprises amortization in connection with the purchase price allocations for the acquisitions of Serono SA and the Millipore Corporation. Amortization of software is allocated to the functional costs in the income statement. An impairment test is performed if there are indications of impairment. Impairment losses are determined using the same methodology as for indefinite-life intangible assets. Impairment losses are reversed if the original reasons for impairment no longer apply.

(17) Property, plant and equipment

Property, plant and equipment is measured at cost less depreciation and impairments plus reversals of impairments. The component approach is applied here in accordance with IAS 16. Subsequent costs are only capitalized if it is probable that future economic benefits will arise for the Group and the cost of the asset can be measured reliably. The cost of self-constructed property, plant and equipment is calculated on the basis of the directly attributable unit costs and an appropriate share of overheads. If the construction of property, plant and equipment takes a substantial period of time, the directly attributable borrowing costs incurred up until completion are capitalized as part of the costs. In accordance with IAS 20, costs are reduced by the amount of government grants in those cases where government grants or subsidies have been paid for the acquisition or manufacture of assets (grants related to assets). Grants related to expenses which no longer offset future expenses are recognized in profit or loss. Property, plant and equipment is depreciated by the
straight-line method over the useful life of the asset concerned. Depreciation of property, plant and equipment is based on the following useful lives:

Useful life of property, plant and equipment

<table>
<thead>
<tr>
<th></th>
<th>Useful life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production buildings</td>
<td>maximum of 33 years</td>
</tr>
<tr>
<td>Administration buildings</td>
<td>maximum of 40 years</td>
</tr>
<tr>
<td>Plant and machinery</td>
<td>6 to 25 years</td>
</tr>
<tr>
<td>Operating and office equipment; other facilities</td>
<td>3 to 10 years</td>
</tr>
</tbody>
</table>

The useful lives of the assets are reviewed regularly and adjusted if necessary. If indications of a decline in value exist, an impairment test is performed. The determination of the possible need to recognize impairments proceeds in the same way as for intangible assets. If the reasons for an impairment loss no longer exist, a reversal of the impairment loss recognized in prior periods is recorded.

(18) **Leasing**

Where non-current assets are leased and economic ownership lies with Merck (finance lease), the asset is recognized at the present value of the minimum lease payments or the lower fair value in accordance with IAS 17 and depreciated over their useful life. The corresponding payment obligations from future lease payments are recorded as liabilities. If an operating lease is concerned, the associated expenses are recognized in the period in which they are incurred.

(19) **Deferred taxes**

Deferred tax assets and liabilities result from temporary differences between the carrying amount of an asset or liability in the IFRS and tax balance sheets of consolidated companies as well as from consolidation activities, as far as the carrying amount of the asset or liability is recovered or settled in future periods. In addition, deferred tax assets are recorded in particular for tax loss carryforwards if and insofar as their utilization is probable in the foreseeable future. In accordance with the liability method, the tax rates enacted and published as of the balance sheet date are used.

Deferred tax assets and liabilities are only offset on the balance sheet data if they meet the requirements of IAS 12.
(20) Provisions

Provisions are recognized in the balance sheet if it is more likely than not that a cash outflow will be required to settle the obligation and the amount of the obligation can be measured reliably. The carrying amount of provisions takes into account the amounts required to cover future payment obligations, recognizable risks and uncertain obligations of the Merck Group to third parties.

Measurement is based on the settlement amount with the highest probability or if the probabilities are equivalent and a high number of similar cases exist, it is based on the expected value of the settlement amounts. Long-term provisions are discounted and carried at their present value as of the balance sheet date. To the extent that reimbursement claims exist as defined in IAS 37, they are recognized separately as an asset if their realization is virtually certain and the asset recognition criteria has been met.

(21) Provisions for pensions and other post-employment benefits

Provisions for pensions and other post-employment benefits are recorded in the balance sheet in accordance with IAS 19. The obligations under defined benefit plans are measured using the projected unit credit method. Under the projected unit credit method, dynamic parameters are taken into account in calculating the expected benefit payments after an insured event occurs; these payments are spread over the entire period of service of the participating employees. Annual actuarial opinions are prepared for this purpose. The actuarial assumptions for discount rates, salary and pension trends, staff turnover as well as health care cost increases, which were used to calculate the benefit obligation, were determined on a country-by-country basis in line with the economic conditions prevailing in each country; the latest country-specific actuarial mortality table was used in each case. The respective discount rates are generally determined on the basis of the returns on high-quality corporate bonds issued with adequate maturities and currencies. For euro-denominated obligations, bonds with ratings of at least "AA" from one of the three major rating agencies (Standard & Poor’s, Moody’s or Fitch), and a euro swap rate of adequate duration served as the basis for the data. Actuarial gains and losses resulting from changes in actuarial assumptions and/or experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred) are recognized immediately in equity as soon as they are incurred, taking deferred taxes into account. Consequently, the balance sheet discloses – after deduction of the plan assets – the full scope of the obligations while avoiding the fluctuations in expenses that can result especially when the calculation parameters change. The actuarial gains and losses recorded in the respective reporting period are presented separately in the Statement of Comprehensive Income.
Notes to the consolidated income statement

(22) Sales

Sales were generated primarily from the sale of goods and to a limited degree also included revenues from services rendered. Merck Group sales totaled €10,700.1 million in 2013 (2012: €10,740.8 million), which represented a decline of –0.4% compared to 2012 (increase of 8.4% in 2012). Adjusted for the impact of foreign exchange rates and acquisitions, organic growth amounted to 4.2% (2012: 4.5%). Sales are presented by division and region in the Segment reporting (see Note [51]).

(23) Royalty, license and commission income

In 2013, royalty and license income totaled €359.8 million (2012: €417.2 million) and mainly included royalty and license income from the products Humira® (AbbVie Inc., formerly Abbott), Avonex® (Biogen Idec Inc.), Enbrel® (Amgen Inc.), Puregon® (Merck & Co. Inc.) and Viibryd® (Forest Laboratories Inc.), as well as income from the active pharmaceutical ingredients bisoprolol and metformin. The change compared to 2012 resulted primarily from the expiration of the patent for Avonex® in the United States on May 7, 2013.

In 2013, commission income totaled €35.2 million (2012: €14.9 million). This primarily consisted of cooperation and distribution agreements. The breakdown of royalty, license and commission income by division is presented in the Segment reporting (see Note [51]).

(24) Cost of sales

Cost of sales primarily included the cost of manufactured products sold as well as goods for resale. Cost comprises overheads and, if necessary, inventory write-downs, in addition to directly attributable costs, such as the cost of materials, personnel and energy.
(25) Marketing and selling expenses

Marketing and selling expenses comprised the following:

<table>
<thead>
<tr>
<th></th>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales force</td>
<td></td>
<td>–789.8</td>
<td>–841.0</td>
</tr>
<tr>
<td>Internal sales services</td>
<td></td>
<td>–598.7</td>
<td>–647.7</td>
</tr>
<tr>
<td>Sales promotion</td>
<td></td>
<td>–458.4</td>
<td>–460.8</td>
</tr>
<tr>
<td>Logistics</td>
<td></td>
<td>–390.7</td>
<td>–405.1</td>
</tr>
<tr>
<td>Other marketing and selling expenses</td>
<td></td>
<td>–88.9</td>
<td>–56.2</td>
</tr>
<tr>
<td><strong>Marketing and selling expenses</strong></td>
<td></td>
<td><strong>–2,326.5</strong></td>
<td><strong>–2,410.8</strong></td>
</tr>
</tbody>
</table>

The breakdown of marketing and selling expenses by division is presented in the Segment reporting (see Note [51]).

(26) Royalty, license and commission expenses

In 2013, royalty and license expenses amounted to € 212.8 million (2012: € 208.1 million) and commission expenses totaled € 354.2 million (2012: € 371.7 million).

The sales-dependent royalty payments represented selling expenses and were expensed in the period in which they were incurred. Of significance here are the marketing rights to Erbitux® outside the United States and Canada, for which expenses totaling € 80.9 million (2012: € 86.5 million) were incurred in 2013.

Co-marketing agreements lead to sales-dependent commission payments that are expensed in the period in which they are incurred. The commission expenses incurred related mainly to the marketing of Rebif® in the United States, for which expenses of € 302.4 million were incurred in 2013 (2012: € 309.5 million). These also represented exclusively selling expenses.

The breakdown of royalty, license and commission expenses by division is presented in the Segment reporting (see Note [51]).

(27) Administration expenses

Personnel costs and material expenses of management and administrative functions were recorded under this item unless charged to other functional costs as internal services.

The breakdown of administration expenses by division is presented in the Segment reporting (see Note [51]).
Other operating expenses and income were as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litigation</td>
<td>−154.8</td>
<td>−185.5</td>
</tr>
<tr>
<td>Premiums, fees and contributions</td>
<td>−54.3</td>
<td>−51.4</td>
</tr>
<tr>
<td>Allowances for receivables</td>
<td>−47.1</td>
<td>−68.3</td>
</tr>
<tr>
<td>Non-income related taxes</td>
<td>−37.4</td>
<td>−33.0</td>
</tr>
<tr>
<td>Expense for miscellaneous services</td>
<td>−23.9</td>
<td>−20.2</td>
</tr>
<tr>
<td>Impairment losses</td>
<td>−18.4</td>
<td>−19.7</td>
</tr>
<tr>
<td>Losses on disposals of assets</td>
<td>−17.7</td>
<td>−2.7</td>
</tr>
<tr>
<td>Project costs</td>
<td>−6.5</td>
<td>−8.1</td>
</tr>
<tr>
<td>Exchange rate differences from operating activities</td>
<td>−</td>
<td>−60.4</td>
</tr>
<tr>
<td>Impairment losses on Greek sovereign bonds</td>
<td>−</td>
<td>−2.8</td>
</tr>
<tr>
<td>One-time items</td>
<td>−386.8</td>
<td>−663.7</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>−111.0</td>
<td>−129.9</td>
</tr>
<tr>
<td><strong>Total other operating expenses</strong></td>
<td><strong>−857.9</strong></td>
<td><strong>−1,245.7</strong></td>
</tr>
<tr>
<td>Release of allowances for receivables</td>
<td>42.1</td>
<td>42.4</td>
</tr>
<tr>
<td>Exchange rate differences from operating activities</td>
<td>26.0</td>
<td>−</td>
</tr>
<tr>
<td>Income from miscellaneous services</td>
<td>25.1</td>
<td>21.0</td>
</tr>
<tr>
<td>Gains on disposals of assets</td>
<td>7.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Income from investments</td>
<td>1.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Other operating income</td>
<td>37.6</td>
<td>49.8</td>
</tr>
<tr>
<td><strong>Total other operating income</strong></td>
<td><strong>139.8</strong></td>
<td><strong>119.8</strong></td>
</tr>
</tbody>
</table>

**Total other operating expenses and income** | **−718.1** | **−1,125.9**

1 Previous year’s figures have been adjusted, see explanations below

Allowances for receivables and the release of allowances for receivables included both trade accounts receivable as well as other receivables disclosed under other assets insofar as the expenses were not recorded under one-time items.

The impairments related in the amount of € 3.3 million (2012: € 3.3 million) to assets which were assigned to research and development, in the amount of € 8.0 million (2012: € 16.1 million) to production plants, in the amount of € 2.7 million (2012: € 0.2 million) to sales-related assets, and in the amount of € 1.7 million (2012: € 0.0 million) to administration. In addition, impairments were recognized in the amount of € 2.7 million (2012: € 0.1 million) related to non-consolidated investments and other financial instruments which were assigned to the category “available for sale”.

Other operating expenses included, among other things, special environmental protection costs and non-allocable personnel expenses.
Due to its overall minor importance, income from investments was first shown in fiscal 2013 as a part of other operating income. The figures for 2012 were accordingly adjusted.

One-time items comprised:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restructuring costs</td>
<td>–130.5</td>
<td>–503.8</td>
</tr>
<tr>
<td>Integration costs/IT costs</td>
<td>–49.0</td>
<td>–36.7</td>
</tr>
<tr>
<td>Gains/losses on the divestment of businesses</td>
<td>–2.3</td>
<td>–60.1</td>
</tr>
<tr>
<td>Acquisition costs</td>
<td>–</td>
<td>–1.0</td>
</tr>
<tr>
<td>Other one-time items</td>
<td>–2.3</td>
<td>–3.1</td>
</tr>
<tr>
<td><strong>One-time items before impairment losses/reversals of impairments</strong></td>
<td>–184.1</td>
<td>–604.7</td>
</tr>
<tr>
<td>Impairment losses</td>
<td>–207.2</td>
<td>–59.0</td>
</tr>
<tr>
<td>Reversals of impairments</td>
<td>4.5</td>
<td>–</td>
</tr>
<tr>
<td><strong>One-time items (total)</strong></td>
<td>–386.8</td>
<td>–663.7</td>
</tr>
</tbody>
</table>

The restructuring charges incurred in fiscal 2013 amounting to €130.5 million (2012: €503.8 million) were directly related to the efficiency measures in connection with the “Fit for 2018” transformation and growth program. This program was initiated in 2012 with the aim of increasing the competitiveness of Merck, especially by optimizing cost structures in all divisions. The recognized restructuring charges largely related to personnel measures, for instance the elimination of positions in order to create a leaner and more efficient organization. These were offset against income generated by the restructuring, which resulted in the amount of €33.4 million primarily from the sale of the buildings at Merck Serono location in Geneva, Switzerland. The amount for 2012 also primarily comprises expenses for personnel measures in connection with the “Fit for 2018” program.

Integration and IT costs of €49.0 million (2012: €36.7 million) were incurred primarily for the global harmonization of the IT landscape and in connection with the integration of acquired and existing businesses.

The losses from the divestment of businesses amounting to €2.3 million (2012: €60.1 million) related mainly to subsequent expenses for the Generics business sold in 2007.

Asset impairments amounted to €207.2 million (2012: €59.0 million). Of this amount, €35.7 million (2012: €34.3 million) was attributable to the “Fit for 2018” transformation and growth program, which together with the restructuring expenses resulted in total expenses of €166.2 million (2012: €538.1 million). The other impairments were allocable in the amount of €170.8 million to intangible assets and in the amount of €0.7 million to property, plant and equipment. The other impairments allocated to intangible assets are explained in more detail in Note [41].

The impairments related in the amount of €7.2 million (2012: €28.6 million) to assets which were assigned to research and development, in the amount of €4.6 million (2012: €8.3 million) to production plants, in the amount of €153.5 million (2012: €15.3 million) to sales-related assets, and in the amount of €21.8 million (2012: €1.8 million) to administration. In addition, impairments were recognized in the amount of €2.8 million (2012: €5.0 million) for non-consolidated investments and other financial instruments which were classified to the category “available for sale”. Lastly, impairments were recorded in the amount of €17.3 million (2012: €0.0 million) for capitalized goodwill in connection with the sale of the Discovery and Development Solutions business field of the Merck Millipore division.
The breakdown of other operating expenses and income by division as well as one-time items excluding impairment losses and reversals of impairment losses by division are presented in the Segment reporting (see Note [51]).

(29) Research and development costs

Research and development costs decreased slightly in 2013 to €1,504.3 million (2012: €1,511.3 million) and were thus nearly at the previous year’s level. Reimbursements for research and development amounting to €15.0 million (2012: €37.2 million) were offset against research and development costs. This figure also included government subsidies of €8.9 million (2012: €6.4 million).

The breakdown of research and development costs by division and region is presented in the Segment reporting (see Note [51]).

(30) Amortization of intangible assets

Due to the particular significance of the amortization of intangible assets to the Merck Group, this item is disclosed separately in the income statement. This item mainly included amortization of intangible assets in connection with the purchase price allocations for the acquisitions of Serono SA and the Millipore Corporation. Amortization of intangible assets decreased to €813.5 million in 2013 from €871.6 million in 2012.

Amortization amounting to €763.9 million (2012: €820.6 million) related to capitalized brands, marketing authorizations and customer relationships. These represent selling expenses. Further amortization of €49.6 million (2012: €51.0 million) was attributable to production technologies, which represent cost of sales.

Amortization of software is allocated to the respective functional costs.

(31) Financial result

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income and similar income</td>
<td>30.1</td>
<td>35.6</td>
</tr>
<tr>
<td>Interest expenses and similar expenses</td>
<td>-176.6</td>
<td>-221.9</td>
</tr>
<tr>
<td>Interest component from currency hedging transactions</td>
<td>-17.2</td>
<td>-19.0</td>
</tr>
<tr>
<td>Interest result</td>
<td>-163.7</td>
<td>-205.3</td>
</tr>
<tr>
<td>Interest component of the additions to pension provisions and other non-current provisions</td>
<td>-54.2</td>
<td>-60.3</td>
</tr>
<tr>
<td>Currency differences from financing activities</td>
<td>-4.3</td>
<td>11.2</td>
</tr>
<tr>
<td>Result from financial investments</td>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-222.2</td>
<td>-254.6</td>
</tr>
</tbody>
</table>
In spite of the increase in cash and cash equivalents, due to the overall lower level of interest rates interest income slightly declined.

The decrease in interest expenses was due mainly to the repayment of three bonds. Two bonds with a nominal volume of €500.0 million each were already repaid in the course of fiscal 2012, and a bond with a nominal volume of €750.0 million was repaid in 2013. In addition, interest expenses in 2012 included the expense from an interest rate swap with a nominal volume of €250.0 million, which was closed out in 2012.

(32) Income tax

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current taxes in the period</td>
<td>–496.9</td>
<td>–451.2</td>
</tr>
<tr>
<td>Taxes for previous periods</td>
<td>–41.6</td>
<td>–4.5</td>
</tr>
<tr>
<td>Deferred taxes in the period</td>
<td>359.0</td>
<td>325.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>–179.5</td>
<td>–130.0</td>
</tr>
</tbody>
</table>

The following table presents the tax reconciliation from theoretical tax expense to tax expense according to the income statement. The theoretical tax expense is determined by applying the statutory tax rate of 30.7% of a corporation headquartered in Darmstadt.

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit before income tax</td>
<td>1,388.6</td>
<td>709,0</td>
</tr>
<tr>
<td>Tax rate</td>
<td>30.7%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Theoretical tax expense</td>
<td>–426.3</td>
<td>–217.7</td>
</tr>
<tr>
<td>Tax rate differences</td>
<td>109.7</td>
<td>67.6</td>
</tr>
<tr>
<td>Tax effect of companies with a negative contribution to consolidated profit</td>
<td>–14.6</td>
<td>–1.9</td>
</tr>
<tr>
<td>Tax for other periods</td>
<td>–41.6</td>
<td>–4.5</td>
</tr>
<tr>
<td>Tax credits</td>
<td>225.8</td>
<td>71.3</td>
</tr>
<tr>
<td>Tax effect on tax loss carryforwards</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Effect of non-deductible expenses/tax-free income/other tax effects</td>
<td>–32.9</td>
<td>–44.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>–179.5</td>
<td>–130.0</td>
</tr>
</tbody>
</table>

The tax expense consisted of corporation and trade taxes for the companies domiciled in Germany as well as comparable income taxes for foreign companies.

The higher tax credits arose primarily in the United States due to the consideration of dividend income from high-tax countries.
The tax effects of non-deductible expenses/tax-free income/other tax effects include a deferred tax benefit in the amount of €194.1 million (2012: €2.4 million) which resulted primarily from the decrease in deferred tax liabilities on intangible assets from changes in the applied tax rates for specific companies.

The reconciliation between deferred taxes in the balance sheet and deferred taxes in the income statement is presented in the following table:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in deferred tax assets (balance sheet)</td>
<td>-210.2</td>
<td>216.6</td>
</tr>
<tr>
<td>Change in deferred tax liabilities (balance sheet)</td>
<td>526.5</td>
<td>127.6</td>
</tr>
<tr>
<td>Deferred taxes credited/debited to equity</td>
<td>42.0</td>
<td>-20.3</td>
</tr>
<tr>
<td>Changes in scope of consolidation/currency translation/other changes</td>
<td>0.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Deferred taxes (income statement)</td>
<td>359.0</td>
<td>325.7</td>
</tr>
</tbody>
</table>

Tax loss carryforwards were structured as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany Abroad Total</td>
<td>Germany Abroad Total</td>
<td></td>
</tr>
<tr>
<td>Tax loss carryforwards</td>
<td>3.4 437.4 440.8</td>
<td>281.9 285.2 567.1</td>
</tr>
<tr>
<td>thereof:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Including deferred tax asset</td>
<td>0.8 102.5 103.3</td>
<td>278.3 146.3 424.6</td>
</tr>
<tr>
<td>Deferred tax asset</td>
<td>0.2 20.6 20.8</td>
<td>41.3 33.0 74.3</td>
</tr>
<tr>
<td>thereof:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluding deferred tax asset</td>
<td>2.6 334.9 337.5</td>
<td>3.6 138.9 142.5</td>
</tr>
<tr>
<td>Theoretical deferred tax asset</td>
<td>0.4 77.5 77.9</td>
<td>1.0 21.1 22.1</td>
</tr>
</tbody>
</table>

The decrease in tax loss carryforwards compared to 2012 was mainly the result of the use of German tax loss carryforwards of Merck KGaA. The increase in non-German tax loss carryforwards resulted primarily from the consideration of loss carryforwards in Luxembourg for which no deferred tax assets were recognized. Deferred tax assets are recognized for tax loss and interest carryforwards only if for tax loss carryforwards of less than €5.0 million, realization of the related tax benefits is probable within one year, and for tax loss carryforwards of more than €5.0 million realization of the related tax benefits is probable within the next three years.

The vast majority of the tax loss carryforwards either has no expiry date or can be carried forward for up to 20 years.

The tax loss carryforwards accumulated in Germany for corporation and trade tax amounted to €3.4 million (2012: €281.9 million).

The additional theoretically possible deferred tax assets amounted to €77.9 million (2012: €22.1 million).

In 2013, the income tax expense was reduced by €0.4 million (2012: €0.1 million) due to the utilization of tax loss carryforwards from prior years for which no deferred tax asset had been recognized in prior periods.
Deferred tax assets and liabilities corresponded to the following balance sheet items:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible assets</td>
<td>39.5</td>
<td>46.4</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>14.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Current and non-current financial assets</td>
<td>0.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Inventories</td>
<td>442.1</td>
<td>438.7</td>
</tr>
<tr>
<td>Current and non-current receivables/Other assets</td>
<td>39.1</td>
<td>41.8</td>
</tr>
<tr>
<td>Provisions for pensions and other post-employment benefits</td>
<td>149.6</td>
<td>153.6</td>
</tr>
<tr>
<td>Current and non-current other provisions</td>
<td>311.8</td>
<td>316.2</td>
</tr>
<tr>
<td>Current and non-current liabilities</td>
<td>41.6</td>
<td>53.1</td>
</tr>
<tr>
<td>Tax loss carryforwards</td>
<td>20.8</td>
<td>74.3</td>
</tr>
<tr>
<td>Tax refund claims/Other</td>
<td>42.2</td>
<td>43.7</td>
</tr>
<tr>
<td>Offset deferred tax assets and liabilities</td>
<td>-365.2</td>
<td>-227.3</td>
</tr>
<tr>
<td>Deferred taxes (balance sheet)</td>
<td>736.4</td>
<td>946.6</td>
</tr>
</tbody>
</table>

In addition to deferred tax assets on tax loss carryforwards amounting to € 20.8 million (2012: € 74.3 million), deferred tax assets of € 715.6 million (2012: € 872.3 million) were recognized for temporary differences.

As of the balance sheet date, deferred tax liabilities for temporary differences for interests in subsidiaries as regards planned dividend payments amounted to € 12.9 million (2012: € 52.7 million). Deferred tax liabilities amounting to € 43.6 million recognized in 2012 for planned dividend payments within the scope of the Millipore acquisition were reversed in 2013. No deferred tax liabilities were recognized for other temporary differences relating to interests in subsidiaries since the reversal of these differences was not foreseeable. Temporary differences relating to the retained earnings of subsidiaries amounted to € 4,894.6 million (2012: € 3,533.0 million).

### (33) Non-controlling interests

Non-controlling interests in net profit were primarily composed of the minority interests in the companies Merck Ltd., Thailand, and Merck (Pvt.) Ltd., Pakistan, as well as in the listed companies Merck Ltd., India, and P.T. Merck Tbk., Indonesia.

### (34) Earnings per share

Basic earnings per share are calculated by dividing the profit after tax attributable to the shareholders of Merck KGaA by the weighted average number of theoretical shares outstanding. The use of a theoretical number of shares takes into account the fact that the general partner’s capital is not represented by shares. The share capital of € 168.0 million was divided into 64,621,126 shares. Accordingly, the general partner’s capital of € 397.2 million was divided into 152,767,813 theoretical shares. Overall, the total capital thus amounted to € 565.2 million or 217,388,939 theoretical shares outstanding. The weighted average number of shares in 2013 was likewise 217,388,939 in 2013.

As of December 31, 2013 there were no potentially dilutive shares.
Notes to the consolidated balance sheet

(35) Cash and cash equivalents

This item comprised:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash, bank balances and cheques</td>
<td>332.0</td>
<td>349.1</td>
</tr>
<tr>
<td>Short-term cash investment (up to 3 months)</td>
<td>648.8</td>
<td>380.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>980.8</strong></td>
<td><strong>729.7</strong></td>
</tr>
</tbody>
</table>

Changes in cash and cash equivalents as defined by IAS 7 are presented in the cash flow statement. The maximum default risk is equivalent to the carrying value of the cash and cash equivalents.

(36) Current financial assets

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Held to maturity investments</td>
<td>53.4</td>
<td>349.7</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>2,312.1</td>
<td>1,230.1</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>27.3</td>
<td>200.0</td>
</tr>
<tr>
<td>Derivative assets (financial transactions)</td>
<td>17.7</td>
<td>18.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,410.5</strong></td>
<td><strong>1,797.9</strong></td>
</tr>
</tbody>
</table>

The development of current financial assets resulted mainly from the increase in available-for-sale financial assets to €2,312.1 million (2012: €1,230.1 million). As of December 31, 2013, this item mainly included commercial paper amounting to €915.7 million (2012: €283.7 million) as well as bonds amounting to €1,251.7 million (2012: €616.5 million).

The loans and receivables contained in current financial assets are neither past due nor impaired.

(37) Trade accounts receivable

Trade accounts receivable amounting to €2,021.4 million (2012: €2,114.6 million) only existed vis-à-vis third parties.
Trade accounts receivable past due were as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither past due nor impaired</td>
<td>1,542.1</td>
<td>1,556.9</td>
</tr>
<tr>
<td>Past due, but not impaired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 3 months</td>
<td>127.5</td>
<td>210.5</td>
</tr>
<tr>
<td>up to 6 months</td>
<td>6.5</td>
<td>24.7</td>
</tr>
<tr>
<td>up to 12 months</td>
<td>2.8</td>
<td>13.3</td>
</tr>
<tr>
<td>up to 24 months</td>
<td>3.4</td>
<td>6.6</td>
</tr>
<tr>
<td>over 2 years</td>
<td>0.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Impaired</td>
<td>338.7</td>
<td>299.0</td>
</tr>
<tr>
<td>Carrying amount</td>
<td>2,021.4</td>
<td>2,114.6</td>
</tr>
</tbody>
</table>

The corresponding allowances developed as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1</td>
<td>–154.8</td>
<td>–149.0</td>
</tr>
<tr>
<td>Additions</td>
<td>–46.5</td>
<td>–68.3</td>
</tr>
<tr>
<td>Reversals</td>
<td>42.1</td>
<td>42.4</td>
</tr>
<tr>
<td>Utilizations</td>
<td>20.1</td>
<td>20.6</td>
</tr>
<tr>
<td>Currency translation and other changes</td>
<td>2.3</td>
<td>–0.5</td>
</tr>
<tr>
<td>December 31</td>
<td>–136.8</td>
<td>–154.8</td>
</tr>
</tbody>
</table>

Due to the large number of products we offer, trade accounts receivable exist vis-à-vis a large number of customers. This diversification helps to reduce risk with respect to potential defaults on receivables. In addition, established credit management processes that take individual customer risks into account are used to assess the recoverability of receivables. If there are indications that individual trade accounts receivable are partly or fully impaired, corresponding allowances are recognized. Additions to allowances relate mainly to receivables from public hospitals and health care organizations in Italy and Spain.

In the period from January 1 to December 31, 2013 trade receivables in Italy and Spain with a nominal value of € 225.7 million were sold for € 215.9 million. Previous impairments in this context amounting to € 26.0 million were reversed and disclosed under other operating income. The sold receivables do not involve any further rights of recovery against Merck.
Inventories

This item comprised:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials and supplies</td>
<td>294.9</td>
<td>308.1</td>
</tr>
<tr>
<td>Work in progress and finished goods</td>
<td>1,103.2</td>
<td>1,125.4</td>
</tr>
<tr>
<td>Goods for resale</td>
<td>76.1</td>
<td>100.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,474.2</strong></td>
<td><strong>1,533.9</strong></td>
</tr>
</tbody>
</table>

Write-downs of inventories amounted to € 94.1 million (2012: € 126.1 million). As of the balance sheet date, the residual carrying amount of inventories that were written down amounted to € 593.3 million (2012: € 572.3 million). In 2013, reversals of inventory write-downs of € 24.4 million were recorded (2012: € 36.3 million). As of the balance sheet date, no inventories were pledged as security for liabilities.

Other assets

Other assets comprised the following:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other receivables</td>
<td>113.8</td>
<td>1.6</td>
<td>115.4</td>
<td>86.5</td>
<td>2.3</td>
<td>88.8</td>
</tr>
<tr>
<td>Derivative assets (operational)</td>
<td>72.7</td>
<td>53.9</td>
<td>126.6</td>
<td>23.3</td>
<td>32.0</td>
<td>55.3</td>
</tr>
<tr>
<td>Financial items</td>
<td>186.5</td>
<td>55.5</td>
<td>242.0</td>
<td>109.8</td>
<td>34.3</td>
<td>144.1</td>
</tr>
<tr>
<td>Receivables from non-income related taxes</td>
<td>99.0</td>
<td>30.4</td>
<td>129.4</td>
<td>94.0</td>
<td>31.4</td>
<td>125.4</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>34.9</td>
<td>12.2</td>
<td>47.1</td>
<td>34.3</td>
<td>2.2</td>
<td>36.5</td>
</tr>
<tr>
<td>Assets from defined benefit plans</td>
<td>3.8</td>
<td>–</td>
<td>3.8</td>
<td>15.2</td>
<td>–</td>
<td>15.2</td>
</tr>
<tr>
<td>Other assets</td>
<td>36.5</td>
<td>7.4</td>
<td>43.9</td>
<td>18.2</td>
<td>7.5</td>
<td>25.7</td>
</tr>
<tr>
<td>Non-financial items</td>
<td>174.2</td>
<td>50.0</td>
<td>224.2</td>
<td>161.7</td>
<td>41.1</td>
<td>202.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>360.7</strong></td>
<td><strong>106.5</strong></td>
<td><strong>466.2</strong></td>
<td><strong>271.5</strong></td>
<td><strong>75.4</strong></td>
<td><strong>346.9</strong></td>
</tr>
</tbody>
</table>

Other receivables included current receivables from related parties amounting to € 32.5 million (2012: € 5.4 million) as well as current receivables from affiliates amounting to € 0.6 million (2012: € 0.3 million). Interest receivables amounted to € 30.6 million (2012: € 27.6 million). In addition, other prepayments were reported under this item.
Other receivables from third parties past due were as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither past due nor impaired</td>
<td>109.8</td>
<td>82.0</td>
</tr>
<tr>
<td>Past due, but not impaired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 3 months</td>
<td>3.3</td>
<td>4.7</td>
</tr>
<tr>
<td>up to 6 months</td>
<td>0.3</td>
<td>0.9</td>
</tr>
<tr>
<td>up to 12 months</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>up to 24 months</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>over 2 years</td>
<td>0.2</td>
<td>0.1</td>
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<tr>
<td>Impaired</td>
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<tr>
<td>Carrying amount</td>
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</tbody>
</table>

In the year under review, allowances for other receivables from third parties amounting to € 0.6 million (2012: € 1.6 million) were necessary. In 2013, these were reported under allowances for receivables; in 2012 under one-time items. There were no reversals of allowances in this connection in 2013 or in 2012.

(40) Tax receivables

Tax receivables amounted to € 109.8 million (2012: € 178.5 million) and resulted from tax prepayments that exceeded the actual amount of tax payable for 2013 and prior fiscal years, and from refund claims for prior years as well as withholding tax credits.
## Intangible assets

<table>
<thead>
<tr>
<th></th>
<th>Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other</th>
<th>Goodwill</th>
<th>Software</th>
<th>Advance payments</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>Finite useful life</td>
<td>Indefinite useful life</td>
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<tr>
<td>Cost at January 1, 2012</td>
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</tr>
<tr>
<td>December 31, 2012</td>
<td>11,070.9</td>
<td>594.1</td>
<td>4,695.7</td>
<td>288.1</td>
<td>35.4</td>
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### Accumulated amortization and impairment losses

<table>
<thead>
<tr>
<th></th>
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<th>Goodwill</th>
<th>Software</th>
<th>Advance payments</th>
<th>Total</th>
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<td>–</td>
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<td>–189.1</td>
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</table>

### Net carrying amount as of December 31, 2012

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<th>Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other</th>
<th>Goodwill</th>
<th>Software</th>
<th>Advance payments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Finite useful life</td>
<td>Indefinite useful life</td>
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<td></td>
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</tr>
<tr>
<td>January 1, 2013</td>
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<td>594.1</td>
<td>4,695.7</td>
<td>288.1</td>
<td>35.4</td>
</tr>
<tr>
<td>Changes in scope of consolidation</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Additions</td>
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<td>64.5</td>
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<td>1.8</td>
<td>36.3</td>
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<td>–1.5</td>
<td>–30.1</td>
<td>–11.2</td>
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<td>–0.1</td>
</tr>
<tr>
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<td>4,583.2</td>
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<td>42.3</td>
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</table>

### Accumulated amortization and impairment losses

<table>
<thead>
<tr>
<th></th>
<th>Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other</th>
<th>Goodwill</th>
<th>Software</th>
<th>Advance payments</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>–189.1</td>
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</tr>
<tr>
<td>Changes in scope of consolidation</td>
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<tr>
<td>Reversals of impairment losses</td>
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<td>–</td>
<td>–</td>
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</table>

### Net carrying amount as of December 31, 2013

<table>
<thead>
<tr>
<th></th>
<th>Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other</th>
<th>Goodwill</th>
<th>Software</th>
<th>Advance payments</th>
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<tr>
<td></td>
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<td>Indefinite useful life</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>January 1, 2013</td>
<td>11,070.9</td>
<td>594.1</td>
<td>4,695.7</td>
<td>288.1</td>
<td>35.4</td>
</tr>
<tr>
<td>Changes in scope of consolidation</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Additions</td>
<td>7.0</td>
<td>64.5</td>
<td>–</td>
<td>1.8</td>
<td>36.3</td>
</tr>
<tr>
<td>Disposals</td>
<td>–13.5</td>
<td>–1.5</td>
<td>–30.1</td>
<td>–11.2</td>
<td>–0.1</td>
</tr>
<tr>
<td>Transfers</td>
<td>1.0</td>
<td>–0.8</td>
<td>–</td>
<td>36.3</td>
<td>–29.2</td>
</tr>
<tr>
<td>Classification as held for sale or transfer to a disposal group</td>
<td>–46.6</td>
<td>–</td>
<td>–16.5</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Currency translation</td>
<td>–86.1</td>
<td>–0.3</td>
<td>–65.9</td>
<td>–10.7</td>
<td>–0.1</td>
</tr>
<tr>
<td>December 31, 2013</td>
<td>10,932.7</td>
<td>656.0</td>
<td>4,583.2</td>
<td>304.3</td>
<td>42.3</td>
</tr>
</tbody>
</table>
Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other
The net carrying amount of “Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other” with finite useful lives amounting to €4,940.1 million (2012: €5,957.8 million) mainly included the identified and capitalized assets from the purchase price allocations for the acquisitions of Serono SA and the Millipore Corporation. The vast majority was attributable to marketing authorizations of active pharmaceutical ingredients and technologies. The remaining useful lives of these assets ranged between 0.5 and 11.0 years. This item also included licenses from these acquisitions with a remaining useful life of up to one year.

The additions to intangible assets with finite useful lives amounted to €7.0 million in 2013 (2012: €42.8 million).

In connection with the forthcoming sale of the marketing rights to Egrifta® (tesamorelin for injection) to Theratechnologies Inc., Canada, as of December 31, 2013, intangible assets with a definite useful life in the amount of €5.6 million were reclassified to “assets held for sale”.

The item “Marketing authorizations, patents, licenses and similar rights, brand names, trademarks and other” with indefinite useful lives primarily related to rights that Merck had acquired for active ingredients, products or technologies that were still in the research and development stage. Owing to the uncertainty as to the extent to which these projects will ultimately lead to marketable products, the period for which the resulting capitalized assets would generate an economic benefit for the company could not yet be determined. Amortization will only begin once the products receive marketing approval and is carried out on a straight-line basis over the shorter period of the patent or contract term or the expected useful life.

In 2013, additions to intangible assets with indefinite useful lives amounted to €64.5 million (2012: €81.0 million) and related exclusively to the Merck Serono division. The acquisition of the rights to the active ingredient TH-302 as well as a licensing agreement with BeiGene Co. Ltd., China, accounted for the vast majority of this amount. Further additions were attributable to the acquisition of a license to an oncological compound from Symphogen A/S, Denmark and to milestone payments to Open Monoclonal Technology, Inc. (OMT), USA, and to Ablynx N.V., Belgium.

Goodwill
Goodwill was incurred mainly in connection with the acquisitions of Serono SA and the Millipore Corporation. The changes in goodwill caused by foreign exchange rates resulted almost exclusively from translating the goodwill of the Millipore Corporation, part of which is carried in U.S. dollars, into the reporting currency.

In connection with the forthcoming sale of the Discovery and Development Solutions business field of the Merck Millipore division to Eurofins Scientific S.A., Luxembourg, on December 31, 2013, goodwill allocated to the business field in the amount of €16.5 million was reclassified to “assets held for sale”.

The disposal in the amount of €30.1 million is due to the closure of the effect pigments production facility Suzhou Taizhu Technology Development Co. Ltd., Taicang, China, and to the goodwill allocated to the Discovery and Development Solutions business field.
The carrying amounts of “Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other” as well as goodwill were attributable to the divisions as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Marketing authorizations, patents, licenses and similar rights, brands, trademarks and other</td>
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<td></td>
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<td></td>
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<td>474.7</td>
<td>568.7</td>
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<td>184.4</td>
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<td>19.1</td>
<td>184.8</td>
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<td>1,168.5</td>
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<td>2,730.9</td>
<td>4,583.2</td>
<td>4,695.7</td>
<td></td>
</tr>
</tbody>
</table>

Information on impairment tests of intangible assets with indefinite useful lives

Since goodwill and other intangible assets with indefinite useful lives are not amortized, these are subjected to an impairment test if there are indications of impairment, or at least once a year. In fiscal 2013, the goodwill assigned to the Discovery and Development Solutions business field of the Merck Millipore division was impaired by € 17.3 million.

For intangible assets with indefinite useful lives there was an impairment loss in 2013 in the amount of € 1.3 million (2012: € 12.3 million) for a license in the Merck Serono division. The impairment loss was reported in other operating expenses under impairment losses.

Goodwill and intangible assets with indefinite useful lives which do not generate own cash flows are allocated to cash-generating units for impairment testing. A cash-generating unit is a division as presented in the Segment reporting.

When testing for potential impairments of these assets, Merck determines the recoverable amount by discounting expected cash flows and therefore uses the value-in-use method. Reference is made to the latest forecasts approved by the company management. Among other things, market observations, and – if available – market data, constant target-actual deviations, detailed plans as well as past experience form the basis for cash flow forecasts. Above all, assumptions on existing and future customers, future realizable selling prices and volumes and corresponding costs are made. The existing plans normally cover a period of four years. Cash flows for periods in excess of this are included using an individualized long-term growth rate for the specific cash-generating unit.
In the business plan, a long-term growth rate of 2.8% was used to measure the goodwill of the Merck Millipore division (2012: 2.8%). The long-term growth rates used for the other divisions are as follows: Merck Serono 0.0% (2012: 1.5%), Consumer Health 2.5% (2012: 2.5%) and Performance Materials 1.0% (2012: 1.0%). The use of division-specific long-term growth rates is suited to taking the specific business and the imminent growth expectations thereof into account.

The expected future cash flows were discounted using a weighted average cost of capital (WACC) of 7.0% (2012: 7.0%).

A 10% reduction in the long-term growth rate was assumed when calculating sensitivity; furthermore sensitivities were calculated for the case that the weighted average cost of capital increases by 10%. Even if the actual long-term growth rate was 10% lower than the expected growth rate, there would be no need to record impairment losses for goodwill. Likewise, there would be no need to record impairment losses if future cash flows were discounted by a weighted average cost of capital that was 10% higher.

Information on impairment losses of intangible assets with finite useful lives

Impairment losses of intangible assets with finite useful lives amounted to €155.5 million in 2013 (2012: €8.5 million). Of this amount, an impairment of €153.5 million was recorded in the income statement as a one-time item under other operating expenses.

An impairment loss was required to be recognized in the amount of €126.5 million for the intangible asset identified and capitalized for Humira® in connection with the acquisition of Serono SA. This occurred after Merck, based on an out-of-court settlement with AbbVie Biotechnology Ltd., Bermuda, and Abbott GmbH & Co. KG, Germany (collectively “AbbVie”), from the second half of 2014 is to receive no further license payments from AbbVie. An additional impairment loss of €27.0 million in the Merck Serono division which was classified as a one-time item related to Egrifta® (tesamorelin for injection) and resulted from the agreement for the transfer of marketing rights to Theratechnologies Inc., Canada. Moreover, an impairment of €1.1 million was attributable to customer relationships in the Performance Materials division and €0.9 million in marketing rights in the Merck Serono division, which were recorded in the income statement as impairment losses under other operating expenses.

In fiscal 2013, software impairments of €4.3 million (2012: €8.7 million) were recognized. Thereof, the €3.3 million in connection with the transfer of the research and development activities from Switzerland to the United States was recognized in the income statement within other operating expenses under one-time items. The additional €1.0 million was recorded in other operating expenses under impairments.

In 2013, no intangible assets were pledged as security for liabilities.
### Property, plant and equipment

<table>
<thead>
<tr>
<th>€ million</th>
<th>Land, land rights and buildings, including buildings on third-party land</th>
<th>Plant and machinery</th>
<th>Other facilities, operating and office equipment</th>
<th>Construction in progress and advance payments to vendors and contractors</th>
<th>Total</th>
</tr>
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<tbody>
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<td>6.3</td>
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<tr>
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<td>31.0</td>
<td>–557.6</td>
<td>–10.9</td>
</tr>
<tr>
<td>Classification as held for sale or transfer to a disposal group</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Currency translation</td>
<td>–16.1</td>
<td>–16.4</td>
<td>–5.7</td>
<td>–1.4</td>
<td>–39.6</td>
</tr>
<tr>
<td><strong>December 31, 2012</strong></td>
<td>2,651.5</td>
<td>3,044.4</td>
<td>906.7</td>
<td>429.1</td>
<td>7,031.7</td>
</tr>
</tbody>
</table>

Accumulated depreciation and impairment losses January 1, 2012:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Land, land rights and buildings, including buildings on third-party land</th>
<th>Plant and machinery</th>
<th>Other facilities, operating and office equipment</th>
<th>Construction in progress and advance payments to vendors and contractors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in scope of consolidation</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Depreciation</td>
<td>–108.7</td>
<td>–199.4</td>
<td>–88.3</td>
<td>–</td>
<td>–396.4</td>
</tr>
<tr>
<td>Impairment losses</td>
<td>–16.0</td>
<td>–21.5</td>
<td>–4.1</td>
<td>–2.5</td>
<td>–44.1</td>
</tr>
<tr>
<td>Disposals</td>
<td>26.5</td>
<td>82.7</td>
<td>64.1</td>
<td>0.1</td>
<td>173.4</td>
</tr>
<tr>
<td>Transfers</td>
<td>–4.6</td>
<td>1.2</td>
<td>1.6</td>
<td>–</td>
<td>–1.8</td>
</tr>
<tr>
<td>Reversals of impairment losses</td>
<td>1.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.4</td>
</tr>
<tr>
<td>Classification as held for sale or transfer to a disposal group</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Currency translation</td>
<td>4.0</td>
<td>12.6</td>
<td>4.8</td>
<td>–</td>
<td>21.4</td>
</tr>
<tr>
<td><strong>December 31, 2012</strong></td>
<td>–1,051.6</td>
<td>–2,164.6</td>
<td>–685.1</td>
<td>–176.8</td>
<td>–4,078.1</td>
</tr>
</tbody>
</table>

Net carrying amount as of December 31, 2012:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Land, land rights and buildings, including buildings on third-party land</th>
<th>Plant and machinery</th>
<th>Other facilities, operating and office equipment</th>
<th>Construction in progress and advance payments to vendors and contractors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost at January 1, 2013</strong></td>
<td>2,651.5</td>
<td>3,044.4</td>
<td>906.7</td>
<td>429.1</td>
<td>7,031.7</td>
</tr>
<tr>
<td>Changes in scope of consolidation</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Additions</td>
<td>8.0</td>
<td>15.1</td>
<td>25.0</td>
<td>360.4</td>
<td>408.5</td>
</tr>
<tr>
<td>Disposals</td>
<td>–376.2</td>
<td>–63.5</td>
<td>–46.6</td>
<td>–10.3</td>
<td>–496.6</td>
</tr>
<tr>
<td>Transfers</td>
<td>186.9</td>
<td>253.0</td>
<td>63.0</td>
<td>–512.1</td>
<td>–9.2</td>
</tr>
<tr>
<td>Classification as held for sale or transfer to a disposal group</td>
<td>–0.8</td>
<td>–4.4</td>
<td>–2.7</td>
<td>–</td>
<td>–7.9</td>
</tr>
<tr>
<td>Currency translation</td>
<td>–56.9</td>
<td>–43.8</td>
<td>–20.4</td>
<td>–3.6</td>
<td>–124.7</td>
</tr>
<tr>
<td><strong>December 31, 2013</strong></td>
<td>2,412.5</td>
<td>3,200.8</td>
<td>925.0</td>
<td>263.5</td>
<td>6,801.8</td>
</tr>
</tbody>
</table>

Accumulated depreciation and impairment losses January 1, 2013:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Land, land rights and buildings, including buildings on third-party land</th>
<th>Plant and machinery</th>
<th>Other facilities, operating and office equipment</th>
<th>Construction in progress and advance payments to vendors and contractors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in scope of consolidation</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Depreciation</td>
<td>–108.9</td>
<td>–187.8</td>
<td>–85.2</td>
<td>–</td>
<td>–381.9</td>
</tr>
<tr>
<td>Impairment losses</td>
<td>–29.5</td>
<td>–11.0</td>
<td>–0.8</td>
<td>–0.4</td>
<td>–41.7</td>
</tr>
<tr>
<td>Disposals</td>
<td>148.6</td>
<td>62.1</td>
<td>44.7</td>
<td>9.7</td>
<td>265.1</td>
</tr>
<tr>
<td>Transfers</td>
<td>–54.2</td>
<td>–108.4</td>
<td>–0.4</td>
<td>166.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Reversals of impairment losses</td>
<td>4.7</td>
<td>0.4</td>
<td>–</td>
<td>–</td>
<td>5.1</td>
</tr>
<tr>
<td>Classification as held for sale or transfer to a disposal group</td>
<td>0.4</td>
<td>1.8</td>
<td>1.9</td>
<td>–</td>
<td>4.1</td>
</tr>
<tr>
<td>Currency translation</td>
<td>20.7</td>
<td>33.0</td>
<td>15.5</td>
<td>–</td>
<td>69.2</td>
</tr>
<tr>
<td><strong>December 31, 2013</strong></td>
<td>–1,069.8</td>
<td>–2,374.5</td>
<td>–709.4</td>
<td>–0.9</td>
<td>–4,154.6</td>
</tr>
</tbody>
</table>

Net carrying amount as of December 31, 2013:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Land, land rights and buildings, including buildings on third-party land</th>
<th>Plant and machinery</th>
<th>Other facilities, operating and office equipment</th>
<th>Construction in progress and advance payments to vendors and contractors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost at January 1, 2014</strong></td>
<td>1,342.7</td>
<td>826.3</td>
<td>215.6</td>
<td>262.6</td>
<td>2,647.2</td>
</tr>
</tbody>
</table>
Impairment losses totaled €41.7 million in fiscal 2013 (2012: €44.1 million). Of this total, €30.3 million was recorded as one-time items under other operating expenses. Of this amount, €25.3 million was attributable to the buildings of Merck Serono site in Geneva, Switzerland as well as an additional €3.9 million to further buildings of the Merck Serono division. These impairment losses were within the context of the “Fit for 2018” transformation and growth program.

Furthermore, impairments on property, plant and equipment in the amount of €11.4 million were recognized in other operating expenses under impairment losses. Of this, €7.4 million was attributable to the Performance Materials division and related to a production plant in the Pigments business. In addition, impairments were recorded for property, plant and equipment in the Merck Serono division in the amount of €2.5 million and in the Merck Millipore division of €1.2 million.

In connection with the forthcoming sale of the Discovery and Development Solutions business field of the Merck Millipore division to Eurofins Scientific S.A., Luxembourg, property, plant and equipment was reclassified to “assets held for sale” as of December 31, 2013, in the amount of €3.8 million.

The total amount of property, plant and equipment used to secure financial liabilities was immaterial.

Total government grants and subsidies in connection with investments in property, plant and equipment during the fiscal year amounted to €2.9 million (2012: €12.3 million).

Directly allocable borrowing costs on qualified assets in the amount of €0.4 million were capitalized.

Property, plant and equipment also included assets that were leased. The total value of capitalized leased assets amounted to €9.3 million (2012: €10.1 million) and the corresponding obligations amounted to €7.7 million (2012: €9.8 million) (see Note [61]).

The carrying amounts of assets classified as finance leases were as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and buildings</td>
<td>7.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Vehicles</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Other property, plant and equipment</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9.3</strong></td>
<td><strong>10.1</strong></td>
</tr>
</tbody>
</table>

(43) Non-current financial assets

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>19.2</td>
<td>16.1</td>
</tr>
<tr>
<td>Investments in associates and other companies</td>
<td>34.3</td>
<td>27.3</td>
</tr>
<tr>
<td>Securities – Available-for-sale financial assets</td>
<td>3.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Securities – Held to maturity investments</td>
<td>–</td>
<td>30.0</td>
</tr>
<tr>
<td>Assets from derivatives (financial transactions)</td>
<td>4.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Loans and other non-current financial assets</td>
<td>15.8</td>
<td>18.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>77.8</strong></td>
<td><strong>97.1</strong></td>
</tr>
</tbody>
</table>
Unconsolidated investments and the investments in associates and other companies were classified as "available for sale". Thereof investments with a carrying amount of €52.3 million (2012: €41.8 million) were subsequently measured at cost since their market value could not be determined.

In 2013, impairment losses were recognized for unconsolidated investments of €1.4 million (2012: €5.0 million) and for available-for-sale financial assets of €4.1 million (2012: €0.1 million). These were recorded in the income statement under other operating expenses.

Moreover, fair value adjustments of €1.8 million (2012: €0.4 million) were made on available-for-sale financial assets and recognized in equity.

(44) Financial liabilities

<table>
<thead>
<tr>
<th>€ million</th>
<th>December 31, 2013</th>
<th>&lt; 1 year</th>
<th>1–5 years</th>
<th>&gt; 5 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and commercial paper</td>
<td>–</td>
<td>1,730.6</td>
<td>1,412.1</td>
<td>3,142.7</td>
<td></td>
</tr>
<tr>
<td>Liabilities to banks</td>
<td>42.2</td>
<td>–</td>
<td>–</td>
<td>42.2</td>
<td></td>
</tr>
<tr>
<td>Liabilities to related parties</td>
<td>361.9</td>
<td>–</td>
<td>–</td>
<td>361.9</td>
<td></td>
</tr>
<tr>
<td>Loans from third parties and other financial liabilities</td>
<td>24.0</td>
<td>60.0</td>
<td>–</td>
<td>84.0</td>
<td></td>
</tr>
<tr>
<td>Liabilities from derivatives (financial transactions)</td>
<td>10.0</td>
<td>49.4</td>
<td>–</td>
<td>59.4</td>
<td></td>
</tr>
<tr>
<td>Finance lease liabilities</td>
<td>2.3</td>
<td>5.0</td>
<td>0.4</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>440.4</strong></td>
<td><strong>1,845.0</strong></td>
<td><strong>1,412.5</strong></td>
<td><strong>3,697.9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>€ million</th>
<th>December 31, 2012</th>
<th>&lt; 1 year</th>
<th>1–5 years</th>
<th>&gt; 5 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and commercial paper</td>
<td>749.1</td>
<td>1,734.9</td>
<td>1,411.0</td>
<td>3,895.0</td>
<td></td>
</tr>
<tr>
<td>Liabilities to banks</td>
<td>48.1</td>
<td>19.3</td>
<td>–</td>
<td>68.0</td>
<td></td>
</tr>
<tr>
<td>Liabilities to related parties</td>
<td>233.1</td>
<td>–</td>
<td>–</td>
<td>233.1</td>
<td></td>
</tr>
<tr>
<td>Loans from third parties and other financial liabilities</td>
<td>21.5</td>
<td>66.6</td>
<td>–</td>
<td>88.1</td>
<td></td>
</tr>
<tr>
<td>Liabilities from derivatives (financial transactions)</td>
<td>37.1</td>
<td>122.4</td>
<td>–</td>
<td>159.5</td>
<td></td>
</tr>
<tr>
<td>Finance lease liabilities</td>
<td>2.5</td>
<td>6.2</td>
<td>1.1</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,091.4</strong></td>
<td><strong>1,950.0</strong></td>
<td><strong>1,412.1</strong></td>
<td><strong>4,453.5</strong></td>
<td></td>
</tr>
</tbody>
</table>
The liabilities of the Merck Group to banks were denominated in the following currencies:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Euros</td>
<td>14.4</td>
<td>65.6</td>
</tr>
<tr>
<td>Argentinian pesos</td>
<td>39.2</td>
<td>13.3</td>
</tr>
<tr>
<td>Chinese renminbi</td>
<td>20.5</td>
<td>8.3</td>
</tr>
<tr>
<td>Indian rupees</td>
<td>8.4</td>
<td>4.6</td>
</tr>
<tr>
<td>Turkish lira</td>
<td>6.9</td>
<td>0.4</td>
</tr>
<tr>
<td>U.S. dollars</td>
<td>5.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Other currencies</td>
<td>5.0</td>
<td>3.8</td>
</tr>
</tbody>
</table>

100.0 100.0

On the balance sheet date, the bank financing commitments vis-à-vis the Merck Group were as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Financing commitments from banks</th>
<th>Utilization as of Dec. 31, 2013</th>
<th>Interest</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syndicated loan 2013</td>
<td>2,000.0</td>
<td>–</td>
<td>variable</td>
<td>2018</td>
</tr>
<tr>
<td>Bilateral credit agreements with banks</td>
<td>22.2</td>
<td>22.2</td>
<td>fixed</td>
<td>2014</td>
</tr>
<tr>
<td>Various bank credit lines</td>
<td>245.0</td>
<td>20.0</td>
<td>fixed/variable</td>
<td>&lt; 1 year</td>
</tr>
<tr>
<td></td>
<td>2,267.2</td>
<td>42.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Recorded discounts are not taken into account in the disclosure.

A € 2 billion multi-currency revolving credit facility was renewed in fiscal 2013 ("Syndicated Loan 2013"). The credit line was underwritten by an international group of banks and has a tenor of five years, with two extension options of one year each that Merck can exercise at its own discretion. This credit line had not been utilized as of the reporting date.

Furthermore, Merck KGaA had access to a commercial paper program with a volume of € 2 billion to meet short-term capital requirements, which had not been utilized as of the reporting date.

In September 2013, Merck increased the volume of its debt issuance program to € 15 billion. The debt issuance program forms a flexible contractual basis for issuing bonds.
The following bonds issued by the Merck Group are currently outstanding:

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Nominal volume</th>
<th>Maturity</th>
<th>Nominal interest rate</th>
<th>Issue price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck Financial Services GmbH, Germany</td>
<td>€ 1,350 million</td>
<td>March 2010 – March 2015</td>
<td>3.375%</td>
<td>99.769</td>
</tr>
<tr>
<td>Merck Financial Services GmbH, Germany</td>
<td>€ 100 million</td>
<td>December 2009 – December 2015</td>
<td>3.615%¹</td>
<td>100.000</td>
</tr>
<tr>
<td>Millipore Corporation, USA</td>
<td>€ 250 million</td>
<td>June 2006 – June 2016</td>
<td>5.875%</td>
<td>99.611</td>
</tr>
<tr>
<td>Merck Financial Services GmbH, Germany</td>
<td>€ 60 million</td>
<td>November 2009 – November 2016</td>
<td>4.000%</td>
<td>100.000</td>
</tr>
<tr>
<td>Merck Financial Services GmbH, Germany</td>
<td>€ 70 million</td>
<td>December 2009 – December 2019</td>
<td>4.250%</td>
<td>97.788</td>
</tr>
<tr>
<td>Merck Financial Services GmbH, Germany</td>
<td>€ 1,350 million</td>
<td>March 2010 – March 2020</td>
<td>4.500%</td>
<td>99.582</td>
</tr>
</tbody>
</table>

¹Fixed by interest rate swaps

A bond issued by Merck Financial Services GmbH, Germany, with a nominal volume of € 750 million was repaid in September 2013.

The financial liabilities of the Merck Group are not secured by liens or similar forms of collateral. The loan agreements do not contain any financial covenants. The Merck Group's average borrowing cost in 2013 was 3.9%.

Finance lease liabilities represented the present value of future payments arising from finance leases. This item primarily related to liabilities from finance leases for buildings.

Information on liabilities to related parties can be found in Note [67].

(45) Trade accounts payable

Trade accounts payable consisted of the following:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities to third parties</td>
<td>1,363.9</td>
<td>1,288.2</td>
</tr>
<tr>
<td>Liabilities to investments</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,364.1</strong></td>
<td><strong>1,288.3</strong></td>
</tr>
</tbody>
</table>

Trade accounts payable included accrued amounts of € 778.0 million (2012: € 776.6 million) for outstanding invoices and reductions in sales revenues.
(46) Other liabilities

This item comprised:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other financial liabilities</td>
<td>578.9</td>
<td>2.2</td>
<td>581.1</td>
<td>520.1</td>
<td>2.8</td>
<td>522.9</td>
</tr>
<tr>
<td>Liabilities from derivatives (operational)</td>
<td>1.5</td>
<td>0.6</td>
<td>2.1</td>
<td>12.2</td>
<td>2.8</td>
<td>15.0</td>
</tr>
<tr>
<td>Financial items</td>
<td>580.4</td>
<td>2.8</td>
<td>583.2</td>
<td>532.3</td>
<td>5.6</td>
<td>537.9</td>
</tr>
<tr>
<td>Accruals for personnel expenses</td>
<td>439.9</td>
<td>-</td>
<td>439.9</td>
<td>466.2</td>
<td>-</td>
<td>466.2</td>
</tr>
<tr>
<td>Deferred income</td>
<td>31.6</td>
<td>2.3</td>
<td>33.9</td>
<td>29.5</td>
<td>2.6</td>
<td>32.1</td>
</tr>
<tr>
<td>Advance payments received from customers</td>
<td>16.0</td>
<td>-</td>
<td>16.0</td>
<td>10.1</td>
<td>0.1</td>
<td>10.2</td>
</tr>
<tr>
<td>Liabilities from non-income related taxes</td>
<td>66.6</td>
<td>0.5</td>
<td>67.1</td>
<td>58.1</td>
<td>1.1</td>
<td>59.2</td>
</tr>
<tr>
<td>Non-financial items</td>
<td>554.1</td>
<td>2.8</td>
<td>556.9</td>
<td>563.9</td>
<td>3.8</td>
<td>567.7</td>
</tr>
<tr>
<td>Total</td>
<td>1,134.5</td>
<td>5.6</td>
<td>1,140.1</td>
<td>1,096.2</td>
<td>9.4</td>
<td>1,105.6</td>
</tr>
</tbody>
</table>

As of December 31, 2013, other financial liabilities included liabilities to related companies amounting to € 373.1 million (2012: € 295.4 million). These are profit entitlements of E. Merck KG. Moreover, this item contained liabilities to investments amounting to € 1.6 million (2012: € 3.6 million), interest accruals of € 83.3 million (2012: € 93.0 million) as well as payroll liabilities of € 63.6 million (2012: € 64.8 million). The remaining amount of € 59.5 million (2012: € 66.1 million) recorded under other financial liabilities included among other things liabilities to insurers as well as contractually agreed payment obligations vis-à-vis other companies.

(47) Tax liabilities

Tax liabilities and provisions for tax liabilities resulted in total income tax liabilities of € 465.1 million as of December 31, 2013 (2012: € 401.4 million).
provisions
devolved as follows:

<table>
<thead>
<tr>
<th>£ million</th>
<th>Litigation</th>
<th>Restructuring</th>
<th>Personnel</th>
<th>Environmental protection</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2013</td>
<td>678.9</td>
<td>351.0</td>
<td>168.1</td>
<td>106.7</td>
<td>271.3</td>
<td>1,576.0</td>
</tr>
<tr>
<td>Additions</td>
<td>189.7</td>
<td>69.3</td>
<td>107.3</td>
<td>14.0</td>
<td>97.8</td>
<td>478.1</td>
</tr>
<tr>
<td>Utilizations</td>
<td>−29.4</td>
<td>−202.6</td>
<td>−60.1</td>
<td>−10.7</td>
<td>−90.3</td>
<td>−393.1</td>
</tr>
<tr>
<td>Release</td>
<td>−50.4</td>
<td>−12.5</td>
<td>−8.3</td>
<td>−1.6</td>
<td>−52.5</td>
<td>−125.3</td>
</tr>
<tr>
<td>Interest portion</td>
<td>4.7</td>
<td></td>
<td>2.6</td>
<td>3.1</td>
<td>0.1</td>
<td>10.5</td>
</tr>
<tr>
<td>Currency translation</td>
<td>−25.6</td>
<td>−2.6</td>
<td>−7.4</td>
<td>−0.3</td>
<td>−4.5</td>
<td>−40.4</td>
</tr>
<tr>
<td>Changes in scope of consolidation/Other</td>
<td>4.4</td>
<td>0.2</td>
<td>−0.6</td>
<td></td>
<td>−4.0</td>
<td></td>
</tr>
<tr>
<td>December 31, 2013</td>
<td>772.3</td>
<td>202.8</td>
<td>201.6</td>
<td>111.2</td>
<td>217.9</td>
<td>1,505.8</td>
</tr>
<tr>
<td>thereof current</td>
<td>115.4</td>
<td></td>
<td>128.1</td>
<td></td>
<td>6.0</td>
<td>178.6</td>
</tr>
<tr>
<td>thereof non-current</td>
<td>656.9</td>
<td>74.7</td>
<td>135.0</td>
<td></td>
<td>95.2</td>
<td>1,011.1</td>
</tr>
</tbody>
</table>

Litigation

As of December 31, 2013, the provisions for legal disputes amounted to £ 772.3 million (2012: £ 678.9 million). Many of the legal disputes and official proceedings currently pending relate to the Merck Serono division. The legal matters described below represent the most significant legal risks.

Product-related and patent disputes

Rebif®

In Israel, Merck is party to three legal disputes with Israel Bio-Engineering Project Limited Partnership ("IBEP"). IBEP is asserting claims for intellectual property rights and the payment of license fees in the past and in the future. The legal disputes are connected to the financing of the development of Rebif®, a drug for the treatment of multiple sclerosis, and other products in the early 1980s. Merck has taken appropriate accounting measures.

Merck is also involved in a patent dispute in the United States with Biogen IDEC Inc., USA ("Biogen"). Biogen claims that the sale of Rebif® in the United States infringes on a Biogen patent. The disputed patent was granted to Biogen in 2009 in the United States. Subsequently, Biogen sued Merck and other pharmaceutical companies for infringement of this patent. Merck defended itself against all allegations and brought a countersuit claiming that the patent was invalid and not infringed on by Merck’s actions. A “Markman hearing” was held in January 2012. The parties are currently engaged in court-ordered mediation proceedings. Merck has taken appropriate accounting measures.
Antitrust proceedings

Raptiva®

In December 2011, the Brazilian federal state of São Paulo sued Merck for damages because of alleged collusion between various pharmaceutical companies and an association of patients suffering from psoriasis and vitiligo. The collusion is alleged to have aimed at an increase in the sales of the involved companies’ drugs to the detriment of patients and state coffers. Moreover, in connection with the product Raptiva®, patients have filed suit to receive compensatory damages. Merck has taken appropriate accounting measures for these legal disputes in the financial statements.

Drug pricing by the divested Generics Group

Merck continues to bear the risk of having to defend against certain litigation brought against the Generics Group, which was sold to Mylan, Inc. (USA) in 2007. In this context, Merck remains responsible for risks from cases in the United States which relate to drug pricing. Merck has taken appropriate accounting measures.

Paroxetine: In connection with the divested generics business, Merck is subject to antitrust investigations by the British Office of Fair Trading (“OFT”) in the United Kingdom. In March 2013, the OFT informed Merck of the assumption that a settlement agreement entered into in 2002 between Generics (UK) Ltd. and several GlaxoSmithKline companies in connection with the antidepressant drug paroxetine violates British and European competition law. As the owner of Generics (UK) Ltd. at the time, Merck was allegedly involved in the settlement negotiations and is therefore liable. The investigations into Generics (UK) Ltd. started in 2011, without Merck being aware of this. It is considered probable that the OFT will impose a fine on Merck. Merck has recognized appropriate provisions in this connection.

Citalopram: In June 2013, the European Commission imposed a fine on Merck for various agreements between its former subsidiary Generics (UK) Ltd. and the Danish company Lundbeck, which related to the antidepressant citalopram, patented by Lundbeck. The provision recognized in 2012 was partially utilized or released. For the remaining risks, appropriate accounting measures were taken. Merck has filed an appeal with the European Court.

In addition to provisions for the mentioned litigation, adequate provisions existed as of the balance sheet date for various smaller pending legal disputes.

Restructuring

Provisions for restructuring mainly include provisions for severance payments for employees in connection with restructuring projects and provisions for onerous contracts. These were recognized once detailed restructuring plans had been prepared and communicated.

In 2013, additional provisions related to the “Fit for 2018” transformation and growth program were set up. The aim of this program, which was established in 2012, is to secure the competitiveness and the growth of the Merck Group over the long term. The provisions recognized in this connection mainly included future commitments to employees such as severance payments and €31.8 million (2012: €14.7 million) from partial retirement arrangements. In addition, commitments from the closure of sites were included here. The advance payments made in 2013 in the amount €202.6 million are primarily due to severance payments to employees.
Provisions for employee benefits/Share-based payment

Provisions for employee benefits include obligations from long-term variable compensation programs. In 2012, the previous variable compensation program (Merck Long-Term Incentive Plan – LTIP) was replaced by a new long-term variable compensation plan aligned not only with target achievement based on key performance indicators, but above all with the long-term performance of Merck shares. With the new Merck Long-Term-Incentive-Plan, certain executives and employees could be eligible to receive a certain number of virtual shares – Merck Share Units (MSUs) – at the end of a three-year performance cycle. The number of MSUs that could be received depends on the total value defined for the respective person and the average closing price of Merck shares in Xetra trading during the last 60 trading days prior to January 1 of the respective fiscal year (reference price). In order for members of top management to receive payment, they must personally own an investment in Merck shares dependent on their respective fixed annual compensation. When the three-year performance cycle ends, the number of MSUs to then be granted is determined based on the development of two key performance indicators (KPIs). These are on the one hand the performance of the Merck share price compared to the performance of the DAX® with a weighting of 70% and on the other hand the development of the EBITDA pre margin, during the performance cycle as a proportion of a defined target value with a weighting of 30%. Depending on the development of the KPIs, at the end of the respective performance cycle the eligible participants are granted between 0% and 150% of the MSUs they could be eligible to receive.

Based on the MSUs granted, the eligible participants receive a cash payment at a specified point in time in the year after the three-year performance cycle has ended. The value of a granted MSU, which is relevant for payment, corresponds to the average closing price of Merck shares in Xetra trading during the last 60 trading days prior to January 1 after the performance cycle. The payment amount is limited to three times the reference price.

<table>
<thead>
<tr>
<th>Performance cycle</th>
<th>2012 tranche</th>
<th>2013 tranche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Reference price of Merck shares in € (60-day average Merck share price prior to the start of the performance cycle)</td>
<td>69.57</td>
<td>100.11</td>
</tr>
<tr>
<td>DAX® value (60-day average of the DAX® prior to the start of the performance cycle)</td>
<td>5,883.35</td>
<td>7,350.64</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential number of MSUs</th>
<th>2012 tranche</th>
<th>2013 tranche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential number offered for the first time in 2012</td>
<td>538,235</td>
<td>–</td>
</tr>
<tr>
<td>Expired</td>
<td>30,685</td>
<td>–</td>
</tr>
<tr>
<td>Status on Dec. 31, 2012</td>
<td>507,550</td>
<td>–</td>
</tr>
<tr>
<td>Potential number offered for the first time in 2013</td>
<td>–</td>
<td>389,658</td>
</tr>
<tr>
<td>Expired</td>
<td>28,101</td>
<td>11,938</td>
</tr>
<tr>
<td>Status on Dec. 31, 2013</td>
<td>479,449</td>
<td>377,720</td>
</tr>
</tbody>
</table>
The fair value of the obligations is recalculated on each balance sheet date using a Monte Carlo simulation based on the previously described KPIs. The expected volatilities are based on the implicit volatility of Merck shares and the DAX® in accordance with the remaining term of the LTIP tranche. The dividend payments incorporated into the valuation model orient towards medium-term dividend expectations. The value of the provision for the vesting period already completed was €63.5 million as of December 31, 2013 (2012: €17.8 million). The net expense for fiscal 2013 was €45.7 million (2012: €17.8 million).

The Executive Board members have their own Long-Term Incentive Plan, the conditions of which largely correspond to the Long-Term Incentive Plan described here. A description of the plan for the Executive Board can be found in the compensation report, which is part of the Statement on Corporate Governance.

Moreover, obligations from the previously valid, non-share-price-based LTIP tranche 2011 exist totaling €37.3 million (2012: €50.7 million). The amount paid from these tranches depends on the achievement of the two performance indicators "Underlying Free Cash Flow on Revenues (FCR)" and "Return on Sales (ROS)" at the end of a three-year period. The plan has caps on potential future payments in the event of high degree of target achievement. By contrast, if the level of target of achievement is too low, no payments are made. The Executive Board was excluded from participating in the earlier LTIP tranche.

Provisions for employee benefits also include obligations for the partial retirement program and other severance pay that were not set up in connection with the “Fit for 2018” transformation and growth program as well as obligations in connection with long-term working hour accounts and anniversary bonuses.

With respect to provisions for defined-benefit pensions and other post-employment benefits, see Note [49].

Environmental protection
Provisions for environmental protection mainly existed in Germany and the United States and were set up particularly for obligations from soil remediation and groundwater protection in connection with the discontinued crop protection business.

Other provisions
Other provisions mainly include provisions for purchase commitments, subsequent contract costs stemming from discontinued research projects, other guarantees, and provisions for uncertain commitments from contributions, duties and fees.

A provision recognized for contingent consideration in connection with the acquisition of the microbiology business of Biotest AG, Dreieich, in the amount of €15.0 million was paid in 2013. Also, in connection with discontinued research projects, recognized provisions were utilized, and a provision recognized for claims from the discontinued businesses was released.
(49) Provisions for pensions and other post-employment benefits

Depending on the legal, economic and fiscal circumstances prevailing in each country, different retirement benefit systems are provided for the employees of the Merck Group. Generally these systems are based on the years of service and salaries of the employees. Pension obligations of the Merck Group include both defined benefit and defined contribution plans and comprise both obligations from current pensions and accrued benefits for pensions payable in the future. In the Merck Group, defined benefit plans are funded and unfunded. Provisions also contain other post-employment benefits, such as accrued future health care costs for retirees in the United States.

In order to limit the risks of changing capital market conditions and demographic developments, for many years now Merck has been offering only defined contribution plans to newly hired employees.

The value recognized in the balance sheet for pensions and other post-employment benefits was derived as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of all defined benefit obligations</td>
<td>2,736.8</td>
<td>2,830.1</td>
</tr>
<tr>
<td>Fair value of the plan assets</td>
<td>–1,840.2</td>
<td>–1,633.6</td>
</tr>
<tr>
<td>Funded status</td>
<td>896.6</td>
<td>1,196.5</td>
</tr>
<tr>
<td>Effects of asset ceilings</td>
<td>10.5</td>
<td>–</td>
</tr>
<tr>
<td>Net defined benefit liability recognized in the balance sheet</td>
<td>907.1</td>
<td>1,196.5</td>
</tr>
<tr>
<td>Assets from defined benefit plans</td>
<td>3.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Provisions for pensions and other post-employment benefits</td>
<td>910.9</td>
<td>1,211.7</td>
</tr>
</tbody>
</table>

The calculation of the defined benefit obligations as well as the relevant plan assets was based on the following actuarial parameters:

<table>
<thead>
<tr>
<th>%</th>
<th>Germany</th>
<th>Switzerland</th>
<th>United Kingdom</th>
<th>Other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount rate</td>
<td>3.75</td>
<td>3.50</td>
<td>2.30</td>
<td>1.75</td>
</tr>
<tr>
<td>Future salary increases</td>
<td>2.51</td>
<td>2.51</td>
<td>1.73</td>
<td>1.97</td>
</tr>
<tr>
<td>Future pension increases</td>
<td>1.75</td>
<td>1.75</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Future cost increases for health care benefits</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

These are average values weighted by the present value of the respective benefit obligation.
The defined benefit obligations of the Merck Group were based on the following types of benefits provided by the respective plan:

<table>
<thead>
<tr>
<th>Present value of defined benefit obligations in € million</th>
<th>Germany</th>
<th>Other countries</th>
<th>Merck Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit based on final salary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annuity</td>
<td>1,740.7</td>
<td>383.0</td>
<td>2,123.7</td>
</tr>
<tr>
<td>Lump sum</td>
<td>-</td>
<td>73.6</td>
<td>73.6</td>
</tr>
<tr>
<td>Installments</td>
<td>1.1</td>
<td>-</td>
<td>1.1</td>
</tr>
<tr>
<td>Benefit not based on final salary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annuity</td>
<td>83.2</td>
<td>396.9</td>
<td>480.1</td>
</tr>
<tr>
<td>Lump sum</td>
<td>6.4</td>
<td>39.3</td>
<td>45.7</td>
</tr>
<tr>
<td>Medical plan</td>
<td>-</td>
<td>12.6</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td><strong>1,831.4</strong></td>
<td><strong>905.4</strong></td>
<td><strong>2,736.8</strong></td>
</tr>
</tbody>
</table>

The main benefit rules are as follows:

Merck KGaA and AB Allgemeine Pensions GmbH & Co. KG accounted for € 1,670.6 million (2012: € 1,681.8 million) of the defined benefit obligations and € 1,052.6 million (2012: € 799.5 million) of the plan assets. The benefits comprise old-age, disability and surviving dependent pensions. On the one hand, these obligations are based on benefit rules comprising benefit commitments dependent upon years of service and final salary from which newly hired employees have been excluded. On the other hand, the benefit rules applicable to employees newly hired since January 1, 2005 comprise a direct commitment in the form of a defined contribution obligation. The benefit entitlement results from the cumulative total of annually determined pension components that are calculated on the basis of a defined benefit expense and an age-dependent annuity table. Statutory minimum funding obligations do not exist.

The Merck Serono pension fund in Switzerland accounted for € 314.8 million (2012: € 393.5 million) of the defined benefit obligations and € 324.9 million (2012: € 378.7 million) of the plan assets. Of this amount, € 10.5 million (2012: € 0.0 million) cannot be recognized due to effects of the asset ceiling according to IAS 19.64. These obligations are based on the granting of old-age, disability and surviving dependents benefits, which include the legally required benefits. Both employer and employee contributions are paid into the pension fund. Statutory minimum funding obligations exist.

The Merck Pension Scheme in the United Kingdom accounted for € 320.1 million (2012: € 303.2 million) of the defined benefit obligations and € 293.1 million (2012: € 284.0 million) of the plan assets. These obligations result from a benefit plan which is based on years of service and final salary and was closed to newly hired employees in 2006. The agreed benefits comprise old-age, disability and surviving dependent benefits. The employer and the employees make contributions to the plan. Statutory minimum funding obligations also exist in the United Kingdom.
In the reporting period, the following items were recognized in income:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current service cost</td>
<td>82.7</td>
<td>75.7</td>
</tr>
<tr>
<td>Past service cost</td>
<td>2.6</td>
<td>19.3</td>
</tr>
<tr>
<td>Gains (–) or losses (+) on settlement</td>
<td>–2.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Other effects recognized in income</td>
<td>1.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Interest expense</td>
<td>92.9</td>
<td>101.8</td>
</tr>
<tr>
<td>Interest income</td>
<td>–52.1</td>
<td>–53.8</td>
</tr>
<tr>
<td>Total amount recognized in income</td>
<td>124.3</td>
<td>143.7</td>
</tr>
</tbody>
</table>

With the exception of the net balance of interest expense on the defined benefit obligations and interest income from the plan assets, which is recorded under the financial result, the relevant expenses for defined benefit and defined contribution pension systems are allocated to the individual functional areas.

During the reporting period, the present value of the defined pension obligations changed as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Funded benefit obligations</th>
<th>Benefit obligations funded by provisions</th>
<th>2013</th>
<th>Funded benefit obligations</th>
<th>Benefit obligations funded by provisions</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of the defined benefit obligations January 1</td>
<td>2,615.7</td>
<td>214.4</td>
<td>2,830.1</td>
<td>2,322.8</td>
<td>167.1</td>
<td>2,489.9</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>–27.2</td>
<td>–3.5</td>
<td>–30.7</td>
<td>4.8</td>
<td>–0.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Current service cost</td>
<td>72.5</td>
<td>10.2</td>
<td>82.7</td>
<td>64.9</td>
<td>10.8</td>
<td>75.7</td>
</tr>
<tr>
<td>Past service cost</td>
<td>2.6</td>
<td>–</td>
<td>2.6</td>
<td>17.7</td>
<td>1.6</td>
<td>19.3</td>
</tr>
<tr>
<td>Gains (–) or losses (+) on settlement</td>
<td>–2.2</td>
<td>–0.6</td>
<td>–2.8</td>
<td>–</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Interest expense</td>
<td>85.4</td>
<td>7.5</td>
<td>92.9</td>
<td>93.8</td>
<td>8.0</td>
<td>101.8</td>
</tr>
<tr>
<td>Actuarial gains (–)/losses (+)</td>
<td>–49.5</td>
<td>–10.8</td>
<td>–60.3</td>
<td>334.0</td>
<td>33.1</td>
<td>367.1</td>
</tr>
<tr>
<td>Contributions by plan participants</td>
<td>7.0</td>
<td>–</td>
<td>7.0</td>
<td>13.6</td>
<td>–</td>
<td>13.6</td>
</tr>
<tr>
<td>Pension payments</td>
<td>–178.5</td>
<td>–7.3</td>
<td>–185.8</td>
<td>–240.4</td>
<td>–7.6</td>
<td>–248.0</td>
</tr>
<tr>
<td>Other effects recognized in income</td>
<td>–0.3</td>
<td>–0.5</td>
<td>–0.8</td>
<td>0.1</td>
<td>–0.2</td>
<td>–0.1</td>
</tr>
<tr>
<td>Other changes</td>
<td>7.5</td>
<td>–5.6</td>
<td>1.9</td>
<td>4.4</td>
<td>1.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Present value of all defined benefit obligations on December 31</td>
<td>2,533.0</td>
<td>203.8</td>
<td>2,736.8</td>
<td>2,615.7</td>
<td>214.4</td>
<td>2,830.1</td>
</tr>
</tbody>
</table>

The following overview shows how the present value of all defined benefit obligations would have been influenced by changes to definitive actuarial assumptions. To determine the sensitivities, in principle each of the observed parameters was varied while keeping the measurement assumptions otherwise constant. Insofar as its development of social security is comparable to salary trends, the amounts for social security vary together with the salary trend.
The fair value of the plan assets changed in the reporting period as follows:

- In December 2013 a further €200.0 million was added to the plan assets of Merck KGaA in the form of a Contractual Trust Arrangement (CTA) set up in 2011 with Merck Pensionstreuhand e. V., Darmstadt. The addition was made in cash. On the same day Merck Capital Asset Management, Malta, which manages the assets of the CTA, acquired securities from Merck Financial Services GmbH at the market value of €203.0 million.

- The actual return on plan assets amounted to €101.1 million in 2013 (2012: income of €116.6 million).

The fair value of the plan assets changed in the reporting period as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Dec. 31, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of all defined benefit obligations if</td>
<td></td>
</tr>
<tr>
<td>the discount rate is 50 basis points higher</td>
<td>2,517.0</td>
</tr>
<tr>
<td>the discount rate is 50 basis points lower</td>
<td>2,987.3</td>
</tr>
<tr>
<td>the expected rate of future salary increases is 50 basis points higher</td>
<td>2,825.7</td>
</tr>
<tr>
<td>the expected rate of future salary increases is 50 basis points lower</td>
<td>2,665.1</td>
</tr>
<tr>
<td>the expected rate of future pension increases is 50 basis points higher</td>
<td>2,873.3</td>
</tr>
<tr>
<td>the expected rate of future pension increases is 50 basis points lower</td>
<td>2,628.5</td>
</tr>
<tr>
<td>the medical cost trend rate is 50 basis points higher</td>
<td>2,737.4</td>
</tr>
<tr>
<td>the medical cost trend rate is 50 basis points lower</td>
<td>2,736.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of the plan assets on January 1</td>
<td>1,633.6</td>
<td>1,370.3</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-22.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Interest income from plan assets</td>
<td>52.1</td>
<td>53.8</td>
</tr>
<tr>
<td>Actuarial gains (+)/losses (−) arising from experience adjustments</td>
<td>49.0</td>
<td>62.8</td>
</tr>
<tr>
<td>Funding CTA Merck KGaA</td>
<td>200.0</td>
<td>250.0</td>
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<tr>
<td>Employer contributions</td>
<td>39.9</td>
<td>59.9</td>
</tr>
<tr>
<td>Employee contributions</td>
<td>7.0</td>
<td>13.6</td>
</tr>
<tr>
<td>Pension payments from plan assets</td>
<td>-119.1</td>
<td>-186.3</td>
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<tr>
<td>Plan administration costs paid from the plan assets recognized in income</td>
<td>-1.7</td>
<td>-0.6</td>
</tr>
<tr>
<td>Other effects recognized in income</td>
<td>-0.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>Other changes</td>
<td>1.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Fair value of the plan assets on December 31</td>
<td>1,840.2</td>
<td>1,633.6</td>
</tr>
</tbody>
</table>
The development of cumulative actuarial gains (+) and losses (–) was as follows:

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<tr>
<th></th>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative actuarial gains (+)/losses (–) recognized in equity on January 1</td>
<td>–795.6</td>
<td>–489.7</td>
<td></td>
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<tr>
<td>Currency translation differences</td>
<td>2.0</td>
<td>–1.2</td>
<td></td>
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<tr>
<td>Remeasurements of defined benefit obligations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial gains (+)/losses (–) arising from changes in demographic assumptions</td>
<td>–1.1</td>
<td>12.4</td>
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<tr>
<td>Actuarial gains (+)/losses (–) arising from changes in financial assumptions</td>
<td>88.6</td>
<td>–333.2</td>
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<tr>
<td>Actuarial gains (+)/losses (–) arising from experience adjustments</td>
<td>–27.2</td>
<td>–46.3</td>
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</tr>
<tr>
<td>Remeasurements of plan assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial gains (+)/losses (–) arising from experience adjustments</td>
<td>49.0</td>
<td>62.8</td>
<td></td>
</tr>
<tr>
<td>Effects of the asset ceilings</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Actuarial gains (+)/losses (–)</td>
<td>–10.5</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Reclassification within retained earnings</td>
<td>–</td>
<td>–0.4</td>
<td></td>
</tr>
<tr>
<td>Cumulative actuarial gains (+)/losses (–) recognized in equity on December 31</td>
<td>–694.8</td>
<td>–795.6</td>
<td></td>
</tr>
</tbody>
</table>

Plan assets for funded defined benefit obligations primarily comprised fixed-income securities, liquid assets, and stocks. They did not include financial instruments issued by Merck Group companies or real estate used by Group companies.

The plan assets serve exclusively to meet the defined benefit obligations. Covering the benefit obligations with financial assets represents a means of providing for future cash outflows, which occur in some countries on the basis of legal requirements and in other countries (e.g. Germany) on a voluntary basis.

The ratio of the fair value of the plan assets to the present value of the defined benefit obligations is referred to as the degree of pension plan funding. If the benefit obligations exceed the plan assets, this represents underfunding of the pension fund.

It should be noted, however, that both the benefit obligations as well as the plan assets fluctuate over time. This could lead to an increase in underfunding. Depending on the statutory regulations, it could become necessary in some countries for the Merck Group to reduce underfunding through additions of liquid assets. The reasons for such fluctuations could include changes in market interest rates and thus the discount rate as well as adjustments to other actuarial assumptions (e.g. life expectancy, inflation rates, etc.)

In order to minimize such fluctuations, in managing its plan assets, the Merck Group also pays attention to potential fluctuations in liabilities. In the ideal case, assets and liabilities develop in opposite directions when exposed to exogenous factors, creating a natural defense against these factors. In order to achieve this effect, the corresponding use of financial instruments is considered in respect of individual pension plans.
The fair value of the plan assets can be allocated to the following categories:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Quoted market price in an active market</td>
<td>No quoted market price in an active market</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>522.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Equity instruments</td>
<td>433.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Debt instruments</td>
<td>589.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Direct investments in real estate</td>
<td>–</td>
<td>79.1</td>
</tr>
<tr>
<td>Investment funds</td>
<td>136.7</td>
<td>–</td>
</tr>
<tr>
<td>Insurance contracts</td>
<td>–</td>
<td>71.4</td>
</tr>
<tr>
<td>Other</td>
<td>5.7</td>
<td>–</td>
</tr>
<tr>
<td>Fair value of the plan assets</td>
<td>1,688.2</td>
<td>152.0</td>
</tr>
</tbody>
</table>

Employer contributions to plan assets and direct payments to beneficiaries will probably amount to around € 89.3 million in 2014. The weighted duration amounted to 18 years.

The cost of ongoing contributions for defined contribution plans that are financed exclusively by external funds and for which the companies of the Merck Group are only obliged to pay the contributions amounted to € 19.3 million (2012: € 19.9 million). In addition, employer contributions amounting to € 55.5 million (2012: € 54.9 million) were transferred to the German statutory pension insurance system and € 29.7 million (2012: € 33.9 million) to statutory pension insurance systems abroad.

(50) Equity

Equity capital

The total capital of the company consists of the share capital composed of shares and the equity interest held by the general partner E. Merck KG. As of the balance sheet date, the company’s share capital amounting to € 168.0 million was divided into 64,621,125 no par value bearer shares plus one registered share and is disclosed as subscribed capital. The amount resulting from the issue of shares by Merck KGaA exceeding the nominal amount was recognized in the capital reserves. The equity interest held by the general partner amounted to € 397.2 million.
E. Merck KG’s share of net profit

E. Merck KG and Merck KGaA engage in reciprocal net profit transfers. This makes it possible for E. Merck KG, the general partner of Merck KGaA, and the shareholders to participate in the net profit/loss of Merck KGaA in accordance with the ratio of the general partner’s equity interest and the share capital (70.274% or 29.726% of the total capital).

The allocation of net profit/loss is based on the net income of E. Merck KG determined in accordance with the provisions of the German Commercial Code as well as the income/loss from ordinary activities and the extraordinary result of Merck KGaA. These results are adjusted for trade tax and create the basis for the allocation of net profit/loss.

The reciprocal net profit/loss transfer between E. Merck KG and Merck KGaA as stipulated by the Articles of Association was as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result of E. Merck KG</td>
<td>–9.2</td>
<td>–7.5</td>
</tr>
<tr>
<td>Result of ordinary activities of Merck KGaA</td>
<td>–</td>
<td>534.9</td>
</tr>
<tr>
<td>Extraordinary result</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Adjustment for trade tax in accordance with Art. 27 (1) Articles of Association of Merck KGaA</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade tax in accordance with Art. 30 (1) Articles of Association of Merck KGaA</td>
<td>–</td>
<td>–34.6</td>
</tr>
<tr>
<td>Basis for the appropriation of profits (100%)</td>
<td>–9.2</td>
<td>500.3</td>
</tr>
<tr>
<td>Profit transfer to E. Merck KG</td>
<td>351.6</td>
<td>–351.6</td>
</tr>
<tr>
<td>Profit transfer from E. Merck KG</td>
<td>2.7</td>
<td>–2.7</td>
</tr>
<tr>
<td>Net income/loss</td>
<td>345.1</td>
<td>134.0</td>
</tr>
</tbody>
</table>

The result of E. Merck KG on which the appropriation of profits is based amounted to € –9.2 million (2012: € 7.5 million). This resulted in a profit transfer to Merck KGaA of € –2.7 million (2012: € 2.2 million). Merck KGaA’s result from ordinary activities adjusted for trade tax and extraordinary result, on which the appropriation of its profit is based, amounted to € 500.3 million (2012: € –529.3 million). Merck KGaA transferred € 351.6 million of its profit to E. Merck KG (2012: loss assumption of € 372.0 million). In addition, the expense from corporation tax charges amounting to € 12.0 million resulted (2012: income of € 4.0 million). Corporation tax is only calculated on the income received by shareholders. Its equivalent is the income tax applicable to E. Merck KG. However, this must be paid by the partners of E. Merck KG directly and is not disclosed in the annual financial statements.

Appropriation of profits

The profit distribution to be resolved upon by shareholders also defines the amount of that portion of net profit/loss freely available to E. Merck KG. If the shareholders resolve to carry forward or to allocate to
retained earnings a portion of Merck KGaA’s net retained profit to which they are entitled, then E. Merck KG is obligated to allocate to the profit brought forward/retained earnings of Merck KGaA a comparable sum determined in accordance with the ratio of share capital to general partner’s capital. This ensures that the retained earnings and the profit carried forward of Merck KGaA correspond to the ownership ratios of the shareholders on the one hand and E. Merck KG on the other hand. Consequently, for distributions to E. Merck KG, only the amount is available that results after netting the profit transfer of Merck KGaA with the amount either allocated or withdrawn by E. Merck KG from retained earnings/profit carried forward. This amount corresponds to the amount that is paid as a dividend to the shareholders, and reflects their pro rata shareholding in the company.

For 2012, a dividend of €1.70 per share was distributed. The dividend proposal for fiscal 2013 will be €1.90 per share, corresponding to a total dividend payment of €122.8 million (2012: €109.9 million) to shareholders. The amount withdrawn by E. Merck KG would amount to €318.8 million (2012: €250.2 million).

Changes in reserves
For 2013 the profit transfer to E. Merck KG including changes in reserves amounted to €–383.0 million. This consists of the profit transfer to E. Merck KG (€–351.6 million), the result transfer from E. Merck KG to Merck KGaA (€–2.7 million), the profit carried forward of E. Merck KG (€26.3 million) as well as the profit transfer from Merck & Cie to E. Merck KG (€–55.0 million). Merck & Cie is a partnership under Swiss law that is controlled by Merck KGaA, but distributes its operating result directly to E. Merck KG. This distribution is a payment to shareholders, which is why it is likewise presented under changes in equity.

Non-controlling interests
The disclosure of non-controlling interests was based on the stated equity of the subsidiaries concerned after any adjustment required to ensure compliance with the accounting policies of the Merck Group, as well as pro rata consolidation entries.

The net equity attributable to non-controlling interests mainly related to the minority interests in Merck Ltd. India, Merck Ltd., Thailand, Merck (Pvt.) Ltd., Pakistan, and P.T. Merck Tbk, Indonesia.
## Segment reporting

### Information by division

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<th></th>
<th>€ million</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2012</td>
<td>2013</td>
<td>2012</td>
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<tr>
<td><strong>Merck Serono</strong></td>
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<tr>
<td><strong>Sales</strong></td>
<td>5,953.6</td>
<td>5,995.8</td>
<td></td>
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<tr>
<td>Royalty, license and commission income</td>
<td>372.2</td>
<td>408.4</td>
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<td></td>
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<tr>
<td><strong>Total revenues</strong></td>
<td>6,325.8</td>
<td>6,405.2</td>
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<tr>
<td><strong>Gross margin</strong></td>
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<td>5,219.7</td>
<td>5,212.1</td>
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</tr>
<tr>
<td><strong>Marketing and selling expenses</strong></td>
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<td></td>
<td>-1,288.7</td>
<td>-1,370.8</td>
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<tr>
<td>Royalty, license and commission expenses</td>
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<td>-547.7</td>
<td>-561.6</td>
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<tr>
<td><strong>Administration expenses</strong></td>
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<td>-216.8</td>
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<tr>
<td><strong>Other operating expenses and income</strong></td>
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<td>-499.4</td>
<td>-669.0</td>
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<td></td>
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<tr>
<td><strong>Research and development</strong></td>
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<td>-1,187.3</td>
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<td><strong>Operating result (EBIT)</strong></td>
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<td>Depreciation and amortization</td>
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<td>797.4</td>
<td>881.1</td>
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<td>Impairment losses</td>
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<td>196.4</td>
<td>51.2</td>
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<tr>
<td>Reversals of impairment losses</td>
<td></td>
<td></td>
<td>-0.3</td>
<td>-</td>
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<tr>
<td><strong>EBITDA</strong></td>
<td></td>
<td></td>
<td>1,886.5</td>
<td>1,480.0</td>
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<tr>
<td><strong>One-time items</strong></td>
<td>68.5</td>
<td></td>
<td>344.7</td>
<td>1.4</td>
<td></td>
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<tr>
<td><strong>EBITDA pre one-time items (segment result)</strong></td>
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<td></td>
<td>1,955.0</td>
<td>1,824.7</td>
<td></td>
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<tr>
<td><strong>EBITDA margin pre one-time items (in % of sales)</strong></td>
<td>32.8</td>
<td></td>
<td>30.4</td>
<td>15.2</td>
<td></td>
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<tr>
<td><strong>Net operating assets</strong></td>
<td>6,968.0</td>
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<td>8,020.6</td>
<td>258.2</td>
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<tr>
<td><strong>Segment liabilities</strong></td>
<td>-1,358.0</td>
<td></td>
<td>-1,349.8</td>
<td>-74.5</td>
<td></td>
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</tr>
<tr>
<td><strong>Investments in property, plant and equipment</strong></td>
<td>151.3</td>
<td></td>
<td>146.9</td>
<td>3.7</td>
<td></td>
<td></td>
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<tr>
<td><strong>Investments in intangible assets</strong></td>
<td>80.6</td>
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<td>88.7</td>
<td>0.4</td>
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<tr>
<td><strong>Net cash flows from operating activities</strong></td>
<td>1,818.9</td>
<td></td>
<td>2,255.6</td>
<td>67.1</td>
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<td></td>
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<tr>
<td><strong>Business free cash flow</strong></td>
<td>1,875.7</td>
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<td>1,880.2</td>
<td>83.9</td>
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</tbody>
</table>

1. Previous year’s figures have been adjusted, see Note [52]
2. According to the cash flow statement

### Information by country and region

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<thead>
<tr>
<th></th>
<th>€ million</th>
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<tr>
<td><strong>Europe</strong></td>
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</tr>
<tr>
<td><strong>Sales by customer location</strong></td>
<td>3,984.6</td>
<td>3,942.7</td>
<td>825.4</td>
<td>801.5</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sales by company location</strong></td>
<td>4,457.5</td>
<td>4,379.9</td>
<td>1,570.8</td>
<td>1,452.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td>4,686.6</td>
<td>4,677.0</td>
<td>1,596.8</td>
<td>1,472.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intangible assets</strong></td>
<td>7,572.4</td>
<td>8,293.4</td>
<td>398.0</td>
<td>344.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Property, plant and equipment</strong></td>
<td>2,075.2</td>
<td>2,344.3</td>
<td>997.5</td>
<td>996.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research and development</strong></td>
<td>-1,357.4</td>
<td>-1,344.1</td>
<td>-849.0</td>
<td>-791.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of employees</strong></td>
<td>20,013</td>
<td>20,777</td>
<td>10,868</td>
<td>10,788</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Previous year’s figures have been adjusted, see Note [52]
2. According to the cash flow statement
Merck 2013
Consolidated Financial Statements

Segment reporting

<table>
<thead>
<tr>
<th>Performance Materials</th>
<th>Merck Millipore</th>
<th>Corporate and Other</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,642.1</td>
<td>1,674.2</td>
<td>2,627.5</td>
<td>2,598.2</td>
</tr>
<tr>
<td>23.0</td>
<td>1.4</td>
<td>17.8</td>
<td>18.7</td>
</tr>
<tr>
<td>1,644.4</td>
<td>1,675.6</td>
<td>2,645.3</td>
<td>2,616.9</td>
</tr>
<tr>
<td>1,028.5</td>
<td>959.1</td>
<td>1,541.0</td>
<td>1,531.1</td>
</tr>
<tr>
<td>–140.5</td>
<td>–142.8</td>
<td>–683.3</td>
<td>–675.7</td>
</tr>
<tr>
<td>–1.3</td>
<td>–1.5</td>
<td>–16.1</td>
<td>–15.7</td>
</tr>
<tr>
<td>–27.8</td>
<td>–31.2</td>
<td>–99.2</td>
<td>–101.3</td>
</tr>
<tr>
<td>–47.9</td>
<td>–32.0</td>
<td>–120.7</td>
<td>–116.5</td>
</tr>
<tr>
<td>–143.0</td>
<td>–137.4</td>
<td>–159.8</td>
<td>–166.1</td>
</tr>
<tr>
<td>653.3</td>
<td>609.7</td>
<td>262.0</td>
<td>251.7</td>
</tr>
<tr>
<td>107.7</td>
<td>114.1</td>
<td>309.2</td>
<td>305.0</td>
</tr>
<tr>
<td>9.3</td>
<td>12.1</td>
<td>18.8</td>
<td>4.2</td>
</tr>
<tr>
<td>–4.5</td>
<td>–1.3</td>
<td>–0.2</td>
<td>–</td>
</tr>
<tr>
<td>765.8</td>
<td>734.6</td>
<td>589.8</td>
<td>560.9</td>
</tr>
<tr>
<td>13.9</td>
<td>7.3</td>
<td>53.0</td>
<td>53.5</td>
</tr>
<tr>
<td>779.7</td>
<td>741.9</td>
<td>642.8</td>
<td>614.4</td>
</tr>
<tr>
<td>47.5</td>
<td>44.3</td>
<td>24.5</td>
<td>23.6</td>
</tr>
<tr>
<td>1,044.7</td>
<td>1,187.7</td>
<td>5,987.1</td>
<td>6,328.9</td>
</tr>
<tr>
<td>–155.9</td>
<td>–147.1</td>
<td>–391.9</td>
<td>–383.1</td>
</tr>
<tr>
<td>66.5</td>
<td>55.7</td>
<td>112.6</td>
<td>113.2</td>
</tr>
<tr>
<td>6.7</td>
<td>28.6</td>
<td>10.3</td>
<td>10.0</td>
</tr>
<tr>
<td>828.4</td>
<td>886.6</td>
<td>557.5</td>
<td>658.2</td>
</tr>
<tr>
<td>787.8</td>
<td>798.1</td>
<td>493.8</td>
<td>511.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>North America</th>
<th>thereof USA</th>
<th>Emerging Markets</th>
<th>Rest of World</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2012</td>
<td>2013</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>2,078.0</td>
<td>2,128.3</td>
<td>1,916.8</td>
<td>1,965.0</td>
<td>3,795.6</td>
</tr>
<tr>
<td>2,072.7</td>
<td>2,121.4</td>
<td>1,933.1</td>
<td>1,979.0</td>
<td>3,467.1</td>
</tr>
<tr>
<td>2,077.1</td>
<td>2,122.1</td>
<td>1,937.5</td>
<td>1,979.7</td>
<td>3,622.3</td>
</tr>
<tr>
<td>2,214.8</td>
<td>2,462.1</td>
<td>2,214.5</td>
<td>2,461.6</td>
<td>46.5</td>
</tr>
<tr>
<td>341.6</td>
<td>359.6</td>
<td>340.4</td>
<td>385.3</td>
<td>169.3</td>
</tr>
<tr>
<td>–92.5</td>
<td>–114.5</td>
<td>–94.7</td>
<td>–113.3</td>
<td>–36.6</td>
</tr>
<tr>
<td>4,911</td>
<td>4,848</td>
<td>4,754</td>
<td>4,688</td>
<td>11,688</td>
</tr>
</tbody>
</table>
(52) Information on segment reporting

Segmentation was performed in accordance with the organizational and reporting structure of the Merck Group. Within the Merck Serono division, Merck focuses on specialist therapeutic areas and markets innovative prescription drugs of chemical and biotechnological origin. The Consumer Health division comprises Merck’s business with high-quality over-the-counter products for preventive health care and self-treatment of minor ailments. The Performance Materials division consists of the Liquid Crystals and Pigments & Cosmetics business units. The Merck Millipore division offers solutions to two key customer groups: research and analytical laboratories in the pharmaceutical/biotechnology industry or in academic institutions, and customers manufacturing large- and small-molecule drugs. The fields of activity of the individual divisions are described in detail in the sections about the divisions in the Group management report.

Corporate and Other includes assets and liabilities as well as income and expenses that cannot be directly allocated to the reportable segments presented; it serves the reconciliation to the Group numbers. The numbers mainly relate to Group functions. The cash flows attributable to the financial result and income taxes are also presented under Corporate and Other.

Apart from sales, the success of a segment is mainly determined by EBITDA pre one-time items (segment result) and business free cash flow (see Note [55]).

Transfer prices for intragroup sales are determined on an arm’s-length basis. There were no significant intercompany relations between the business segments.

The Emerging Markets region comprises Latin America and Asia with the exception of Japan. The Rest of World region comprises Japan, Africa and Australia/Oceania.

Neither in 2013 nor in 2012 did any single customer account for more than 10% of Group sales.

The following table presents the reconciliation of EBITDA pre one-time items of all operating businesses to the profit before income tax of the Merck Group:

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total EBITDA pre one-time items of the operating businesses</td>
<td>3,450.0</td>
<td>3,247.8</td>
</tr>
<tr>
<td>Corporate and Other</td>
<td>-196.7</td>
<td>-282.9</td>
</tr>
<tr>
<td>EBITDA pre one-time items of the Merck Group</td>
<td>3,253.3</td>
<td>2,964.9</td>
</tr>
<tr>
<td>Depreciation and amortization/impairment losses/reversals of impairments</td>
<td>-1,458.4</td>
<td>-1,396.6</td>
</tr>
<tr>
<td>One-time items</td>
<td>-184.1</td>
<td>-604.7</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>1,610.8</td>
<td>963.6</td>
</tr>
<tr>
<td>Financial result</td>
<td>-222.2</td>
<td>-254.6</td>
</tr>
<tr>
<td>Profit before income tax</td>
<td>1,388.6</td>
<td>709.0</td>
</tr>
</tbody>
</table>

\(^{1}\)Previous year’s figures have been adjusted, see explanations below
EBITDA pre one-time items of all operating businesses totaled €3,450 million (2012: €3,247.8 million). Taking into account the expenses and income of €–196.7 million (2012: €–282.9 million) not allocable to the operating businesses which were reported under Corporate and Other, EBITDA pre one-time items of the Merck Group amounted to €3,253.3 million (2012: €2,964.9 million). This figure did not include depreciation, amortization, impairments and reversals of impairments or one-time items (excluding impairments and reversals of impairments). Consequently, the total operating result (EBIT) of the Merck Group amounted to €1,610.8 million (2012: €963.6 million).

The reconciliation of operating assets presented in the Segment reporting to the total assets of the Merck Group was as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>20,818.6</td>
<td>21,643.3</td>
</tr>
<tr>
<td>Monetary assets (cash and cash equivalents, current financial assets, loans, securities)</td>
<td>–3,539.3</td>
<td>–2,633.7</td>
</tr>
<tr>
<td>Non-operating receivables, income tax receivables, deferred taxes and net defined benefit assets</td>
<td>–913.1</td>
<td>–1,173.3</td>
</tr>
<tr>
<td>Assets held for sale</td>
<td>–27.1</td>
<td>–</td>
</tr>
<tr>
<td>Operating assets (gross)</td>
<td>16,339.1</td>
<td>17,836.3</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>–1,364.1</td>
<td>–1,288.3</td>
</tr>
<tr>
<td>Other operating liabilities</td>
<td>–681.0</td>
<td>–701.9</td>
</tr>
<tr>
<td>Segment liabilities</td>
<td>–2,045.1</td>
<td>–1,990.2</td>
</tr>
<tr>
<td>Operating assets (net)</td>
<td>14,294.0</td>
<td>15,846.1</td>
</tr>
</tbody>
</table>

The operating assets (gross) of the Merck Group are determined by adjusting all assets totaling €20,818.6 million (2012: €21,643.3 million) for monetary assets totaling €3,539.3 million (2012: €2,633.7 million) as well as all other non-operating assets totaling €913.1 million (2012: €1,173.3 million) and assets held for sale of €27.1 million (2012: €0.0 million). After deducting the reported segment liabilities which represented the operating liabilities totaling €2,045.1 million (2012: €1,990.2 million), the operating assets (net) of the Merck Group amounted to €14,294.0 million (2012: €15,846.1 million).

The investment result in the amount of €1.5 million (2012: €0.6 million) was disclosed for the first time under other operating expenses in 2013 (Note [28]). As in 2012, it was attributable to Corporate and Other.

Expenses for Group functions at consolidated subsidiaries were no longer allocated to the operating segments in fiscal 2013, but rather disclosed fully under Corporate and Other in the Segment reporting. In order to ensure comparability, the previous year’s Segment reporting figures have been adjusted in accordance with the new allocation rules. The effects on the 2012 figures are presented below.
The amended allocation of expenses related to administration expenses as well as other expenses and income. Overall, administration expenses under Corporate and Other increased from €130.2 million by €52.8 million to €183.0 million. Other operating expenses and income rose by €19.5 million to €262.8 million from €243.3 million. Considering the positive investment result of €0.6 million, other operating expenses and income amounted to €262.2 million.

In the Merck Serono division, €33.4 million of the original €250.2 million in administration expenses was reclassified, resulting in administration expenses of €216.8 million. Out of the €674.9 million in other operating expenses and income, €5.9 million was reclassified. This resulted in other operating expenses and income of €669.0 million.

In the Consumer Health division, €3.2 million of the original €23.1 million in administration expenses was disclosed as Corporate and Other, leaving a balance of €19.9 million.

In the Performance Materials division, €4.0 million of the original €35.2 million in administration expenses was reclassified, resulting in administration expenses of €31.2 million. Following the reclassification, other operating expenses and income declined by €7.2 million from €39.2 million to €32.0 million.

In the Merck Millipore division, €12.2 million of the original €113.5 million in administration expenses was reclassified, resulting in administration expenses of €101.3 million. Other operating expenses and income declined by €6.4 million from €122.9 million to €116.5 million.

The change in costs in the divisions led to further changes to the earnings and cash flow figures in the Segment reporting. In the operating segments, the respective EBIT, EBITDA, EBITDA pre one-time items, cash flow from operating activities as well as business free cash flow increased by the lower amounts for administration expenses and other operating expenses and income. Moreover, this led to a corresponding increase in the EBITDA margin pre one-time items. The earnings and cash flow figures under Corporate and Other declined in line with allocation of administration expenses and other operating expenses and income. The EBITDA margin pre one-time items also declined accordingly.
Notes to the consolidated cash flow statement

The cash flow statement has been prepared in accordance with IAS 7 “Statement of Cash Flows”. It presents the changes in cash and cash equivalents as a result of cash inflows and outflows in the year under review. Further information on cash flows can be found in the explanation of cash and cash equivalents (see Note [35]). The amount of undrawn borrowing facilities that could be tapped for future operating activities and to meet obligations is disclosed in Note [44].

The cash flows reported by Group companies outside Germany are translated at average exchange rates. Due to strong exchange rate effects, in 2013 there were greater effects on the individual balance sheet items. Cash and cash equivalents are translated at the closing rates. The impact of foreign exchange rate changes is disclosed separately under changes in cash and cash equivalents.

Within the cash flows from investing activities and financing activities reclassifications were made with the aim of a clearer and more understandable presentation. The 2012 figures were correspondingly adjusted.

(53) Net cash flows from operating activities

In 2013, tax payments totaled € 491.4 million (2012: € 580.5 million). Tax refunds totaled € 85.9 million (2012: € 18.6 million). Interest paid totaled € 248.3 million (2012: € 303.6 million). Interest received amounted to € 89.5 million (2012: € 59.9 million). Within the scope of a Contractual Trust Arrangement in Germany, in 2013 € 200.0 million was transferred to Merck Pensionstreuhand e.V., Darmstadt (trustee) (2012: € 250.0 million). This led to a corresponding decline in pension provisions and to a decrease in cash flows from operating activities.

Net cash flows from operating activities broken down by the segments of the Merck Group are disclosed in Note [51].

(54) Net cash flows from investing activities

A total of € 655.7 million was used for acquisitions and investments in financial assets (2012: € 778.2 million). Of this amount, € 15.1 million (2012: € 20.6 million) was used for acquisitions. In 2013, the line “Acquisitions” reflects a contingent purchase price payment for the microbiology business of Biotest AG, Dreieich, acquired in 2011. Net cash outflows from investments in current and non-current assets amounting to € 640.6 million (2012: € 757.6 million) mainly resulted from the purchase of current financial assets.

In 2013, cash inflows from disposals of assets amounted to € 297.8 (2012: € 93.6 million). The sale of the Merck Serono site in Geneva, Switzerland, resulted in cash inflows of € 251.1 million.
(55) Business free cash flow

Business free cash flow is an important performance indicator used to agree internal targets for steering liquidity. It comprises the major payment-relevant items that the individual businesses can influence.

The composition of business free cash flow was as follows:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA pre one-time items</td>
<td>3,253.3</td>
<td>2,964.9</td>
</tr>
<tr>
<td>less investments in property, plant and equipment, software as well as advance payments for intangible assets</td>
<td>-446.2</td>
<td>-366.5</td>
</tr>
<tr>
<td>Changes in inventories as reported in the balance sheet</td>
<td>59.7</td>
<td>157.2</td>
</tr>
<tr>
<td>Changes in trade accounts receivable as reported in the balance sheet</td>
<td>93.2</td>
<td>213.7</td>
</tr>
<tr>
<td>Business free cash flow</td>
<td>2,960.0</td>
<td>2,969.3</td>
</tr>
</tbody>
</table>

This indicator is presented in the Segment reporting (see Note [61]).
Derivative financial instruments

Merck uses derivative financial instruments exclusively to hedge and reduce risks from currency and interest rate positions. Merck currently uses marketable forward exchange contracts, interest rate swaps and currency options as hedging instruments. Depending on the nature of the hedged item, changes in the fair values of derivatives are recorded in the income statement either in the operating result or in the financial result. The strategy to hedge interest rate and foreign exchange rate fluctuations arising from forecast transactions and transactions already recognized in the balance sheet is set by a Merck Group risk committee, which meets on a regular basis. A planning period of up to 36 months normally serves as the basis for entering into currency derivative contracts. Extensive guidelines regulate the use of derivatives. There is a ban on speculation. Derivative transactions are subject to continuous risk management procedures. Trading, settlement and control functions are strictly separated. Derivative financial contracts are only entered into with banks that have a good credit rating. Related default risks are continuously monitored.

The following derivative financial instruments were held as of the balance sheet date:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Nominal volume</th>
<th>Fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow hedge</td>
<td>4,073.5</td>
<td>5,798.9</td>
</tr>
<tr>
<td>Interest</td>
<td>650.0</td>
<td>650.0</td>
</tr>
<tr>
<td>Currency</td>
<td>3,423.5</td>
<td>5,148.9</td>
</tr>
<tr>
<td>Fair value hedge</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Interest</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Currency</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>No hedge accounting</td>
<td>2,042.5</td>
<td>1,610.1</td>
</tr>
<tr>
<td>Interest</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Currency</td>
<td>2,042.5</td>
<td>1,610.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,116.0</strong></td>
<td><strong>7,409.0</strong></td>
</tr>
</tbody>
</table>

The nominal volume is the aggregate of all buy and sell amounts relating to derivative financial instruments. The fair values result from the valuation of open positions at market prices, disregarding any offsetting effects from hedged items. They correspond to the income or expenses which would result if the derivatives were closed out as of the balance sheet date. Transactions are recognized at fair value on the basis of quoted prices or current market data provided by a recognized information service.
The maturities of the hedging instruments (nominal volume) are as follows as of the balance sheet date:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Remaining maturity less than 1 year</th>
<th>Remaining maturity more than 1 year</th>
<th>Total</th>
<th>Remaining maturity less than 1 year</th>
<th>Remaining maturity more than 1 year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign exchange contracts</td>
<td>3,763.2</td>
<td>1,244.9</td>
<td>5,008.1</td>
<td>3,965.8</td>
<td>2,089.3</td>
<td>6,055.1</td>
</tr>
<tr>
<td>Currency options</td>
<td>297.2</td>
<td>160.7</td>
<td>457.9</td>
<td>282.9</td>
<td>411.0</td>
<td>703.9</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>–</td>
<td>650.0</td>
<td>650.0</td>
<td>–</td>
<td>650.0</td>
<td>650.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,060.4</strong></td>
<td><strong>2,055.6</strong></td>
<td><strong>6,116.0</strong></td>
<td><strong>4,258.7</strong></td>
<td><strong>3,150.3</strong></td>
<td><strong>7,409.0</strong></td>
</tr>
</tbody>
</table>

The forward exchange contracts and currency options entered into to reduce the exchange rate risk primarily serve to hedge intragroup financing in foreign currency as well as to hedge future cash flows. These mainly served to hedge fluctuations in the exchange rates of the U.S. dollar (€ 3,219.9 million; 2012: € 4,409.6 million), the Swiss franc (€ 603.4 million; 2012: € 528.1 million), the Japanese yen (€ 465.2 million; 2012: € 458.4 million), the British pound (€ 347.3 million; 2012: € 349.1 million) and the Taiwan dollar (€ 215.3 million; 2012: € 215.3 million) versus the euro.

Currency derivatives for which hedge accounting is not applied serve mainly to hedge currency risk from intragroup financing as well as receivables and payables denominated in foreign currency.

Forecast transactions are only hedged if the occurrence can be assumed to be highly probable. The nominal volume of hedged forecast transactions amounted to € 1,868.2 million (2012: € 2,411.6 million) as of the balance sheet date and related to both the hedging of forecast transactions in non-functional currency as well as hedging of variable interest payments for planned refinancing transactions. Moreover, intragroup monetary deposits in foreign currency in the amount of € 1,954.0 million (2012: € 2,732.1 million), intragroup borrowings in foreign currency amounting to € 151.4 million (2012: € 555.3 million) as well as a variable interest private placement with a nominal volume of € 100.0 million were also hedged. These hedging relationships represented cash flow hedges.

Overall, income of € 125.5 million (2012: € 3.6 million) from the fair value measurement of derivatives designated as cash flows hedges was recognized in equity in 2013. € 26.5 million was transferred from equity and recognized as income (2012: € 78.4 million recognized as expense). In 2013, no ineffectiveness resulted from hedge accounting.

The hedging of forecast transactions in non-functional currency related primarily to sales in U.S. dollars, Taiwan dollars and Japanese yen that are expected within the next 36 months. Forward exchange contracts and currency options were used as hedging instruments.

For the planned refinancing of the bond maturing in 2015, we entered into forward starter interest rate swap contracts with a nominal volume of € 550.0 million to hedge the interest rate level. The fair value was recognized in equity at 100% effectiveness.
Management of financial risks

Market fluctuations with respect to foreign exchange and interest rates represent significant profit and cash flow risks for Merck. Merck aggregates these Group-wide risks and steers them also by using derivative financial instruments. Merck uses scenario analyses to estimate existing risks of foreign exchange and interest rate fluctuations. Merck is not subject to any material risk cluster from financial transactions. The report on risks and opportunities included in the Group Management Report provides further information on the management of financial risks.

Foreign exchange risks

Owing to its international business focus, Merck is exposed to foreign exchange-related transaction risks within the scope of both ordinary business and financing activities. Different strategies are used to limit or eliminate these risks. Foreign exchange risks from recognized transactions are eliminated as far as possible through the use of forward exchange contracts. Foreign exchange risks arising from forecast transactions are analyzed regularly and reduced if necessary through forward exchange contracts or currency options by applying the hedge accounting rules.

The following table presents the net foreign exchange risk from forecast and recognized transactions in 2013 in the key currencies and the effect of exchange rate fluctuations versus the euro:

<table>
<thead>
<tr>
<th>€ million</th>
<th>CHF</th>
<th>JPY</th>
<th>TWD</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>as of Dec. 31, 2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange risk from balance sheet items</td>
<td>474.3</td>
<td>184.4</td>
<td>26.4</td>
<td>1,556.1</td>
</tr>
<tr>
<td>Foreign exchange risk from executory contracts and forecast transactions in 2014</td>
<td>233.4</td>
<td>236.2</td>
<td>239.9</td>
<td>1,220.5</td>
</tr>
<tr>
<td>Transaction-related foreign exchange position</td>
<td>707.7</td>
<td>420.6</td>
<td>266.3</td>
<td>2,776.6</td>
</tr>
</tbody>
</table>

Position hedged by derivatives 366.5 -258.1 -88.4 -2,199.7

Open-end foreign exchange risk position 341.2 162.5 177.9 576.9

Change in foreign exchange position² due to a 10% appreciation of the euro² | 34.1 | -16.3 | -17.8 | -57.7 |

Included in profit/loss | 10.8 | -5.4 | -0.9 | 11.4 |

Recognized in equity | 12.8 | 7.1 | 53.0 |

¹Foreign exchange positions include booked and planned transactions. Only the exchange rate effects on booked transactions are reflected in profit/loss or equity.

²A 10% devaluation of the euro would have an opposite effect of the same amount.
Further significant foreign exchange risks also resulted from transactions recognized in Hong Kong dollars as well as Venezuelan bolivars subject to exchange rate movements versus the U.S. dollar. The changes in foreign exchange positions as a result of a 10% appreciation in the value of the U.S. dollar would be €9.4 million (2012: €4.1 million) for the Venezuelan bolivar position, and €–2.2 million (2012: €–0.9 million) for the Hong Kong dollar position, and would be fully recognized in profit or loss. Moreover, derivatives existed to hedge expected cash flows beyond the year 2014. A 10% increase in the value of the euro over the Japanese yen, the Taiwan dollar and the U.S. dollar would have changed equity by €11.6 million, €2.1 million and €40.7 million, respectively. In 2012, owing to hedging of expected cash flows beyond the year 2013, a 10% increase in the value of the euro over the Japanese yen, the Taiwan dollar and the U.S. dollar would have caused a change in equity of €14.5 million, €9.8 million and €65.4 million, respectively.

The corresponding net foreign exchange rate risk from forecast and recognized transactions for 2012 was as follows:

<table>
<thead>
<tr>
<th></th>
<th>CHF</th>
<th>JPY</th>
<th>TWD</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign exchange risk from balance sheet items</td>
<td>–107.8</td>
<td>125.4</td>
<td>28.4</td>
<td>2,082.1</td>
</tr>
<tr>
<td>Foreign exchange risk from executory contracts and forecast transactions in 2013</td>
<td>–375.1</td>
<td>304.3</td>
<td>235.7</td>
<td>1,410.1</td>
</tr>
<tr>
<td>Transaction-related foreign exchange position</td>
<td>–482.9</td>
<td>429.7</td>
<td>264.1</td>
<td>3,492.2</td>
</tr>
<tr>
<td>Position hedged by derivatives</td>
<td>177.4</td>
<td>–216.0</td>
<td>–163.8</td>
<td>–2,855.5</td>
</tr>
<tr>
<td>Open-end foreign exchange risk position</td>
<td>–305.5</td>
<td>213.7</td>
<td>100.3</td>
<td>636.7</td>
</tr>
<tr>
<td>Change in foreign exchange position (^1) due to a 10% appreciation of the euro (^2)</td>
<td>30.6</td>
<td>–21.4</td>
<td>–10.0</td>
<td>–63.7</td>
</tr>
<tr>
<td>included in profit/loss</td>
<td>–7.0</td>
<td>–1.4</td>
<td>–</td>
<td>6.2</td>
</tr>
<tr>
<td>recognized in equity</td>
<td>–</td>
<td>10.5</td>
<td>13.6</td>
<td>71.2</td>
</tr>
</tbody>
</table>

\(^1\) Foreign currency positions include booked and planned transactions. Only the exchange rate effects of booked transactions are reflected in profit or loss/equity.

\(^2\) A 10% devaluation of the euro would have an opposite effect in the same amount.

In addition to the previously described transaction risks, the Merck Group is also exposed to currency translation risks since many Merck companies are located outside the eurozone. The financial statements of these companies are translated into euros. Exchange differences in the assets and liabilities of these companies resulting from currency translation are recognized in equity.

**Interest rate risks**

Interest rate risks related mainly to monetary deposits in the amount of €3,469.1 million (2012: €2,642.7 million) and to a minor extent to financial liabilities of €3,697.9 million (2012: €4,453.5 million). The aim is to optimize the interest result and to minimize interest rate risks. If necessary, derivative financial instruments are used to change variable interest payments into fixed interest payments.
Relative to net interest liabilities on the balance sheet date, owing to the large proportion of fixed-interest financial instruments, a parallel shift in the yield curve by +100 or –100 basis points would not have a material effect. Assuming a refinancing as well as reinvestment of the same amount for the transactions expiring in 2014, a parallel shift in the yield curve by +100 basis points would lead to income of €15.6 million (2012: €12.5 million). A parallel shift in the yield curve by –100 basis points would lead to an expense of €8.6 million (2012: €9.6 million). This corresponded to a change in interest income of €18.0 million (2012: €14.1 million) or €–9.5 million (2012: €–11.2 million) on financial assets and additional interest expense of €2.4 million (2012: €1.6 million) or a decline in interest expense of €0.9 million (2012: €1.6 million) on financial liabilities. The resulting change in assets measured at fair value and derivative financial instruments would increase equity by €33.4 million (2012: increase by €31.6 million) or lower it by €38.9 million (2012: lowered by €41.5 million). The scenario calculations here assumed that the interest rate cannot fall below 0%.

**Share price risks**

The shares in publicly listed companies amounting to €5.0 million (2012: €6.9 million) are generally exposed to a market value risk. A 10% change in the value of the stock market would impact equity by €0.5 million (2012: €0.7 million). This change in value would be recognized in profit or loss at the time of disposal.

**Liquidity risks**

The liquidity risk, meaning the risk that Merck cannot meet its payment obligations resulting from financial liabilities, is limited by establishing the required financial flexibility and by effective cash management. Apart from liquid assets of €3,391.3 million (2012: €2,527.6 million), Merck had at its disposal a multi-currency revolving credit facility of €2 billion with a term running until 2018 and two extension options of one year each as well as bilateral credit facilities and various bank credit lines of €267.2 million (2012: €338.2 million). There were no indications that the availability of credit facilities already extended was restricted. Moreover, a commercial paper program with a volume of €2 billion and a debt issuance program with a volume increased to €15 billion in 2013 were available. Information on bonds issued by the Merck Group can be found in Note [44].

Liquidity risks are monitored and reported to management on a regular basis. No liens or similar forms of collateral are provided for financial liabilities of the Merck Group. The loan agreements do not contain any financial covenants.

Trade payables amounting to €1,364.1 million (2012: €1,288.3 million) had a remaining term of less than one year. With respect to liabilities from operating derivatives amounting to €2.1 million (2012: €15.0 million), €1.5 million (2012: €12.2 million) was short-term. Out of other financial liabilities amounting to €581.1 million (2012: €522.9 million), €578.9 million (2012: €520.1 million) was due within one year.
The following tables present the contractual cash flows such as repayments and interest on financial liabilities and derivative financial instruments with a negative fair value:

### 2013

<table>
<thead>
<tr>
<th>€ million as of Dec. 31, 2013</th>
<th>Carrying amount</th>
<th>Cash flows &lt; one year</th>
<th>Cash flows in 1–5 years</th>
<th>Cash flows &gt; 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interest</td>
<td>Repayment</td>
<td>Interest</td>
<td>Repayment</td>
</tr>
<tr>
<td>Bonds and commercial paper</td>
<td>3,142.7</td>
<td>127.8</td>
<td>–</td>
<td>333.8</td>
</tr>
<tr>
<td>Liabilities to banks</td>
<td>42.2</td>
<td>4.7</td>
<td>42.2</td>
<td>–</td>
</tr>
<tr>
<td>Liabilities to related parties</td>
<td>361.9</td>
<td>0.2</td>
<td>361.9</td>
<td>–</td>
</tr>
<tr>
<td>Loans from third parties and other financial liabilities</td>
<td>84.0</td>
<td>6.0</td>
<td>24.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Liabilities from derivatives (financial transactions)</td>
<td>59.4</td>
<td>2.4</td>
<td>10.0</td>
<td>27.6</td>
</tr>
<tr>
<td>Finance leasing liabilities</td>
<td>7.7</td>
<td>0.4</td>
<td>2.3</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,697.9</strong></td>
<td><strong>141.5</strong></td>
<td><strong>440.4</strong></td>
<td><strong>372.6</strong></td>
</tr>
</tbody>
</table>

### 2012

<table>
<thead>
<tr>
<th>€ million as of Dec. 31, 2012</th>
<th>Carrying amount</th>
<th>Cash flows &lt; one year</th>
<th>Cash flows in 1–5 years</th>
<th>Cash flows &gt; 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interest</td>
<td>Repayment</td>
<td>Interest</td>
<td>Repayment</td>
</tr>
<tr>
<td>Bonds and commercial paper</td>
<td>3,895.0</td>
<td>166.5</td>
<td>750.0</td>
<td>403.2</td>
</tr>
<tr>
<td>Liabilities to banks</td>
<td>68.0</td>
<td>1.9</td>
<td>51.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Liabilities to related parties</td>
<td>233.1</td>
<td>0.1</td>
<td>233.1</td>
<td>–</td>
</tr>
<tr>
<td>Loans from third parties and other financial liabilities</td>
<td>88.1</td>
<td>6.3</td>
<td>21.5</td>
<td>11.3</td>
</tr>
<tr>
<td>Liabilities from derivatives (financial transactions)</td>
<td>159.5</td>
<td>2.5</td>
<td>37.1</td>
<td>26.3</td>
</tr>
<tr>
<td>Finance leasing liabilities</td>
<td>9.8</td>
<td>0.2</td>
<td>2.5</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,453.5</strong></td>
<td><strong>177.5</strong></td>
<td><strong>1,095.7</strong></td>
<td><strong>442.4</strong></td>
</tr>
</tbody>
</table>
**Credit risks**

Merck is only subject to a relatively low credit risk, meaning the unexpected loss of payment funds or income. On the one hand, financial contracts are only entered into with banks and industrial companies with good credit ratings and on the other hand, the broad-based business structure of the Merck Group means that there is no particularly high concentration of credit risks with respect to either customers or individual countries. The credit risk with customers is continuously monitored by analyzing the age structure of trade accounts receivable. The financial crisis has led to an increased risk of default in individual eurozone countries. Merck continuously reviews and monitors open positions vis-à-vis all trading partners in the affected countries and takes risk-mitigating measures and accounts for impairments as necessary. On the reporting date, the theoretically maximum default risk corresponded to the carrying amounts.
**Other disclosures on financial instruments**

The following table presents the reconciliation of the balance sheet items to the classes of financial instruments in accordance with IFRS 7 and provides information on fair value measurement:

<table>
<thead>
<tr>
<th>€ million</th>
<th>Carrying amount Dec. 31, 2013</th>
<th>Subsequent measurement according to IAS 39</th>
<th>Amortized cost</th>
<th>At cost</th>
<th>Fair value</th>
<th>Carrying amount according to IAS 17</th>
<th>Non-financial items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>980.8</td>
<td>980.8</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Current financial assets</td>
<td>2,410.5</td>
<td>80.7</td>
<td>–</td>
<td>2,329.8</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Held for trading (non-derivatives)</td>
<td>6.8</td>
<td>–</td>
<td>–</td>
<td>6.8</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Held to maturity</td>
<td>53.4</td>
<td>53.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>27.3</td>
<td>27.3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Available-for-sale</td>
<td>2,312.1</td>
<td>–</td>
<td>–</td>
<td>2,312.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives in a hedging relationship</td>
<td>10.9</td>
<td>–</td>
<td>–</td>
<td>10.9</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade receivables</td>
<td>2,021.4</td>
<td>2,021.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>2,021.4</td>
<td>2,021.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Current and non-current other assets</td>
<td>466.2</td>
<td>115.4</td>
<td>–</td>
<td>126.6</td>
<td>–</td>
<td>224.2</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives not in a hedging relationship</td>
<td>2.9</td>
<td>–</td>
<td>–</td>
<td>2.9</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>115.4</td>
<td>115.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives in a hedging relationship</td>
<td>123.7</td>
<td>–</td>
<td>–</td>
<td>123.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Non-financial items</td>
<td>224.2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>224.2</td>
<td>–</td>
</tr>
<tr>
<td>Non-current financial assets</td>
<td>77.8</td>
<td>15.8</td>
<td>52.3</td>
<td>9.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives not in a hedging relationship</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>15.8</td>
<td>15.8</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Available-for-sale</td>
<td>57.3</td>
<td>–</td>
<td>52.3</td>
<td>5.0</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives in a hedging relationship</td>
<td>4.7</td>
<td>–</td>
<td>–</td>
<td>4.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current and non-current financial liabilities</td>
<td>3,697.9</td>
<td>3,630.8</td>
<td>–</td>
<td>59.4</td>
<td>7.7</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives not in a hedging relationship</td>
<td>4.0</td>
<td>–</td>
<td>–</td>
<td>4.0</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>3,630.8</td>
<td>3,630.8</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives in a hedging relationship</td>
<td>55.4</td>
<td>–</td>
<td>–</td>
<td>55.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Finance lease liabilities</td>
<td>7.7</td>
<td>–</td>
<td>–</td>
<td>7.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>1,364.1</td>
<td>1,364.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>1,364.1</td>
<td>1,364.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Current and non-current other liabilities</td>
<td>1,140.1</td>
<td>581.1</td>
<td>–</td>
<td>2.1</td>
<td>–</td>
<td>556.9</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives not in a hedging relationship</td>
<td>0.4</td>
<td>–</td>
<td>–</td>
<td>0.4</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>581.1</td>
<td>581.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Derivatives in a hedging relationship</td>
<td>1.7</td>
<td>–</td>
<td>–</td>
<td>1.7</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Non-financial items</td>
<td>556.9</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>556.9</td>
<td>–</td>
</tr>
</tbody>
</table>
### Subsequent measurement according to IAS 39

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>980.8</td>
<td>729.7</td>
<td>729.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>729.7</td>
</tr>
<tr>
<td></td>
<td>1,797.9</td>
<td>549.7</td>
<td>-</td>
<td>1,248.2</td>
<td></td>
<td></td>
<td>1,248.2</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>6.8</td>
<td>7.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.8</td>
</tr>
<tr>
<td>53.4</td>
<td>349.7</td>
<td>349.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>349.7</td>
</tr>
<tr>
<td>27.3</td>
<td>200.0</td>
<td>200.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200.3</td>
</tr>
<tr>
<td>2,312.1</td>
<td>1,230.1</td>
<td></td>
<td></td>
<td>1,230.1</td>
<td></td>
<td></td>
<td>1,230.1</td>
</tr>
<tr>
<td>10.9</td>
<td>10.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.3</td>
</tr>
<tr>
<td>2,021.4</td>
<td>2,114.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,114.6</td>
</tr>
<tr>
<td></td>
<td>346.9</td>
<td>88.8</td>
<td>-</td>
<td>55.3</td>
<td></td>
<td></td>
<td>202.8</td>
</tr>
<tr>
<td>2.9</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td>115.4</td>
<td>88.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>88.8</td>
</tr>
<tr>
<td>123.7</td>
<td>52.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52.6</td>
</tr>
<tr>
<td></td>
<td>202.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>202.8</td>
</tr>
<tr>
<td></td>
<td>97.1</td>
<td>48.0</td>
<td>41.8</td>
<td>7.3</td>
<td></td>
<td></td>
<td>-</td>
</tr>
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<td></td>
<td>-</td>
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<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>15.8</td>
<td>18.0</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>18.0</td>
</tr>
<tr>
<td>57.3</td>
<td>48.7</td>
<td></td>
<td></td>
<td>6.9</td>
<td></td>
<td></td>
<td>48.7</td>
</tr>
<tr>
<td>4.7</td>
<td>0.4</td>
<td></td>
<td></td>
<td>0.4</td>
<td></td>
<td></td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>4,453.5</td>
<td>4,284.2</td>
<td>-</td>
<td>159.5</td>
<td></td>
<td></td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td></td>
<td>-</td>
<td>4.7</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>3,916.6</td>
<td>4,284.2</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>4,715.7</td>
</tr>
<tr>
<td></td>
<td>55.4</td>
<td>154.8</td>
<td>-</td>
<td>154.8</td>
<td></td>
<td></td>
<td>154.8</td>
</tr>
<tr>
<td></td>
<td>7.7</td>
<td>9.8</td>
<td>-</td>
<td></td>
<td></td>
<td>9.8</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>1,364.1</td>
<td>1,288.3</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>1,288.3</td>
</tr>
<tr>
<td></td>
<td>1,105.6</td>
<td>522.9</td>
<td>-</td>
<td>15.0</td>
<td></td>
<td></td>
<td>567.7</td>
</tr>
<tr>
<td></td>
<td>0.4</td>
<td></td>
<td>-</td>
<td>0.4</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>581.1</td>
<td>522.9</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>522.9</td>
</tr>
<tr>
<td></td>
<td>1.7</td>
<td>14.6</td>
<td>-</td>
<td>14.6</td>
<td></td>
<td></td>
<td>14.6</td>
</tr>
<tr>
<td></td>
<td>567.7</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>567.7</td>
</tr>
</tbody>
</table>
Net gains and losses on financial instruments mainly include measurement results from currency translation, fair value adjustments, impairments and reversals of impairments as well as the recognition of premiums and discounts. Dividends and interest are not recognized in the net gains and losses on financial instruments, except for dividends and interest in the category “held for trading”. At Merck, the category “held for trading” only includes derivatives not in a hedging relationship.

The net gains and losses on financial instruments by category on the reporting date were as follows:

<table>
<thead>
<tr>
<th>€ million 2013</th>
<th>Interest</th>
<th>Impairments</th>
<th>Reversals of impairment</th>
<th>Fair value adjustments</th>
<th>Disposal gains/losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial instrument of the category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held for trading</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>131.7</td>
<td>–</td>
</tr>
<tr>
<td>Held to maturity</td>
<td>2.5</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans and receivables</td>
<td>10.3</td>
<td>–47.2</td>
<td>42.1</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Available-for-sale</td>
<td>15.1</td>
<td>–4.1</td>
<td>–</td>
<td>–</td>
<td>1.6</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>–163.3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

In 2013, foreign exchange gains of € 26.0 million resulting from receivables and payables in operating business, their economic hedging, as well as hedging of forecast transactions in operating business were recorded (2012: losses of € 60.4 million). Foreign exchange losses of € 4.3 million resulting from financial balance sheet items, their economic hedging as well as fair value fluctuations of option contracts to hedge forecast transactions were recorded (2012: gains of € 11.2 million).

The fair value of financial assets and liabilities is based on the official market prices and market values quoted on the balance sheet date (Level 1 assets and liabilities) as well as mathematical calculation models with inputs observable in the market on the balance sheet date (Level 2 assets and liabilities). Level 1 assets comprise stocks and bonds and are classified as “available-for-sale”, Level 1 liabilities comprise issued bonds and are classified as “other liabilities”. Level 2 assets and liabilities are primarily liabilities to banks classified.
as "other liabilities", interest-bearing securities classified as "available-for-sale" as well as derivatives with and without hedging relationships. The fair value of interest-bearing securities is determined by discounting future cash flows using market interest rates. The fair value measurement of forward exchange contracts and currency options uses spot and forward rates as well as foreign exchange volatilities applying recognized mathematical principles. The fair value of interest rate swaps is determined with standard market valuation models using interest rate curves available in the market.

The fair values of the financial instruments disclosed in the balance sheet and the fair values deviating substantially from the carrying amount were determined as follows:

<table>
<thead>
<tr>
<th>€ million as of Dec. 31, 2013</th>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value determined by official prices and quoted market values (Level 1)</td>
<td>1,396.5</td>
<td>3,414.3</td>
</tr>
<tr>
<td>thereof available-for-sale</td>
<td>1,396.5</td>
<td>–</td>
</tr>
<tr>
<td>thereof other liabilities</td>
<td>–</td>
<td>3,414.3</td>
</tr>
<tr>
<td>Fair value determined using inputs observable in the market (Level 2)</td>
<td>1,069.6</td>
<td>563.8</td>
</tr>
<tr>
<td>thereof available-for-sale</td>
<td>920.6</td>
<td>–</td>
</tr>
<tr>
<td>thereof derivatives with a hedging relationship</td>
<td>139.3</td>
<td>57.1</td>
</tr>
<tr>
<td>thereof derivatives without a hedging relationship</td>
<td>9.7</td>
<td>4.4</td>
</tr>
<tr>
<td>thereof other liabilities</td>
<td>–</td>
<td>502.3</td>
</tr>
<tr>
<td>Fair value determined using inputs unobservable in the market (Level 3)</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>€ million as of Dec. 31, 2012</th>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value determined by official prices and quoted market values (Level 1)</td>
<td>818.3</td>
<td>4,315.3</td>
</tr>
<tr>
<td>thereof available-for-sale</td>
<td>818.3</td>
<td>–</td>
</tr>
<tr>
<td>thereof other liabilities</td>
<td>–</td>
<td>4,315.3</td>
</tr>
<tr>
<td>Fair value determined using inputs observable in the market (Level 2)</td>
<td>492.5</td>
<td>574.9</td>
</tr>
<tr>
<td>thereof available-for-sale</td>
<td>418.7</td>
<td>–</td>
</tr>
<tr>
<td>thereof derivatives with a hedging relationship</td>
<td>63.3</td>
<td>169.4</td>
</tr>
<tr>
<td>thereof derivatives without a hedging relationship</td>
<td>10.5</td>
<td>5.1</td>
</tr>
<tr>
<td>thereof other liabilities</td>
<td>–</td>
<td>400.4</td>
</tr>
<tr>
<td>Fair value determined using inputs unobservable in the market (Level 3)</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

From an economic perspective, netting is only possible at Merck with derivatives. This possibility results from the framework agreements on derivatives trading which Merck enters into with commercial banks. However, Merck does not offset financial assets and financial liabilities in its balance sheet.
The following table presents the potential netting volume of the reported derivative financial assets and liabilities:

<table>
<thead>
<tr>
<th></th>
<th>€ million as of Dec. 31, 2013</th>
<th>Gross presentation</th>
<th>Netting</th>
<th>Net presentation</th>
<th>Due to master netting agreements</th>
<th>Due to financial collateral</th>
<th>Potential net amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Derivative financial assets</strong></td>
<td>149.0</td>
<td>-</td>
<td>149.0</td>
<td>45.9</td>
<td>-</td>
<td>103.1</td>
<td></td>
</tr>
<tr>
<td><strong>Derivative financial liabilities</strong></td>
<td>-61.5</td>
<td>-</td>
<td>-61.5</td>
<td>-61.5</td>
<td>-45.9</td>
<td>-</td>
<td>-15.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>€ million as of Dec. 31, 2012</th>
<th>Gross presentation</th>
<th>Netting</th>
<th>Net presentation</th>
<th>Due to master netting agreements</th>
<th>Due to financial collateral</th>
<th>Potential net amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Derivative financial assets</strong></td>
<td>73.8</td>
<td>-</td>
<td>73.8</td>
<td>61.3</td>
<td>-</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td><strong>Derivative financial liabilities</strong></td>
<td>-174.5</td>
<td>-</td>
<td>-174.5</td>
<td>-61.3</td>
<td>-</td>
<td>-</td>
<td>-113.2</td>
</tr>
</tbody>
</table>

**Capital management**

The objective of capital management is to secure the financial flexibility in order to maintain long-term business operations and to realize strategic options. Maintaining a stable investment grade rating, ensuring liquidity, limiting financial risks as well as optimizing the costs of capital are the objectives of our financial policy and set important framework conditions for capital management. Traditionally, the capital market represents a major source of financing for Merck, for instance via bond issues. In addition, Merck has both a commercial paper program for short-term financing on the capital market as well as a multi-currency working capital credit facility of € 2 billion with a term running until 2018 and two extension options, each for one year.
The responsible committees decide on the capital structure of the balance sheet, the appropriation of net retained profit and the dividend level.

In this context, net financial debt is one of the leading capital management indicators. It was as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial liabilities</td>
<td>3,697.9</td>
<td>4,453.5</td>
<td>–755.6</td>
</tr>
<tr>
<td>less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>980.8</td>
<td>729.7</td>
<td>251.1</td>
</tr>
<tr>
<td>Current financial assets</td>
<td>2,410.5</td>
<td>1,797.9</td>
<td>612.6</td>
</tr>
<tr>
<td>Net financial debt</td>
<td>306.6</td>
<td>1,925.9</td>
<td>–1,619.3</td>
</tr>
</tbody>
</table>

(60) Contingent liabilities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantees</td>
<td>2.5</td>
<td>–</td>
<td>17.3</td>
<td>–</td>
</tr>
<tr>
<td>Warranties</td>
<td>0.9</td>
<td>–</td>
<td>0.8</td>
<td>–</td>
</tr>
<tr>
<td>Other contingent liabilities</td>
<td>32.9</td>
<td>–</td>
<td>87.8</td>
<td>–</td>
</tr>
</tbody>
</table>

Other contingent liabilities included, among other things, potential obligations from legal disputes, for which the probability of an outflow of resources did not suffice to recognize a provision as of the balance sheet date.
Other disclosures

(61) Other financial obligations

Other financial obligations comprised the following:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligation to purchase the entire share capital of AZ Electronic Materials S.A.</td>
<td>1,876.5</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Obligations to acquire intangible assets</td>
<td>2,000.2</td>
<td>–</td>
<td>1,670.7</td>
<td>–</td>
</tr>
<tr>
<td>Obligations to acquire property, plant and equipment</td>
<td>44.7</td>
<td>–</td>
<td>111.8</td>
<td>–</td>
</tr>
<tr>
<td>Future operating lease payments</td>
<td>172.0</td>
<td>–</td>
<td>207.9</td>
<td>–</td>
</tr>
<tr>
<td>Long-term purchase commitments</td>
<td>151.5</td>
<td>–</td>
<td>186.5</td>
<td>–</td>
</tr>
<tr>
<td>Other financial obligations</td>
<td>29.0</td>
<td>–</td>
<td>14.8</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>4,273.9</td>
<td>–</td>
<td>2,191.7</td>
<td>–</td>
</tr>
</tbody>
</table>

In connection with the offer published by Merck on December 20, 2013 to acquire AZ Electronic Materials S.A., Luxembourg, (AZ), a conditional financial commitment exists in the amount of € 1,876.5 million (€ 1,565 million; based on an exchange rate of € 1 = £ 0.834 on December 31, 2013) for the purchase of the entire share capital of AZ in cash. Among other things, the successful completion of the transaction is subject to antitrust approval as well as the achievement of a minimum acceptance level of 95% of the share capital.

Obligations to acquire intangible assets existed in particular within the scope of research and development collaborations. Here Merck has obligations to make milestone payments when its partner achieves certain objectives. In the unlikely event that all contract partners achieve all milestones, Merck would be obligated to pay up to € 2,000.2 million (2012: € 1,670.7 million) for the acquisition of intangible assets.

Our expectations regarding the potential maturities of these obligations were as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligations to acquire intangible assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>within one year</td>
<td>56.8</td>
<td>140.3</td>
</tr>
<tr>
<td>in 1 – 5 years</td>
<td>508.4</td>
<td>308.9</td>
</tr>
<tr>
<td>more than 5 years</td>
<td>1,435.0</td>
<td>1,221.5</td>
</tr>
<tr>
<td></td>
<td>2,000.2</td>
<td>1,670.7</td>
</tr>
</tbody>
</table>

Other financial obligations were recognized at nominal value.
The maturities of liabilities from lease agreements were as follows:

<table>
<thead>
<tr>
<th></th>
<th>€ million</th>
<th>within 1 year</th>
<th>1 – 5 years</th>
<th>more than 5 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value of future payments from finance leases</td>
<td>2.3</td>
<td>5.0</td>
<td>0.4</td>
<td></td>
<td>7.7</td>
</tr>
<tr>
<td>Interest component of finance leases</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td>Future finance lease payments</td>
<td>2.7</td>
<td>5.1</td>
<td>0.5</td>
<td></td>
<td>8.3</td>
</tr>
<tr>
<td>Future operating lease payments</td>
<td>64.9</td>
<td>103.0</td>
<td>4.1</td>
<td></td>
<td>172.0</td>
</tr>
</tbody>
</table>

Operating lease agreements related mainly to customary leasing arrangements to lease operating and office equipment. The payments resulting from operating lease agreements amounted to € 104.0 million (2012: € 102.6 million) and were recorded as an expense in the reporting period.

(62) Personnel expenses/Headcount

Personnel expenses comprised the following:

<table>
<thead>
<tr>
<th></th>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and salaries</td>
<td>2,611.8</td>
<td>3,007.2</td>
<td></td>
</tr>
<tr>
<td>Compulsory social security contributions and special financial assistance</td>
<td>368.0</td>
<td>398.3</td>
<td></td>
</tr>
<tr>
<td>Pension expenses</td>
<td>146.6</td>
<td>159.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,126.4</td>
<td>3,564.5</td>
</tr>
</tbody>
</table>
The decrease in personnel expenses compared to the prior year was primarily due to the reduction of one-time effects in connection with “Fit for 2018” transformation and growth program. In 2012, € 381.6 million related to expenses for severance pay.

As of December 31, 2013, the Merck Group had 38,154 employees (2012: 38,847). The average number of employees during the year was 38,282 (2012: 39,939).

The breakdown of personnel by function was as follows:

<table>
<thead>
<tr>
<th>Average number of employees</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>9,985</td>
<td>9,486</td>
</tr>
<tr>
<td>Logistics</td>
<td>1,779</td>
<td>1,665</td>
</tr>
<tr>
<td>Marketing and Sales</td>
<td>12,214</td>
<td>12,353</td>
</tr>
<tr>
<td>Administration</td>
<td>5,106</td>
<td>4,416</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>4,433</td>
<td>4,558</td>
</tr>
<tr>
<td>Infrastructure and Other</td>
<td>4,765</td>
<td>7,461</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38,282</strong></td>
<td><strong>39,939</strong></td>
</tr>
</tbody>
</table>

In 2013, Merck substantially increased transparency by assigning all positions to a standardized job profile. In this way, positions that were previously not assigned to specific functional areas were assigned according to function.

(63) Material costs

Material costs in 2013 amounted to € 1,473.2 million (2012: € 1,496.4 million) and was reported under cost of sales.

(64) Auditors’ fees

The costs of the auditors (KPMG) of the financial statements of the Merck Group consisted of the following:

<table>
<thead>
<tr>
<th>€ million</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck Group</td>
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<td>Audits of financial statements</td>
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<td><strong>Total</strong></td>
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<td><strong>2.7</strong></td>
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</table>
(65) **Corporate governance**

The Statement of Compliance in accordance with section 161 of the German Stock Corporation Act (Aktiengesetz) was published in the corporate governance section of our website www.merckgroup.com/investors → corporate governance in March 2013 and thus made permanently available.

(66) **Companies opting for exemption under section 264 (3) HGB or section 264b HGB**

The following companies, which have been consolidated in these financial statements, have opted for exemption:
- Allergopharma GmbH & Co. KG, Reinbek
- Allergopharma Verwaltungs GmbH, Darmstadt
- Chemische Fabrik Lehrte Dr. Andreas Kossel GmbH, Lehrte
- Chemitra GmbH, Darmstadt
- heipha Dr. Müller GmbH, Eppelheim
- Litec LLL GmbH, Greifswald
- Merck Accounting Solutions & Services Europe GmbH, Darmstadt
- Merck Chemicals GmbH, Schwalbach
- Merck Consumer Health Care Holding GmbH, Darmstadt
- Merck Export GmbH, Darmstadt
- Merck Selbstmedikation GmbH, Darmstadt
- Merck Consumer Health Care Holding GmbH, Darmstadt
- Merck Versicherungsvermittlung GmbH, Darmstadt

(67) **Related-party disclosures**

Related parties in respect of the Merck Group are E. Merck KG as well as Emanuel-Merck-Vermögens-KG and E. Merck Beteiligungen KG. In principle, direct or indirect subsidiaries of Merck KGaA, associates and joint ventures of the Merck Group as well as pension funds that are classified as funded defined benefit plans in accordance with IAS 19 are also related parties within the meaning of IAS 24. Members of the Executive Board and the Supervisory Board of Merck KGaA, the Executive Board and the Board of Partners of E. Merck KG as well as close members of their families are also related parties.

As of December 31, 2013, there were liabilities by Merck Financial Services GmbH, Merck KGaA, and Merck & Cie, Altdorf, to E. Merck KG in the amount of € 734.7 million (2012: € 528.1 million) as well as by Merck Financial Services GmbH to Merck Capital Asset Management, Malta, and Merck Capital Asset Management Holding, Malta, amounting to € 0.2 million (2012: € 0.3 million) and € 0.1 million (2012: € 0.1 million), respectively. In addition, as of December 31, 2013, Merck KGaA had receivables from E. Merck Beteiligungen KG in the amount of € 32.5 million (2012: € 5.4 million). The balances result mainly from the profit transfers by Merck & Cie to E. Merck KG as well as the reciprocal profit transfers between Merck KGaA and E. Merck KG. They included financial payables of € 361.9 million (2012: € 233.1 million) which were subject to standard market interest rates.
From January to December 2013, Merck KGaA performed services for E. Merck KG with a value of €1.2 million (2012: €1.2 million), for Emanuel-Merck-Vermögens-KG with a value of €0.4 million (2012: €0.3 million) and for E. Merck Beteiligungen KG with a value of €0.3 million (2012: €0.3 million). During the same period, E. Merck KG performed services for Merck KGaA with a value of €0.5 million (2012: €0.5 million).

During the reporting period, Merck KGaA sold a piece of developed land to Emanuel-Merck-Vermögens-KG. The purchase price of €4.3 million corresponded to the market value, which an independent expert third party determined in an appraisal.

Business transactions with major subsidiaries were eliminated during consolidation. Information on pension funds that are classified as funded defined benefit plans in accordance with IAS 19 can be found under Note [49]. There were no further material transactions with these pension funds.

From January to December 2013, there were no transactions between companies of the Merck Group and associates, as was the case in 2012. As in the previous year, companies of the Merck Group had no receivables or liabilities vis-à-vis associates as of December 31, 2013.

There were no material transactions such as, for example, the provision of services or the granting of loans, between companies of the Merck Group and members of the Executive Board and the Supervisory Board of Merck KGaA, the Executive Board and the Board of Partners of E. Merck KG or members of their immediate families.

(68) Executive Board and Supervisory Board compensation

The compensation of the Executive Board of Merck KGaA is paid by the general partner, E. Merck KG, and recorded as an expense in its income statement. For the period from January to December 2013 fixed salaries of €4.9 million (2012: €4.9 million), variable compensation of €17.6 million (2012: €11.2 million), and additional benefits of €0.1 million (2012: €0.1 million) were recorded for members of the Executive Board of Merck KGaA. Furthermore, additions to the provisions of E. Merck KG for the Long-Term Incentive Plan totaled €8.0 million (2012: €3.1 million), and to the pension provisions of E. Merck KG include current service costs of €2.5 million (2012: €1.9 million) for members of the Executive Board of Merck KGaA.

Subject to the approval of the Annual General Meeting on the proposed distribution of a dividend of €1.90 per share, the compensation of the Supervisory Board amounting to €874.4 thousand (2012: €694.0 thousand) consists of a fixed portion of €599.5 thousand (2012: €122.5 thousand) and a variable portion of €202.2 thousand (2012: €571.5 thousand), as well as meeting attendance compensation of €45.7 thousand (2012: €0.0 thousand).

Further individualized information and details can be found in the Compensation Report on pages 154 et seq.
(69) Information on preparation and approval

The Executive Board of Merck KGaA prepared the consolidated financial statements on February 17, 2014 and approved them for forwarding to the Supervisory Board. The Supervisory Board has the responsibility to examine the consolidated financial statements and to declare whether it approves them.

(70) Subsequent events

Subsequent to the balance sheet date, no events of special importance occurred that could have a material impact on the financial position and results of operations of the Merck Group.

(71) List of shareholdings

The following table presents the list of shareholdings of the Merck Group as of December 31, 2013.

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>Registered office</th>
<th>Equity interest (% of thereof Merck KGaA)</th>
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| I. Fully consolidated companies

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**North America**

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II. Companies not consolidated due to secondary importance

| Germany                 |                                |                  |                     |                       |
| Germany                 | AB Pensionsverwaltung GmbH     | Zossen           | 100.00              | 100.00               |
| Germany                 | Merck 12. Allgemeine Beteiligungs-GmbH | Darmstadt        | 100.00              | 100.00               |
| Germany                 | Merck 13. Allgemeine Beteiligungs-GmbH | Darmstadt        | 100.00              | 100.00               |
| Germany                 | Merck 14. Allgemeine Beteiligungs-GmbH | Darmstadt        | 100.00              | 100.00               |
| Germany                 | Merck Patent GmbH              | Darmstadt        | 100.00              |                       |
| Germany                 | Merck Wohnungs- und Grundstucksverwaltungsgesellschaft mbH | Darmstadt | 100.00              | 100.00               |

Other European countries

<p>| Switzerland             | Asceneuron SA                    | Lausanne          | 80.00               |                       |
| Switzerland             | Calypso Biotech SA               | Plan-les-Ouates   | 75.00               |                       |
| Switzerland             | Prexton Therapeutics SA          | Plan-les-Ouates   | 55.00               |                       |
| France                  | Gennon S.A.S.                    | Lyon              | 100.00              |                       |
| United Kingdom          | Nature’s Best Health Products Ltd. | Tunbridge Wells  | 100.00              |                       |</p>
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To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements of the Merck Group give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group.

Darmstadt, February 17, 2014

Karl–Ludwig Kley
Kai Beckmann
Stefan Uschmann

Bernd Reckmann
Matthias Zachert
Auditor's Report

We have audited the consolidated financial statements prepared by Merck Kommanditgesellschaft auf Aktien, Darmstadt, comprising the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated Balance Sheet, the Consolidated Cash Flow Statement, the Consolidated Statement of Changes in Net Equity, and the Notes to the Group accounts, together with the Group Management Report for the business year from January 1 to December 31, 2013. The preparation of the consolidated financial statements and the Group Management Report in accordance with IFRSs, as adopted by the EU, and the additional requirements of German commercial law pursuant to section 315a (1) HGB (Handelsgesetzbuch "German Commercial Code") and supplementary provisions of the articles of association are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the Group Management Report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with § 317 HGB (Handelsgesetzbuch "German Commercial Code") and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the Group Management Report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the Group Management Report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and Group Management Report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations. In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs, as adopted by the EU, the additional requirements of German commercial law pursuant to section 315a (1) HGB and supplementary provisions of the articles of association and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The Group Management Report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group’s position and suitably presents the opportunities and risks of future development.

Frankfurt/Main, February 18, 2014
KPMG AG
Wirtschaftsprüfungsgesellschaft

Original German version signed by
Karl Braun
Wirtschaftsprüfer
Manfred Jenal
Wirtschaftsprüfer
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Glossary

Affiliate → A company that is not included in the scope of consolidation due to its minor importance.

Biomarkers → The term refers both to substances in the body and cell properties. Biomarkers can help doctors to identify a patient's disease. Certain genes tend to play a role in the treatment of cancers, in terms of whether they are "normal" (wild type) or have undergone transformation (mutant). A predictive biomarker is a parameter or a status that can help to predict whether a patient's disease, e.g. cancer, will respond to a certain treatment.

Biosimilars → A biosimilar medicine is a biological medicine that is developed to be similar to an existing biological medicine (the 'reference medicine'). Biosimilars are not the same as generics, which have simpler chemical structures and are considered to be identical to their reference medicines. The active substance of a biosimilar and its reference medicine is essentially the same biological substance, though there may be minor differences due to their complex nature and production methods. Like the reference medicine, the biosimilar has a degree of natural variability.

Business free cash flow → This key performance indicator is equivalent to EBITDA pre one-time items less (1) investments in property, plant, equipment and software, (2) changes in inventories, as well as (3) changes in accounts receivable trade as reported in the balance sheet.

Cash flow → Equals cash receipts minus cash payments over a given period of time.

CHMP → Committee for Medicinal Products for Human Use: a scientific committee of the European Medicines Agency. It prepares the Agency's opinions and handles the authorization and risk assessment of medicinal products.

Commercial paper program → A commercial paper program provides the contractual framework for the issuance of commercial paper, which is a short-term debt instrument issued by a corporation.

Compliance → This term refers to compliance with laws and regulations as well as with voluntary codices that are internal to the Merck Group. Compliance is an element of diligent corporate governance.

Corporate governance → This term covers compliance with laws and regulations; the application of recognized standards and recommendations; the development of and adherence to internal guidelines; as well as the creation and implementation of guideline and control structures.

DAX® → Deutscher Aktienindex (German stock index): Its value is based on the stock prices of the 30 largest German companies by trading volume and free float market capitalization.

Debt issuance program → A debt issuance program provides the contractual framework for the issuance of bonds. Thanks to the current terms and conditions, the program allows the company flexibility when issuing bonds.
Earnings per share → Earnings per share are calculated as specified in IAS 33 by dividing the Group profit by the weighted average number of shares.

EBIT → Earnings before interest and taxes on income. Equals the operating result.

EBITDA → Earnings before interest, taxes, depreciation and amortization: depreciation and amortization are added back to EBIT.

EBITDA pre → EBITDA before one-time items.

EGFR → Epidermal Growth Factor Receptor: It is upregulated in various tumor types and/or present in mutated form, resulting in uncontrolled growth and replication of tumor cells. Novel cancer therapies are aimed at blocking EGFR’s oncogenic signal and hence stopping tumor growth.

EMA → European Medicines Agency: an official body of the European Union, headquartered in London. It is responsible for evaluating and monitoring medicines and plays a key role in the marketing authorization of medicinal products.

Equity method → The basic idea behind the equity method is to present the carrying amount of the equity investment in the investor’s balance sheet so that it mirrors the development of the proportional share of equity in the investment.

FDA → Food and Drug Administration: U.S. government agency responsible for protecting and advancing public health, especially as concerns food and drugs.

Financial covenants → Financial figures stipulated in loan contracts to which the company must adhere during the duration of the loan.

First, second and third line therapy → First-line therapy is the first therapy that patients receive after having been diagnosed. If they do not respond or cannot tolerate first-line therapy, second-line, or in a further step, third-line therapy follows.

Free cash flow → Sum of the net cash flow from operating activities minus investments in intangible assets, property, plant and equipment, acquisitions as well as investments in other financial assets, plus proceeds from the disposal of assets and changes in securities.

GDP → Gross domestic product: The total value of all goods (products and services) intended for final consumption that are produced within a country’s borders in a given year.

GHS → Globally Harmonized System of Classification and Labelling of Chemicals. An international standard system to classify chemicals, including labels and safety data sheets.

Global Grade → Merck is working with the Global Grading System developed by Towers Watson, a market-focused method to evaluate company positions.
Goodwill  
Goodwill arises when a company acquires another company and primarily represents the difference between the fair value of the acquired net assets and the purchase price paid.

GPHF  
Global Pharma Health Fund e.V. is a charitable organization funded by Merck. The organization’s goal is to promote health care within the scope of development assistance, especially with respect to the fight against counterfeit medicines through the use of the GPHF-Minilab™.

GPHF-Minilab™  
With the GPHF-Minilab™, the GPHF offers a unique mobile compact laboratory that is capable of testing the quality of medicines very quickly.

Greenhouse Gas Protocol  
Most widely used accounting and reporting system for greenhouse gas emissions.

Hedging  
Protection against or limitation of certain clearly identified risks that might result from occurrences such as changes in foreign exchange rates or share prices. Fair value hedge: This primarily involves protecting against potential market value fluctuations of those assets and liabilities already recognized in the balance sheet. The primary purpose of a cash flow hedge is to protect against uncertain cash flows that especially result from future transactions.

ICCA  
International Council of Chemical Associations.

IFRS  
International Financial Reporting Standards (until 2001 known as International Accounting Standards, IAS) are the standards that publicly traded companies must apply if their headquarters are domiciled in the European Union.

IMF  
The International Monetary Fund, with headquarters in Washington, D.C., is a United Nations organization.

Interest rate swap  
An interest rate swap is an agreement between two contractual parties to exchange various interest payments. Thus, a company can transform a variable interest item into a fixed interest item and vice-versa.

KRAS  
A biomarker that can show whether a patient with metastatic colorectal carcinoma is likely to respond to EGFR antibody therapy. This is done by testing the status of the KRAS gene in the tumor to see if it is normal (wild type) or abnormal (mutant). The KRAS acronym stands for Kirsten Rat Sarcoma.

LED  
A light-emitting diode (LED) is an electronic semiconductor device. When an electric current passes through it in the flow direction, it emits visible light, infrared radiation (IR diode) or ultraviolet radiation (UV diode). The wavelength of this depends on the semiconductor material used and the doping level.

Liquid Crystals (LC)  
These specialty chemicals are used in LC displays (LCD), for example, in flat-panel televisions, notebooks, mobile telephones, etc.

LTIR  
Lost time injury rate: indicator for workplace safety. The number of workplace accidents with one or more days of lost time per million hours worked.
Lupus erythematosus (LE) → An autoimmune disease linked to inflammatory rheumatic disease and classified as a collagen disease. There are two main types: lupus of the skin, and systemic lupus erythematosus (SLE). It may affect other organ systems apart from the skin and joints, e.g. the kidneys in lupus nephritis (LN).

Monoclonal antibodies → Highly specialized targeted antibodies synthesized using biotechnological methods. What makes them special is their ability to activate the body’s natural mechanisms to fight disease. Monoclonal antibodies have mainly been used for cancer treatment and to suppress adverse immune responses.

MUC1 → Also known as PEM (polymorphic epithelial mucin), MUC1 is a glycoprotein group mucin embedded in cell membranes and occurring in all human organs. The MUC1 mucin is an established tumor marker. In oncology, this tumor marker is the starting point for several new cancer therapies.

Multi-currency credit facility → A contract between a company and a bank (or several banks) under which the bank gives the company the possibility to access a predefined amount of money at certain conditions. Depending on the agreement, payment can be made in different currencies.

Net current assets → Current assets less current liabilities.

Net present value → This parameter is based on the discounted cash flow method and is calculated as the sum of the discounted free cash flows over the projection period of a project. Consistent with the definition of the free cash flow, the weighted average cost of capital is used as the discount rate.

OLED → Organic light-emitting diodes. New technology for displays and lighting used, for example, in mobile telephones, MP3 players, and since recently also in televisions and lamps.

Organic growth → Organic growth is the part of a company’s growth that is not derived from acquisitions or currency effects.

Progression-free survival → In oncology, the amount of time between a patient’s enrollment in a clinical trial and disease progression or the patient’s death.

Provisions/reserves → Provisions are set aside for liabilities whose amount or maturity are uncertain. Reserves, on the other hand, are part of a company’s equity.

PS-VA → Polymer-stabilized vertical alignment: A polymer layer pre-aligns the molecules inside the display in a certain direction. In the black state, the liquid crystals are not exactly vertical, but slightly tilted. This allows the liquid crystals to switch more quickly. The light transmittance of the display is significantly higher, thus reducing the backlighting, one of the most costly components to produce.

Purchase price allocation → The purchase price allocation allows a company’s acquisition costs (purchase price) to be assigned to the tangible and intangible assets and liabilities that were acquired with it.
Randomized study → In medical research, randomization refers to the random assignment of subjects to treatment groups. The goal is to prevent the investigator from influencing the trial and to ensure that known and unknown influencing factors are distributed evenly across all groups.

REACH → REACH stands for the Registration, Evaluation, Authorization and Restriction of Chemicals. This is an EU regulation that entered into force in mid-2007.

Recurrent → In oncology, recurrent cancer means that the disease returns after it seems to have completely disappeared. This is often caused by the incomplete removal of the tumor.

Research spending ratio → Research spending as a proportion of the sales of the company or division.

Schistosomiasis → Schistosomiasis is a parasitic disease that is spread in warm lakes and ponds by snails that serve as intermediate hosts.

Tax rate → The tax rate indicates the percentage rate by which Group profit before tax is to be multiplied in order to calculate the theoretical tax expense.

Tax ratio → The tax ratio indicates the ratio of total taxes to profit before tax.

Total revenues → Sum of sales as well as royalty, license and commission income. Royalties are earned primarily through patents held by the Merck Serono division.

VCI → Verband der Chemischen Industrie (German Chemical Industry Association) represents the economic-political interests of 1,600 German chemical companies.
### Financial calendar for 2014

#### March
- **Thursday, 3/6/2014**: Annual Press Conference

#### May
- **Friday, 5/9/2014**: Annual General Meeting
- **Thursday, 5/15/2014**: Report on the first quarter

#### August
- **Thursday, 8/7/2014**: Report on the second quarter

#### November
- **Thursday, 11/13/2014**: Report on the third quarter
### Awards and recognitions

<table>
<thead>
<tr>
<th>Award/Recognition</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intersolar Award 2013</strong></td>
<td><strong>Excellent Supplier Award from TPK Touch Solutions Inc.</strong> for Innovative Photovoltaic Production Technologies in recognition of isishape® technology</td>
</tr>
<tr>
<td><strong>Europe Product Differentiation Excellence Award 2013 conferred by Frost &amp; Sullivan</strong></td>
<td><strong>BARC Best Practice Award conferred by the Business Application Research Center</strong> in recognition of exemplary methods and processes for implementing and improving universal databases and information services</td>
</tr>
<tr>
<td><strong>Chairman’s Award presented by the Associated Industries of Massachusetts</strong></td>
<td><strong>Stiefe Supplier Award from TPK Touch Solutions Inc.</strong> for Innovative Photovoltaic Production Technologies in recognition of isishape® technology</td>
</tr>
<tr>
<td><strong>PR Report Award 2013 (“Change Communication” category)</strong> for the cogent internal and external communications strategy</td>
<td><strong>Prestigious Supplier Award presented by “Paint &amp; Pintura” magazine</strong> to Merck in the “Best Supplier of Pearlescent Pigments” category</td>
</tr>
<tr>
<td><strong>Solar Industry Award 2013 (PV Materials Enabling Award category)</strong></td>
<td><strong>Stevie Awards (the American Business Awards competition)</strong> Europe Product Differ-entiation Excellence Award 2013 conferred by Frost &amp; Sullivan for the cutting-edge easypod® and cool.click®2 drug delivery devices for the treatment of endogenous growth hormone deficiency</td>
</tr>
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</table>

## Business Development 2009 – 2013

This overview may include historically adjusted values in order to ensure comparability with 2013.

<table>
<thead>
<tr>
<th>€ million</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Change in %</th>
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</thead>
<tbody>
<tr>
<td><strong>Earnings performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenues</td>
<td>7,747</td>
<td>9,291</td>
<td>10,276</td>
<td>11,173</td>
<td>11,095</td>
<td>-0.7</td>
</tr>
<tr>
<td>Sales</td>
<td>7,378</td>
<td>8,929</td>
<td>9,906</td>
<td>10,741</td>
<td>10,700</td>
<td>-0.4</td>
</tr>
<tr>
<td>Operating result (EBIT)</td>
<td>621</td>
<td>1,113</td>
<td>1,132</td>
<td>964</td>
<td>1,611</td>
<td>67.2</td>
</tr>
<tr>
<td>Margin (in % of sales)</td>
<td>8.4</td>
<td>12.5</td>
<td>11.4</td>
<td>9.0</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>EBITDA</td>
<td>1,625</td>
<td>2,457</td>
<td>2,731</td>
<td>2,360</td>
<td>3,069</td>
<td>30.0</td>
</tr>
<tr>
<td>Margin (in % of sales)</td>
<td>22.0</td>
<td>27.5</td>
<td>27.6</td>
<td>22.0</td>
<td>28.7</td>
<td></td>
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<tr>
<td>One-time items</td>
<td>-28</td>
<td>-88</td>
<td>7</td>
<td>-605</td>
<td>-184</td>
<td>-69.6</td>
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<tr>
<td>EBITDA pre one-time items</td>
<td>1,653</td>
<td>2,545</td>
<td>2,724</td>
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<tr>
<td><strong>Profit before tax</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>486</td>
<td>861</td>
<td>839</td>
<td>709</td>
<td>1,389</td>
<td>95.9</td>
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<td></td>
<td></td>
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<td></td>
<td>377</td>
<td>642</td>
<td>618</td>
<td>579</td>
<td>1,209</td>
<td>108.8</td>
</tr>
<tr>
<td><strong>Earnings per share (in €)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.68</td>
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<td>2.79</td>
<td>2.61</td>
<td>5.53</td>
<td>111.9</td>
</tr>
</tbody>
</table>

| **Asset position** | | | | | | |
| Total assets | 16,713 | 22,388 | 22,122 | 21,643 | 20,819 | -3.8 |
| Non-current assets | 11,181 | 16,724 | 15,723 | 15,017 | 13,434 | -10.5 |
| – of which intangible assets (incl. goodwill) | 7,598 | 12,484 | 11,764 | 10,945 | 9,867 | -9.8 |
| – of which property, plant and equipment | 2,608 | 3,241 | 3,113 | 2,954 | 2,647 | -10.4 |
| Current assets | 5,532 | 5,664 | 6,399 | 6,626 | 7,385 | 11.4 |
| – of which cash and cash equivalents | 541 | 944 | 938 | 730 | 981 | 34.4 |
| – of which trade accounts receivable | 1,789 | 2,296 | 2,328 | 2,115 | 2,021 | -4.4 |
| – of which inventories | 1,368 | 1,674 | 1,691 | 1,534 | 1,474 | -3.9 |
| Financial liabilities | 2,307 | 5,484 | 5,539 | 4,454 | 3,698 | -17.0 |
| – of which current | 705 | 356 | 1,394 | 1,091 | 440 | -59.6 |
| – of which non-current | 1,602 | 5,127 | 4,145 | 3,362 | 3,257 | -3.1 |
| **Equity** | | | | | | |
| | 9,514 | 10,372 | 10,494 | 10,415 | 11,069 | 6.3 |

| **Financial position** | | | | | | |
| Investments in intangible fixed assets | 97 | 104 | 80 | 144 | 110 | -24.0 |
| Investments in property, plant and equipment | 467 | 396 | 366 | 329 | 407 | 23.7 |
| **Business free cash flow** | 1,035 | 1,275 | 2,262 | 2,969 | 2,960 | -0.3 |
| Net financial debt | 263 | 4,484 | 3,484 | 1,926 | 307 | -84.1 |

| **Other key figures** | | | | | | |
| Equity ratio | 56.9 | 46.3 | 47.4 | 48.1 | 53.2 | | |
| Research and development | 1,345 | 1,397 | 1,514 | 1,511 | 1,504 | -0.5 |
| Dividend per share in € | 1.00 | 1.25 | 1.50 | 1.70 | 1.90 | 11.8 |
| Employees (number as of December 31) | 33,062 | 40,562 | 40,676 | 38,847 | 38,154 | -1.8 |

1 According to the cash flow statement
<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
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<th>2013</th>
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<td></td>
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<tr>
<td>Pre one-time</td>
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</table>

<table>
<thead>
<tr>
<th>Asset position</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>-10.5</td>
</tr>
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<td>12,484</td>
<td>11,764</td>
<td>10,945</td>
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<td>Property</td>
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<td>11.4</td>
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<td>Property</td>
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<td>944</td>
<td>938</td>
<td>730</td>
<td>981</td>
<td>34.4</td>
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<td>4,454</td>
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<td>Intangible</td>
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</tr>
<tr>
<td>Total assets</td>
<td>1,789</td>
<td>2,296</td>
<td>2,328</td>
<td>2,115</td>
<td>2,021</td>
<td>-4.4</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>1,368</td>
<td>1,674</td>
<td>1,691</td>
<td>1,534</td>
<td>1,474</td>
<td>-3.9</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>2,307</td>
<td>5,484</td>
<td>5,539</td>
<td>4,454</td>
<td>3,698</td>
<td>-17.0</td>
</tr>
<tr>
<td>Property, plant &amp; eq.</td>
<td>705</td>
<td>356</td>
<td>1,394</td>
<td>1,091</td>
<td>440</td>
<td>-59.6</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>1,602</td>
<td>5,127</td>
<td>4,145</td>
<td>3,362</td>
<td>3,257</td>
<td>-3.1</td>
</tr>
<tr>
<td>Property, plant &amp; eq.</td>
<td>9,514</td>
<td>10,372</td>
<td>10,494</td>
<td>10,415</td>
<td>11,069</td>
<td>6.3</td>
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<table>
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<tr>
<th>Equity</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>97</td>
<td>104</td>
<td>80</td>
<td>144</td>
<td>110</td>
<td>-24.0</td>
</tr>
<tr>
<td>Non-current</td>
<td>467</td>
<td>396</td>
<td>366</td>
<td>329</td>
<td>407</td>
<td>23.7</td>
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<tr>
<td>Current</td>
<td>1,035</td>
<td>1,275</td>
<td>2,262</td>
<td>2,860</td>
<td>2,960</td>
<td>-0.3</td>
</tr>
<tr>
<td>Intangible</td>
<td>263</td>
<td>4,484</td>
<td>3,484</td>
<td>1,926</td>
<td>307</td>
<td>-84.1</td>
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</tbody>
</table>

<table>
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<tr>
<th>Other key figures</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>56.9</td>
<td>46.3</td>
<td>47.4</td>
<td>48.1</td>
<td>53.2</td>
<td></td>
</tr>
<tr>
<td>Non-current</td>
<td>1,345</td>
<td>1,397</td>
<td>1,514</td>
<td>1,511</td>
<td>1,504</td>
<td>-0.5</td>
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<tr>
<td>Current</td>
<td>1.00</td>
<td>1.25</td>
<td>1.50</td>
<td>1.70</td>
<td>1.90</td>
<td>11.8</td>
</tr>
<tr>
<td>Intangible</td>
<td>33,062</td>
<td>40,562</td>
<td>40,676</td>
<td>38,847</td>
<td>38,154</td>
<td>-1.8</td>
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</table>
Information and Service

The Annual Report for 2013 was published in German and English. The report is also available as a navigable online version at [www.merckgroup.com/annualreport2013](http://www.merckgroup.com/annualreport2013).

More information about Merck can be found on the Web at [www.merckgroup.com](http://www.merckgroup.com) and in the brochures “Merck from 1668 until today – Exploring new horizons” and “The Merck Way”, which you may read or order at [www.merckgroup.com/publications](http://www.merckgroup.com/publications).

You can order all publications from Group Communications, Merck KGaA, 64271 Darmstadt [comms@merckgroup.com](mailto:comms@merckgroup.com)

Merck KGaA, Group Communications
Frankfurter Strasse 250, 64293 Darmstadt, Germany
Telephone: +49 (0) 6151-72 0
Fax: +49 (0) 6151-72 5577
E-Mail: comms@merckgroup.com
Website: [www.merckgroup.com](http://www.merckgroup.com)

Concept and design
Strichpunkt, Stuttgart/Berlin
www.strichpunkt-design.de

Photos
Steffen Jänicke (p. 2, 6–7)
Leif Schmodde (Cover, p. 16–17, 24–25)
Corbis (p. 14–15, 26–27)
Getty (p. 18–19)
Bob Fraher (p. 20–21, 28)
Thomas Ernsting (p. 22–23)

Paper: Heaven42, Olin
Printing: Franz Kuthal GmbH & Co. KG
www.merckgroup.com
Redacted pursuant to Merck KGaA's request for confidentiality
ANNEX 03
Informationen zur Marke 45659, Stand 04.03.2013

[-----] Datenbestand: DE
[111] Registernummer: 45659
[210] Altes Aktenzeichen: M4119
[540] Wiedergabe der Marke: Merck
[550] Markenform: Wortmarke
[571] Markenbeschreibung: <ja>

[-----] Seniorität:

<table>
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<th>Datum</th>
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<td>04.01.2002</td>
<td>283986</td>
</tr>
</tbody>
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[220] Anmeldetag: 11.01.1900
[151] Tag der Eintragung im Register: 24.09.1900

[730] Inhaber: Merck KGaA, 64293 Darmstadt, DE
[750] Zustellanschrift: Merck KGaA Markenschutz, 64271 Darmstadt

[511] Klasse(n) Nizza: 05, 01, 02, 03, 04, 33
[141] Löschdatum: 01.08.2009

[-----] Aktenzustand: Marke gelöscht


[-----] Internationale Registrierungen:

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<th>Datum</th>
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<td>31.01.1964</td>
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[450] Tag der Veröffentlichung: 31.07.1953

[510] Waren-/ Dienstleistungsverzeichnis:

| Klasse(n) Nizza: 01, 02, 03, 04, 05, 33

Begriffe: Arzneimittel und Verbandstoffe für Menschen und Tiere, Verbandwatten und -Mulle, Tier- und Pflanzenvertilgungsmittel, Desinfektionsmittel, Drogen aus dem Pflanzenreich, nämlich Kräuter, Wurzeln, Stengel, Stammteile, Blätter, Blüten und Früchte und Teile derselben, Alkaloiode, ätherische und fette Öle, Harze, Gummiharze, sowie alle aus Pflanzen darstellbaren Präparate, Drogen aus dem Tierreich, nämlich Moschus, Bibergeil, Lebertran, Organextrakte, Heilsera und Bakteriengifte; chemische Präparate für die Parfümeriebranche, Galvanoplastik (soweit in Klasse 01 enthalten), Firnis- und Ölindustrie, Textilindustrie, Gährungszwecke, Gerberei und Färbererei, Likörfabrikation; chemische Präparate für wissenschaftliche synthetische Zwecke, Präparate für Mikroskopie und bakteriologische Zwecke, physiologisch chemische Präparate aus dem Tier- und Pflanzenreich, Mineralien und mineraleiche Rohstoffe (soweit in Klasse 01 enthalten), sowie die daraus dargestellten Salze
Verfahrensdaten

Anmeldeverfahren
[-----] Verfahrensart: Anmeldeverfahren
[-----] Verfahrensstand: Marke eingetragen
[-----] EDV-Erfassungstag : 24.09.1900

Widerspruchsverfahren
[-----] Verfahrensart: Widerspruchsverfahren
[-----] Verfahrensstand: Marke nicht gelöscht
[-----] EDV-Erfassungstag : 24.09.1900

Verlängerung
[-----] Verfahrensart: Verlängerung
[-----] Verfahrensstand: Schutzdauer der Marke verlängert
[-----] EDV-Erfassungstag : 16.07.1999

Seniorität
[-----] Verfahrensart: Seniorität
[-----] Verfahrensstand: Seniorität erfasst
[-----] EDV-Erfassungstag : 28.11.2001
[-----] Seniorität:

<table>
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<th>Datum</th>
<th>Aktenzeichen</th>
</tr>
</thead>
<tbody>
<tr>
<td>04.01.2002</td>
<td>283986</td>
</tr>
</tbody>
</table>

Umschreibung - Rechtsübergang
[-----] Verfahrensart: Umschreibung - Rechtsübergang
[-----] Verfahrensstand: Umschreibung abgeschlossen
[-----] EDV-Erfassungstag : 03.12.2001
[-----] Eingangstag des Antrags: 30.04.2001
[730] Inhaber: Merck KGaA, 64293 Darmstadt, DE
[750] Zustellanschrift: Merck KGaA Markenschutz, 64271 Darmstadt
[-----] Frühere Zustellanschrift: Merck KGaA CLIP/TRADEMARKS, Frankfurter Str. 250, 64293 Darmstadt

Löschung Antrag Inhaber
[-----] Verfahrensart: Löschung Antrag Inhaber
[-----] Verfahrensstand: Marke gelöscht
[-----] EDV-Erfassungstag : 01.06.2010
[-----] Markenblatt: 26/2010
[-----] Veröffentlicht in Teil : 5f
[-----] Rechtsgrund: Löschung nach § 47
[-----] Wirkungsdatum : 01.08.2009
[-----] Veröffentlichungsdatum: 02.07.2010
ANNEX 04
Wortlaut der Marke: MERCK
Nummer der Marke: 000283986
Markenbasis: GM
Eingangsdatum: 28/03/1996
Anzahl der Ergebnisse: 1 von 1

Bitte stellen Sie einen Antrag auf Akteneinsicht.

Marke
Anmeldetag: 01/04/1996
Tag der Eintragung: 22/02/1999
Ablaufdatum: 01/04/2016

Nizzaer Klassifikation:
1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 16, 17, 19, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42

Marke: Einzelmarke
Art der Marke: Wortmarke
Erlangte Unterscheidungskraft: Nein
Verfahrensstand der Marke: Eingetragen

Veröffentlichung der Eintragung
Glossar
Veröffentlichungen B1 oder Veröffentlichungen B2
Statusverlauf

Erste Sprache: Deutsch
Zweite Sprache: Englisch

Graphische Wiedergabe
Keine Angabe unter der Anmeldenummer: 000283986.

Nizzaer Klassifikation:
Verzeichnis der Waren und Dienstleistungen
1 Chemische Erzeugnisse für gewerbliche, wissenschaftliche, photographische, land-, garten- und forstwirtschaftliche Zwecke; Kunsthärze im Rohzustand, Kunststoffe im Rohzustand; Düngemittel; Feuerlöschmittel; Mittel zum Härten und Löten von Metallen; chemische Erzeugnisse zum Frischhalten und Haltbarmachen von Lebensmitteln; Gerbmittel; Klebstoffe für gewerbliche Zwecke.

2 Farben, Firnisse, Lacke; Rostschutzmittel, Naturharze im Rohzustand; Blattmetalle und Metalle in Pulverform für Maler, Dekorateure, Drucker und Künstler.

3 Wasch- und Bleichmittel; Putz-, Polier-, Fettentfernungs- und Schleifmittel; Seifen; Parfümerien, ätherische Öle, Mittel zur Körper- und Schönheitspflege, Haarwasser; Zahnputzmittel.

4 Technische Öle und Fette; Schmiermittel; Staubabsorbierungs-, Staubbeseitigungs- und Staubbindemittel; Brennstoffe (einschließlich Motorentreibstoffe) und Leuchtstoffe; Kerzen, Dochte.

5 Pharmazeutische und veterinärmedizinische Erzeugnisse sowie Praparate für die Gesundheitspflege; diätetische Erzeugnisse für medizinische Zwecke, Babykost; Pflaster, Verbundmaterial; Zahnhüllmittel und Abdunkermassen für zahnärztliche Zwecke; Desinfektionsmittel; Mittel zur Vertilgung von schädlichen Tieren; Fungizide, Herbizide.

6 Unedle Metalle und deren Legierungen; Baumaterialien

http://oami.europa.eu/CTMOnline/RequestManager/de_Detail_NoReg
04.03.2013
<table>
<thead>
<tr>
<th>Dienstleistungen</th>
<th>Nizzaer Klassifikation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dienstleistungen aus Metall; transportable Bauten aus Metall; Schienenbaumaaterial aus Metall; Kabel und Drähte aus Metall (nicht für elektrische Zwecke); Schlosserwaren und Kleineisenwaren; Metallrohre; Geldschränke; Waren aus Metall, soweit in Klasse 6 enthalten; Erze.</td>
<td>7</td>
</tr>
<tr>
<td>Maschinen für die Metall-, Holz-, Kunststoffverarbeitung, Maschinen für die chemische Industrie, die Landwirtschaft, den Bergbau, Baumaschinen, Verpackungsmaschinen.</td>
<td></td>
</tr>
<tr>
<td>Wissenschaftliche, Schifahrts-, Vermessungs-, elektrische, photographische, Film-, optische, Wäge-, Mess-, Signal-, Kontroll-, Rettungs- und Unterrichtsapparate und -instrumente; elektrische Apparate und Instrumente (soweit in Klasse 9 enthalten); Geräte zur Aufzeichnung, Übertragung und Wiedergabe von Ton und Bild; Magnetaufzeichnungsträger, Schallplatten; Verkaufsautomaten und Mechaniken für geldbetätigte Apparate; Registrierkassen, Rechenmaschinen, Datenverarbeitungsgeräte und Computer; Feuerlöschergeräte.</td>
<td>9</td>
</tr>
<tr>
<td>Instrumente und Apparate, künstliche Gliedmaßen, Augen und Zähne; orthopädische Artikel; chirurgisches Nahtmaterial.</td>
<td>10</td>
</tr>
<tr>
<td>Beleuchtungs-, Heizungs-, Dampferzeugungs-, Koch-, Kühl-, Trocken-, Lüftungs- und Wasserleitungsgeräte sowie sanitäre Anlagen.</td>
<td>11</td>
</tr>
<tr>
<td>Papier, Pappe (Karton) und Waren aus diesen Materialien, soweit in Klasse 16 enthalten; Druckereierzeugnisse; Buchbinderteile; Photographien; Druckwaren; Klebstoffe für Papier- und Schreibwaren oder für Haushaltszwecke; Künstlerbedarfartikel; Pinsel; Schreibmaschinen und Bürotischartikel (ausgenommen Möbel); Lehr- und Unterrichtsmittel (ausgenommen Apparate); Verpackungsmaterial aus Kunststoff, soweit in Klasse 16 enthalten; Spielkarten; Drucklettern; Druckstücke.</td>
<td>16</td>
</tr>
<tr>
<td>Kautschuk, Guttapercha, Gummi, Asbest, Glimmer und Waren daraus, soweit in Klasse 17 enthalten; Waren aus Kunststoffen (Halbfabrikate); Dichtungs-, Packs- und Isoliermaterial; Schläuche (nicht aus Metall).</td>
<td>17</td>
</tr>
<tr>
<td>Baumanalern (nicht aus Metall); Rohre (nicht aus Metall) für Bauzwecke; Asphalt, Pech und Bitumen; transportable Bauten (nicht aus Metall); Denkmäler (nicht aus Metall).</td>
<td>19</td>
</tr>
<tr>
<td>Fleisch, Fisch, Geflügel und Wild; Fleischextrakte; konserviertes, getrocknetes und gekochtes Obst und Gemüse; Gallerien (Gelee), Konfitüren; Fruchtsäften; Eier, Milch und Milchprodukte; Speiseöl und -fette.</td>
<td>20</td>
</tr>
<tr>
<td>Kaffee, Tee, Kakao, Zucker, Reis, Tapioka, Sago, Kaffee-Ersatzmittel, Mehl und Getreidepräparate, Brot, feste Backwaren und Konditorewaren, Speisezeiten; Honig, Melaseserup; Hefe, Backpulver; Salz, Senf; Essig, Saucen (Würzmittel); Gewürze; Kühleis.</td>
<td>29</td>
</tr>
<tr>
<td>Land-, garten- und forstwirtschaftliche Erzeugnisse sowie Samenkörner, so weit in Klasse 31 enthalten; lebende Tiere; frisches Obst und Gemüse; Sämereien; lebende Pflanzen und natürliche Blumen; Futtermittel, Malz.</td>
<td>30</td>
</tr>
<tr>
<td>Biere; Mineralwasser und kohlensäurehaltige Wasser und andere alkoholfreie Getränke; Fruchtgetränke und Fruchtsäfte; Sirupe und andere Präparate für die Zubereitung von Getränken.</td>
<td>31</td>
</tr>
<tr>
<td>Alkoholische Getränke (ausgenommen Biere).</td>
<td>32</td>
</tr>
<tr>
<td>Werbung; Geschäftsführung; Unternehmensverwaltung; Büroarbeiten.</td>
<td>35</td>
</tr>
<tr>
<td>Versicherungswesen; Finanzwesen; Geldgeschäfte;</td>
<td>36</td>
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</table>
Dienstleistungen

Nizzaer Klassifikation: 37
Verzeichnis der Waren und Dienstleistungen: Immobilienwesen.

Nizzaer Klassifikation: 38
Verzeichnis der Waren und Dienstleistungen: Telekommunikation.

Nizzaer Klassifikation: 39
Verzeichnis der Waren und Dienstleistungen: Bauwesen; Reparaturwesen; Installationsarbeiten.

Nizzaer Klassifikation: 40
Verzeichnis der Waren und Dienstleistungen: Transportwesen; Verpackung und Lagerung von Waren; Veranstaltung von Reisen.

Nizzaer Klassifikation: 41
Verzeichnis der Waren und Dienstleistungen: Materialbearbeitung.

Nizzaer Klassifikation: 42
Verzeichnis der Waren und Dienstleistungen: Erziehung; Ausbildung; Unterhaltung; sportliche und kulturelle Aktivitäten.

Beschreibung der Marke:

Inhaber

Name: Merck KGaA
Nummer: 126
Natürliche/juristische Person: juristische Person
Anschrift: Frankfurter Str. 250
Stadt: Darmstadt
Staat: DEUTSCHLAND
Korrespondenzanschrift: Merck KGaA Frankfurter Str. 250 D-64293 Darmstadt ALEMANIA
Telefon-Nummer: 00 49-6151724590
Fax: 00 49-6151723378

Vertreter

Name: Diana Schmerler
Nummer: 36497
Firmenname: Merck KGaA
Art: 5 - Angestellter
Anschrift: Frankfurter Str. 250
Postleitzahl: 64293
Stadt: Darmstadt
Staat: DEUTSCHLAND
Korrespondenzanschrift: Merck KGaA Diana Schmerler Frankfurter Str. 250 D-64293 Darmstadt ALEMANIA
Telefon-Nummer: 00 49-6151722681
Fax: 00 49-6151723378
E-Mail: diana.schmerler@merck.de

Seniorität

Staat: DEUTSCHLAND
Eintragungsnummer: 45659
Verfahrensstand: Angenommen
Anmeldetag: 11/01/1900
Datum des Zugeständnis: 24/09/1900

Staat: DEUTSCHLAND
Eintragungsnummer: 694178
Verfahrensstand: Angenommen
Anmeldetag: 29/04/1955
Datum des Zugeständnis: 24/08/1956

Staat: DEUTSCHLAND
Eintragungsnummer: 1077176
Verfahrensstand: Angenommen
Anmeldetag: 19/03/1981
Datum des Zugeständnis: 20/05/1985

Staat: DEUTSCHLAND
Eintragungsnummer: 990951
Verfahrensstand: Angenommen
Anmeldetag: 02/04/1979
Datum des Zugeständnis: 26/09/1979

Staat: DEUTSCHLAND
Eintragungsnummer: 1016711
Verfahrensstand: Angenommen
Anmeldetag: 02/04/1979
Datum des Zugeständnis: 13/04/1981
Staat: DEUTSCHLAND
Eintragungsnummer: 692106
Verfahrensstand: Angenommen
Anmeldetag: 29/04/1955
Datum des Zugeständnis: 26/06/1956

Staat: DEUTSCHLAND
Eintragungsnummer: 464877
Verfahrensstand: Angenommen
Anmeldetag: 08/02/1934
Datum des Zugeständnis: 09/04/1934

Staat: DEUTSCHLAND
Eintragungsnummer: 1120558
Verfahrensstand: Angenommen
Anmeldetag: 14/08/1987
Datum des Zugeständnis: 13/04/1988

Ausstellungsriorität
Keine Angabe unter der Anmeldenummer: 000283986

Priorität
Keine Angabe unter der Anmeldenummer: 000283986.

Umwandlung der Internationalen Eintragung
Keine Angabe unter der Anmeldenummer: 000283986.

Veröffentlichung
Nr. des Blatts für Gemeinschaftsmarken: 1998/054
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Teil: A.1

Nr. des Blatts für Gemeinschaftsmarken: 1999/029
Tag der Veröffentlichung: 12/04/1999
Teil: B.2

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Tag der Veröffentlichung: 10/07/2006
Teil: D.1

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Tag der Veröffentlichung: 28/07/2010
Teil: C.1.3

Nr. des Blatts für Gemeinschaftsmarken: 2010/208
Tag der Veröffentlichung: 05/11/2010
Teil: C.2.2

Widerspruch
Keine Angabe unter der Anmeldenummer: 000283986.

Löschung
Keine Angabe unter der Anmeldenummer: 000283986

Beschwerden
Keine Angabe unter der Anmeldenummer: 000283986.

Sonstige Eintragungen
Rubrik: Inhaber
Unterrubrik: Änderungen von Namen und Anschrift
Nummer: 004947241
Nr. des Blatts für Gemeinschaftsmarken: 2010/138
Tag der Veröffentlichung: 28/07/2010
Teil: C.1.3

Rubrik: Vertreter
Unterrubrik: Wechsel von Vertretern
Nummer: 005173565
Nr. des Blatts für Gemeinschaftsmarken: 2010/208
Tag der Veröffentlichung: 05/11/2010
Teil: C.2.2

Rubrik: Vertreter
Unterrubrik: Wechsel von Vertretern
Nummer: 000266604
Rubrik: Vertreter
Unterrubrik: Wechsel von Vertretern
Nummer: 000381908

Verlängerungen

Keine Angabe unter der Anmeldenummer: 000283986.

Harmonisierungsamt für den Binnenmarkt (Marken, Muster und Modelle)
Avenida de Europa 4, E-03008 Alicante, Spain - Tel: +34 96 513 9400 - e-mail:
ПАТЕНТНО ВЕДОМСТВО НА РЕПУБЛИКА БЪЛГАРИЯ

РЕШЕНИЕ № 58-ОМ
София, 09.12.2010 г.

Образувано е производство по постъпило на 05.10.2009 г. искане за определяне на марка „MERCK” – слоична с рег.№ 625 за общизвестна на територията на Република България.

ИДЕНТИФИКАЦИЯ НА МОЛИТЕЛЯ

Искане вх. № 70-00-12235 от 05.10.2009 г. за определяне на марка „MERCK” – слоична като общизвестна е подадено от MERCK-KGaA, Frankfurter Strasse 250, 64271 Darmstadt, Germany, чрез местен ПИС.

СЪЩНОСТ НА ИСКАНЕТО

Искането с вх. № 70-00-12235 от 05.10.2009 г. за признаване на общизвестност на марка „MERCK” – слоична е във връзка с подадено възражение по чл.366 от ЗМГО във връзка със заявка за национална регистрация на марка „Merkol” – слоична с вх.№ 102695, заявена от „ЗЛАТЕН МЕРКУРИЙ” ЕООД.

С писмо от 13.05.2010 г. молителя е уведомен, че съгласно чл.16, ал.2 от Наредбата за реда и начина за определяне в Патентно ведомство на марка като общизвестна и марка, подважа се с известност на територията на Република България в едномесечен срок от датата на получаване на съобщението е необходимо да уточни датата, от която счита марката си за общизвестна на територията на Република България. В писмото, молителят е уведомен, че между списъка на стоките от клас 05, цитирани в искането за обявяване на марка „Merck”, рег.№ 625 за общизвестна, и списъка на стоките от клас 05 в регистрацията на марката, има несъответствие. Във връзка с това на молелата е указано, изрично да уточни списъка на стоките от клас 05, за които се претендира общизвестност. Обърнато му е и внимание, че съгласно изискванията на чл.14, ал.3 от АПК, представените в рамките на административното производство доказателства следва да са на български език. При проверка на приложените към искането доказателства е установено, че те не са на български език и нямат представен превод. Едномесечен срок на молелата е предоставена възможност да представи превод на български език на доказателствата за общизвестност, от които желая да се ползва.

В писмото от 13.05.2010 г., молелата бе уведомен също така, че в предоставения му едномесечен срок има възможност да представи допълнителни доказателства, които да се ползват от Комисията при вземане на решение по настоящето искане.

В рамките на предоставения му едномесечен срок за отстраняване на недостатъците, молелата с писмо с вх.№ 70-00-12235 от 09.06.2010 г. представи отговор, в който:

- уточи датата, от която се претендира, че марка „MERCK” е общизвестна на територията на Република България, а именно – 01/09/2009 г.;

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- посочи, че претендираниятата общицестно следва да се разглежда към списъка на стоките в класове 01 и 05, за които марка "MERCK" с рег. № 625 е регистрирана.
- поиска на основание чл.35 и чл.36, ал.2 и 3 от АПК да му се предостави допълнителен срок за събиране на доказателства, които са релевантни и от важно значение за случая.

С писмо от 30.06.2010 г., заявители е информиран, че с цел изясняване на всички факти и обстоятелства по конкретния случай на основание чл.35 и чл.36, ал.2 и 3 от АПК му се предоставя възможност в тримесечен срок да представи допълнителни доказателства, които да се ползват от Комисията при вземане на решение за определяне на марка "MERCK" – словно като общицестно на територията на Република България за стоките от класове 01 и 05. В писмото, заявители отново са уведомени, че списъкът на стоките от класове 01 и 05, за който е регистрирана марка "MERCK" – словно с рег. № 625 е неясно формулиран и е необходимо неговото прецизиране.

С вх. № 70-00-12235/15.06.2010 г. са постъпили нови доказателства за използването на марка „MERCK“.
С вх. № 70-00-12235/25.06.2010 г. са постъпили още доказателства за използването на марка „MERCK“.
С вх. № 70-00-12235/23.07.2010 г. отново са постъпили доказателства за използването на марка „MERCK“.

В отговор на писмото от 30.06.2010 г. с вх. № 70-00-12235/27.07.2010 г. е постъпило становището на молителя във връзка с прецизиране на списъка на стоките от класове 01 и 05, за които се претендира общицестност. Според молителя, да се извърши прецизиране на стоките, за които марка „MERCK“ с рег. № 625, вчера е регистрирана и се ползва с правна закрила съгласно по-стара версия на МКСУ означава, че винаги ще съществува риск от ограничаване или излизане извън кръга на правната закрила, така, както та вчера е определена със защитен документ. Подобно изискване, според молителя би довело до правна несигурност и неоснователно засегане на интересите на притежателя на марката или съответно на трети лица. Така според молителя, законово регламентирано изискване е единствено стоките и/или услугите да се описват с термини по възможност съгласно терминологията, използвана в МКСУ. За по-голяма яснота, молителя е формулиран списък на стоките, за които се претендира общицестност както следва:

Клас 01: химически препарати за парфюмерийния бранш, главнопластиката, за производството на финис и масла, за дъбене на кожи за текстилни цели, за кожарство, за бояджийство, за производство на ликьори; химически препарати за научна и синтетична цел; микроскопски препарати, бактериологични препарати; химико-физиологични препарати за растения и животни; минерали и минерални суровини, като и произведени от тях соли;

Клас 05: лекарства и превързочни материали за хора и животни, превързочен палук (вата) и превързочна муселиноподобна памучна тъкан; алкапони, етерични и тъксти масла, смоли, гума и гутаперча, както и всички други препарати за медицински цели, изработени от растения; извлек на вещества за предназначение в медицината, а именно от треви (буляки), корени, стръккове, стъблени части, листа, цвет и плодове и части от тях; извлек на вещества от животински произход за предназначение в медицината, а именно миск, бибергай (вещество подобно на сирене, което се добавя от задните две търбици на бобрите), рибено масло, животински органи или екстракти от тях, лечебни серуми и бактерийни отрови; препарати за унищожаване на растения и животни.
Към отговора си от 27/07/2010 г., молителят е представил и още доказателства за използване на марка “MERCK”.
С вх.№ 70-00-12235/23.08.2010 г. са постъпили още доказателства за използването на марка „MERCK”.
С вх.№ 70-00-12235/15.09.2010 г. отново са постъпили доказателства за използването на марка „MERCK”.
В подаденото искане за определя на марка „MERCK” – словна с рег.№ 625 за общи известна на територията на Република България за стоки от класове 01 и 05 към дата 01/09/2009 г. са посочени следните действащи на територията на РБългария марки на фирмата MERCK-KGaA:
- CTM 2839986, словна, MERCK за класове 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 16, 17, 19, 32, 33, 35, 37, 38, 39, 41, 42;
- IR 547719, словна, MERCK за класове 02, 09, 10 с приоритет от 03.01.1990 г.;
- национална регистрация на марка № 8522, комбинирана, MERCK за класове 1, 2, 3, 4, 5 с приоритет от 03.06.1972 г.
В искането е подчертано, че фирменият име MERCK е от 1668 г., а търговската марка MERCK – от 1850 г. Посочено е, че в момента действат 560 търговски марки с лого MERCK в 159 страни в света, в четири съюза: Европейски съюз, Световната организация за интелектуална собственост, Африкански съюз по интелектуална собственост на френско говорящите страни, Южна Африка и английско говорящите страни. Отбелязано е също така, че фирмата MERCK KGaA има филиали в над 2/3 от цитираните 159 страни в света, като оборота й възлиза на 3,5 милиарда евро. Посочено е, че домейн-имената на MERCK KGaA &<merck.net> & <merck.org> са регистрирани на 02.03.1990 г. в WIPO.
Към искането са приложени следните доказателства в подкрепа на претенцията за общи известност на словна марка „MERCK” с рег.№ 625:
Приложение № 1: Клетвена декларация от д-р Волфганг Лозерт и г-н Улрих Фогер, действащи от името на Merck KGaA (представен е и превод на декларацията). Към нея са приложени следните документи:
1.1. Списък на страните по света, в които е регистрирана марка MERCK на името на Merck KGaA (представен е и превод);
1.2. Важни данни от историята на MERCK за периода 1668 - 1995 г. и 1996 - 2005 г. (представен е и превод);
1.3. Подбор от извлеченията от архивите, описващи продажбите на фармацевтични продукти на E.MERCK в градовете: Базел, Фра̀фурт ам Ма̀йн, Лондон, Цюрих, Щутгарт, Смиров, Ротердам, Париж, Санкт Петербург, Лозана, Дюседорф през годините: 1822-1831, 1840-1841, 1831-1844 (представен е и превод);
1.4. Подбор от извлеченията от годишните отчети за финансови години 1898/98, 1902/03, 1904/05, 1914, 1921, 1928, 1930, 1934 (представен е и превод);
1.5. Общи продажби на продукти с марката MERCK през 2002-2006 г. (представен е и превод);
1.6. Копия от рекламни материали с марка MERCK, отнасящи се до годините от 1950 до 2007 и за различни страни в света на различни езичи (представен е и превод);
1.7. Бюлетини рекламиращи нови продукти в Гърция, Франция, Финландия, Норвегия, Швеция, Холандия, Швейцария, Колумбия, Бразилия, Белгия, Еквадор през 1950-1970 г. (представен е и превод);
1.8. Стандартни рекламни брошури, използвани през 50-те години на миналия век на различни езичи (представен е и превод).

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1.9. Подбор от инструкции за използване, включени в опаковките на продуктите на MERCK, от различни години (1940 - 1963) и в различни страни (нямат представен превод);

1.10. Копия от информация за продуктите на MERCK на холандски (1909 г.), на италиански, датиращи от 60-те и 70-те години на минаващия век, а също така и от Азия (1935 г.) (няма представен превод);

1.11. Индекс на специалните продукти на MERCK и страните, в които те се разпространяват (60-те години на минаващия век) (няма представен превод);

1.12. Извлечения от медицинска научна литература, отбелязвайки предимствата на продуктите на MERCK (няма представен превод);

1.13. Извлечения от Аналиите на MERCK на немски (1887 г., 1892 г.), английски (1930 г.), италиански (1926 г.), руски (1893 г.) и френски (1937 г.) езии. Аналиите са разпространявани сред фармацевти, лекари и медицински специалисти. (няма представен превод);

1.14. Извлечение от указателя на MERCK от 1889 г. в САЩ, разпространяващо сред фармацевти и лекари и отразяващо различните международни награди, получените от MERCK за изключителни постижения и изяви в областта на продукти (няма представен превод);

Приложение № 2: Решение на административния съд на Центъра за арбитраж и посредничество на WIPO във връзка с домейн-имената на MERCK (представен е превод);

Приложение № 3: Библиографски справки на регистрирани по национален ред марки с притежател MERCK KGaA (per.№ 625 и per.№ 8522), както и удостоверения за подносяване срокът на действие на тези регистрации;

Приложение № 4: Копия от оферта (10.12.1996 г.) за доставяне на измерителна апаратурата за връзка и архивиране стойностите на показателите за качеството на питейна и отпадъчна вода от фирма MERCK;

Приложение № 5: Копия от проформа-фактура (24.01.1997 г.) за доставка на химикали и реактиви от фирма MERCK;

Приложение № 6: Копия от проформа-фактура (19.06.1997 г.) за доставка на химикали за диагностика в Института по неврология от фирма MERCK;

Приложение № 7: Копия от удостоверение, издадено от Националния център по метрология на 24.02.1998 г. на фирма Merck KGaA за одобрен тип съоръжение за измерване;

Приложение № 8: Копия от удостоверение, издадено Националния център по метрология на 04.11.1999 г. на фирма Merck KGaA за одобрен тип аналлизатор;

Приложение № 9: Копия от брошури, рекламации аналлизатори и средства за измерване на Merck KGaA;

Приложение № 10: Копия от приемо-предавателни протоколи (04.06.1999 г.) на ХЭИ - Кюстендил, Враца, Видин, Благоевград и СХЕИ за предоставяне на измерителна апаратурата и консумативи за нея – всички те произведени от Merck KGaA;

Приложение № 11: Копия на удостоверение издадено от Merck KGaA в уверение на това, че АКБАХИМ, София, България има право да дистрибуира, промотира и съхранява продуктите на фирмата като: реагенти, химикали, диагностика (представен е и превод на удостоверението);

Приложение № 12: Нотариално заверено копие на удостоверение от Merck KGaA в уверение на това, че за 2002 и 2003 г., управляваща на Аквамиум е утвърдено да преговаря и подписва необходимите документи свързани с доставка и цени на фармацевтични продукти, химикали и реактиви от името на Merck KGaA с Министерство на здравеопазването, Националната здравно-осигурителна каса и болниците в РБългария (представен е и превод);
Приложение № 13: Копие на информационен лист, издаден на 09.01.2003 г. за безопасност на продукта АЦЕТОН, произведен от Merck KGaA;
Приложение № 14: Копие от титулите страници на списание Хранително-вкусова промишленост бр.9/2004 г. и бр.12/2005 г., представляващи продукти на Merck KGaA;
Приложение № 15: Копие от титулите страници на списание Хранителна индустрия и търговия бр.2/2007 г., представляващи продукти на Merck KGaA;
Приложение № 16: Копия на Дипломи от Международния панаир – Пловдив от 26.09.2007 г. и 14.05.2009 г., издадени на фирма Merck KGaA за системи за контрол и анализ на води, както и листовки с указан начин на действие на посочените системи;
Приложение № 17: Библиографска справка на СТМ 283986 (представен е и превод);
Приложение № 18: Копие от писмо от Акваксим, София до Merck KGaA относно искания за доставки и пропорции-фактури за възложени поръчки от 28.11.2005 г. (представен е превод);
Приложение № 19: Копие от писмо с фактура от Merck KGaA до Акваксим, София, относно закупа № 01/32019342 от 12.09.1997 г. (представен е превод);
Приложение № 20: Копие от писмо с фактура от Merck KGaA до Акваксим, София, относно закупа № 01/32039619 от 14.07.1999 г. (представен е превод);
Приложение № 21: Копие от кампаниите „Храна и напитки – компаниите за бутановане на минерална вода", проведена през 2007 г., представляваща продуктите на Merck KGaA в България (представен е превод);
Приложение № 22: Фактури от 2009 и 2010 г. за изработка на рекламни материали и брошури с продуктите на Merck KGaA, както и мостри от тях;
Приложение № 23: Покана от Merck България за посещения на шанда на фирмата на изложение БУЛКОНТРОЛА 13-16 април 2010 г.;
Приложение № 24: Благодарствено писмо от Аргия АД за доброто сътрудничество с Merck-България и висока оценка на продукти, които те предлагат (25.03.2010 г.);
Приложение № 25: Препоръка от „Токула” болница София АД във връзка с доставените висококачествени химикали, реактиви и хранителни среди от фирма Merck (11.11.2009 г.);
Приложение № 26: Метод за определяне на Калий в течност на Калий на MERCK, адресирани до химическите лаборатории във връзка с опазване на околната среда;
Приложение № 27: Покана от Софарма АД за участие в теоретичен семинар, организиран на 08.06.2010 г. със сътрудничеството на MERCK, относно новостите предлагани от компаниацията във връзка с устойчивото опазване на околната среда и хората;
Приложение № 28: Копия на складови разписки за продукти на Merck KGaA, предоставени на Акваксим, София. Подбора от складови разписки е за периода 20.01.2009 г. − 22.10.2009 г.;
Приложение № 29: Копие от заключен на 16.02.2009 г. договор между „Областен диспансер за онкологични заболявания със стационар – Б.Търново” ЕООД и „Акваксим” ЕООД за доставка на медицински консумативи от фирма Merck KGaA;
Приложение № 30: Копие от заключен на 24.07.2009 г. договор между „СБАЛССЗ – Национална кардиологияща болница” ЕАД и „Акваксим” ЕООД за доставка на медицински издрели от фирма Merck KGaA;
Приложение № 31: Оценка на стойността на търговска марка MERCK към 05.07.2010 г. (представен е превод);

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Приложение № 32: Списък на регистрационите на марки на фирма Merck KGaAчески реда на Мадридската спогодба и Протокола към нея, като марки на Общността, както и на национален ред;
Приложение № 33: Оценка на стойността на търговска марка MERCK към 19.07.2010 г. – надлежно подписана и заверена с апостил (представен в превод);
Приложение № 34: Решение на Окръжен съд ИНЧЕОП (23.05.2008 г.) по дело 2007ГАА50589 – Съдебна забрана за използване на домейн имената „merckserono.com” и „merck-serono.com” (представен в превод);
Приложение № 35: Копия на фактури от 2010 г. за разработка и отпечатване на рекламни материали – химикали, листовки, хартиени чанти, диплами с лого и продуктите на Merck;
Приложение № 36: Копия на фактури от 15.07.2010 г., 10.08.2010 г. и 11.08.2010 г. за доставка от Мерк България на смес за анаеробна среда, тест набор за хлор с течни реагенти и кръвен агар;
Приложение № 37: Референция от 06.08.2010 г. за дългогодишно сътрудничество между НЕОХИМ АД и Мерк България;
Приложение № 38: Референция от 26.07.2010 г. за успешна колаборация на Ес енд Би Индустрий Минералс АД с Мерк България;

ПРЕЦЕНКА ЗА ДОПУСТИМОСТ НА ИСКАНЕТО

Искането е допустимо, тъй като отговора на изискванията на чл. 10 и чл. 12 от Наредбата за реда и начина за определяне в Патентното ведомство на марка като общиизвестна и марка, ползваща се с известност на територията на Република България. Към искането са приложени документ за платена такса и доказателствени материали.

ПРЕЦЕНКА ЗА ОСНОВАТЕЛНОСТ НА ИСКАНЕТО

След анализ на аргументите, изложени в искането за общиизвестност на марка „MERCK” – словна с рег.№ 625 и представените доказателства материали, се присъжествено следното:

1. Описание на обекта
Искането е за определяне на словна марка „MERCK” с рег.№ 625 за общиизвестна на територията на Република България за стоки от класове 01 и 05 към дата 01/09/2009 г.

2. Фактически и правни изводи
Представените доказателства следва да се пренесват от гледна точка на критерийте, посочени в чл.50а, ал.1 от Закон за марките и географските означения, които се вземат предвид при определяне на марка като общиизвестна / ползваща се с известност на територията на Република България, а именно:
- степен на известност или признаване на марката в съответната част от обществото, която обхваща действителните или потенциалните потребители на стоки и/или услуги, лицата, заети в съответната разпространителска мрежа и деловите кръгове, ангажирани с дадените стоки и/или услуги (т.нар. релевантен сектор или релевантен кръг от потребители);
- продължителност, степен и географска област на използване на марката;
- продължителност, степен и географска област на публично представяне на марката, в това число рекламиране, разгласяване или излагане на панаир и/или изложби на стоките и/или услугите, за което се използва марката;
- данни за успешно прилагане на правата върху марката, ако тя е регистрирана;
- стойността на марката.

2.1. Степен на известност или признаване на марката сред релевантния кръг от потребителите.

С марката "MERCK" се означават стоки, предлагани от компанията Merck KGaA, специализирана в производството на химични и фармацевтични продукти.

Изхождали от характера на стоките, за които се използва цитираната марка, релевантният обществен сектор включва: производители на фармацевтични и химични продукти; фармацевти; лекари; медицински специалисти; действителни или потенциални ползватели на фармацевтични и химични стоки; търговци на едро и дребно на фармацевтични и химични стоки; собственици на аптеки.

За степента на известност на марката "MERCK" сред релевантния потребителски кръг може да се съди от материали в Приложения 4, 5, 6, 10, 11, 12, 18, 19, 20. Цитираните приложения са копия от оферт, проформа-факти, приемо-предавателни протоколи, удостоверения за доставка на измервателна апаратура, химикали, реактиви, фармацевтични продукти от Merck KGaA чрез търговските представители в България до различни институции между които ХЕИ – Кюстендил, Враца, Видин, Благоевград, СХЕИ, Акваким. Офертите и проформа-фактурите са на стойност 7 378, 91 евро; 40 950, 00 DM и 7 650 DM. От приемо-предавателните протоколи е видно, че консумативните и реактивите, с които през 1999 г. са работили ХЕИ – Кюстендил, Враца, Видин, Благоевград, СХЕИ са произведени от Merck KGaA.

За известността на марката "MERCK" сред релевантния кръг на специалистите, може да се направи извод и от публикациите в специализирани печатни издания – Хранително-вкусова промишленост и Хранителна индустрия и търговия (Приложения 14 и 15). Прикреплението на марката "MERCK" и продукти, произведени от компанията Merck KGaA на титулните страници на цитираните издания предполага запознаването с марката и продуктите на широк кръг от специалисти в различните сфери на химическата и фармацевтична промишленост.

Приложение 26, представлява брошюра с описан метод за определяне на Калций с тест за Калций на MERCK, адресиран до химическите лаборатории във връзка с опазване на околната среда. Самият факт, че адресат на този метод са химическите лаборатории в РБългария, предполага запознаването на голяма част от релевантния сектор, както с марката "MERCK", така и с другите продукти на компанията и то в светлината на една твърде актуална тема на съвремието – опазването на околната среда.

Приложения 7 и 8 представляват копия от удостоверения, издадени от Националния център по метрология, София, удостоверяващи, че на основание положителните резултати от изпитването са одобрени фотометър и анализатор, произведени от Merck KGaA, като типове средства за измерване. Това показва признаването на високото качество на продуктите, произведени от компанията Merck KGaA, оценено не само от потребителите на техните продукти, а и от държавните институции на РБългария.

Приложения 37 и 38 са Референция за дългогодишно сътрудничество между НЕОХИМ и Мерк България (към момента официален представител на Merck KGaA, Germany) и Референция за успешна колаборация на Ес енд Би Индустрис Инлеранс АД с Мерк България. Приложение 24 и 25 представляват съответно благодарствено

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писмо от Аргрия АД за добро сътрудничество с Мерк България и препоръка от „Токува” бълчушца София АД във връзка с доставените висококачествени химикали, реактиви и хранителни среди от фирма Мерк. Цитираните доказателства, макар и направени в по-късни етап спрямо претендирания дата за общиизвестност и адресирани до производителя на продукти с марка “MERCK” - Merck KGaA, отразяват високата степен на известност и признаване на марката сред релевантния край потребители.

В приложените като доказателства към изисканото копие на складови разписки и договори за доставка на медицински консумативи фигурират голем брой продукти, произведени от Merck KGaA. Цитираните доказателства макар и за периода след датата на претендирания общиизвестност също отразяват реално постигнатата преди датата на изготвянето им висока степен на известност на марката “MERCK” сред релевантния край потребители.

Предвид изложеното, приложените доказателствени материали и информацията в тях биха могли да се приемат като релевантни по отношение на степен на известност или признаване на марката сред релевантния край потребители.

2.2. Продължителност, степен и географска област на използване на марката.

В Приложение 1.2. молителя е представил важни дати и данни от историята на MERCK за периода 1668 – 1995 г. От приложението е видно, че на 26 август 1668 г. Фридрих Якоб Мерк закупува “Engel-Apotheke” („Ангелската аптека”), където се смята и за началото на първата химическа и фармацевтична компания в свeta. По-късно през 1850 г. е основано търговското дружество E.Merck. Оттук насетне започва развитието на компанията, която към момента има клонове и подразделения в целия свят. Развитието на компаниите включва провеждане на собствени изследвания, разработване, производство и продажба както на лекарствени препарати, реактиви и химикали за хуманната и ветеринарната медицина, така и на препарати за химическата промишленост. Продажбите и известността на стоките с марка “MERCK” отговарят постоянно нарастващия интерес.

В изисканото си молителят е подчертал, че първата търговска марка “MERCK” датира от 1850 г. За Република България първата регистрация на марка “MERCK” е от 1955 г. и тя е на марка с рег.№ 625, която е и обект на настоящето производство. Регистрацията на марката е подновявана многократно и към момента срокът й на действие е до 18/07/2019 г.

В световен мащаб марката “MERCK” е регистрирана в 159 страни. Приложение 1.1. е списъкът на страните по света, в които е регистрирана марката с притежател Merck KGaA.

Коментираните в т. 2.1. доказателства могат да се разглеждат като релевантни и по този критерий, тъй като за използване в търговската дейност се приема всяко едно от представените в т. 2.1. действия, а именно търговия с продукти, носящи марка “MERCK”, както и представянето на такива продукти.

Коментираните доказателства свидетелстват, че периодът на използване на марката “MERCK” е достатъчно дълъг, за да придобие тя общиизвестност сред релевантните потребителски кръгове.

2.3. Продължителност, степен и географска област на публично представяне на марката, в т. ч. рекламиране, разгласяване или излагане на панаири и/или изложби на стоките/услугите, за които се използва марката.

Към доказателствата са приложени рекламни материали и факти за изработка на такива (Приложения 9 и 22), които се разпространяват по различни начини и сред различните потребителски кръгове на препарати, производство на компаниите Merck

КГаA. Марката “MERCK” заедно с търговското наименование на съответния продукт, е поставена на химикали, листовки, хартиени чанти, диплики, тефтери, календари, картонки, обложки на устни гардероби, използвани от лекари.

Разнообразието от форми на рекламни материали, които се разпространяват по различни начини, предполага широк кръг от потребители, които по един или друг начин възприемат информация както за марката “MERCK”, така и за другите продукти, произвеждани от компанията Merck KGаA.

Приложение 16 са копия на Дипломи от Международния панаир – Пловдив от 26.09.2007 г. и 14.05.2009 г., издадени на фирма Merck KGаA за системи за контрол и анализ на вода. Към приложението са представени и листовки с указания начин на действие на посочените системи. Макар, че дипломите са издадени на компанията Merck KGаA за системи, обозначенi с други марки, това може да бъде тълкувано като непрекъснато доказателство за интереса на молителя за непрекъснато присъствие на пазара и това с висококачествени продукти, оценени не само от специалисти в областта.

Приложение 21 е копие от кампанията „Учени и напитки – компании за бутулиране на минерална вода“, проведена през 2007 г. В рамките на кампанията са представени продуктите на компанията Merck KGаA, използвани при оборудването на лаборатории в компания за бутулиране на минерална вода. Констатирано е, че компанията е оборудвала 6 лаборатории в компания за бутулиране на минерална вода, като в тях е започнал и техен собствен аналитичен контроль (микробиологичен и химически). Двама клиенти на други компании са преминати изцяло към продукти на Merck KGаA, а други двама клиенти, прилагащи старите стандарти в продължение на повече от 15 години и използващи хранителни среди от други производители са преминали към стандарти ISO със съдед на Merck KGаA. Заключението е, че компанията поддържа утвърждаването си на българския пазар като иновационна компания, предлагаша висококачествени продукти. При представянето на продуктите заедно с търговските марки на съответните продукти, неизменно присъства и марката “MERCK”, обект на настоящото производство.

Освен това Merck KGаA поддържа и уеб страница http://www.merck.de, в която са представени продуктите на компанията, новини в областта на фармацевтична и химическата промишленост и други. На цитирания уеб страница неизменно присъства и марката, обект на настоящото искане. Това обстоятелство според Общата препоръка за разпоредби, касаещи закривата на общоприети марки, приета от Генералната асамблея на СОИС може да се приеме, като доказателство за публично представяне на марката “MERCK”.

От представените доказателства може да се направи извод, че марката „MERCK” е била представена и разгласявана до настоящия момент по различни пътища, достъпни до релевантните потребителски кригове.

2.4. Данни за успешно прилагане на правата върху марката.

Към настоящият момент марки “MERCK” са регистрирани в множество страни на всички континенти. Илюстрация на това твърдение е приложение 1.1., което е списък на страните по света, в която е регистрирана марка „MERCK” на името на Merck KGаA.

За успешното прилагане на правата върху марката свидетелстват и Решение на администрацията състав на Центъра за арбитраж и посредничество на WIPO във връзка с домейните имената на MERCK (Приложение 2) и Решение на Окържен съд ИНЧЕОН по дело 2007GAHAP5089 – Съдебна забрана за използване на домейн имене (Приложение 34). Ище по споровете е Merck KGаA, притежател на марката, обект на
настоящего производство. Съставите по двета спора са констатирали, че домейн имената „merck.net“, „merck.org“, „merckserono.com“ и „merck-serono.com“ са били регистрирани и използвани недобросъвестно от други лица с цел облашгодетстване от репутацията на MERCK.

Гореизложеното свидетелства, че компанията провежда активна политика за закрила чрез регистрация на права върху търговските знаци, с които обозначава продуктите си, което от своя страна е предпоставка както за тяхното използване, така и за упражняване на придобитите права.

2.5. Стоимост на марката.

Приложения 31 и 33 отразяват стойността на търговската марка MERCK. Оценката е направена от Дийна Шмерлер и Йонас Кърле, упълномощени представители на Merck KGaA. Съгласно представената оценка:

- името Merck KGaA за първи път се свързва с фармацевтични стоки през 1668 г. и използва като търговска марка през 1850 г., когато е основана компанията E.Merck;
- марката “MERCK” е придобила известност и слава по цял свят;
- стойността на търговската марка “MERCK” е най-малко 3 милиарда евро.

Цитираното до тук свидетелства за високата стойност на марката “MERCK”.

Във връзка с чл.14, ал.3 от АПК, съгласно който представените в рамките на административното производство доказателства следва да са представени на български език, непреведените документи са изключени от кръга на доказателствата по ispакето.

По отношение на претендираната общознаменост за стоките от клас 01: химически препарати за парфюмерийния бранш, големопластиката, за производството на фирнис и масла, за дъбене на кожи за текстилни цели, за кожарство, за бояджийство, за производство на ликьори; стоките от клас 05: превързочни материали за хора и животни, превързочен памук (вата) и превързочна муселиноподобна памучна тъкан, молителят не е представил доказателства, от които да се преценята дали и как марката „MERCK” се свързва с тях.

От така установената фактическа обстановка и анализ е видно, че представените доказателства материали могат да се приемат като достатъчно доказателство за определине на марка „MERCK” - сложна като общознаменост на територията на Република България за следните стоки:

Клас 01: химически препарати за научна и синтетична цел; микроскопски препарати, бактериологически препарати; химико-физиологически препарати за растения и животни; минерали и минерални суровини, както и произведени от тях съди;
Клас 05: лекарства; алкохоли, етерични и тъксти масла, смоли, гума и гутаперча, както и всички други препарати за медицински цели, изработени от растения; извлек на вещества за предназначение в медицината, а именно от трави (били), корени, стъркове, стъблени части, листа, цвят и плодове и части от тях; извлек на вещества от животински произход за предназначение в медицината, а именно миск, бибергайл (вещество подобно на сириен, което се добива от задните две търбички на бобрите), рибено масло, животински органи или екстракти от тях, лечебни съруми и бактерийни отрови; препарати за уничожаване на растения и животни.

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Въз основа на гореизложеното и на основание чл.506, ал.2 от ЗМГО, председателят на Патентно ведомство

РЕШЕНИЕ:

На основание чл. 506, ал.2 от ЗМГО марка „MERCK“ – словна, рег. № 625, с притежател Merck KGaA, да се определи като общоизвестна на територията на Република България към 01.09.2009 г. за следните стоки:

Клас 01: химически препарати за научна и синтетична цел; микроскопски препарати, бактериологични препарати; химико-физиологични препарати за растения и животни; минерали и минерални суровини, както и произведени от тях соли;

Клас 05: лекарства; алкалози, етерични и тлъстот масла, смоли, гума и гутаперча, както и всички други препарати за медицински цели, изработени от растения; извлек на вещества за предназначение в медицината, а именно от тъкани (били), корени, стръкове, стъблени части, листа, цвет и плодове и части от тях; извлек на вещества от животински произход за предназначение в медицината, а именно мис, бибергайл (вещество подобно на сируене, което се добива от задните две торбички на бобрите), рибено масло, животински органи или екстракти от тях, лечебни серуми и бактерийни отрови; препарати за ушицежаване на растения и животни.

На основание чл. 506, ал. 2 от ЗМГО да се отхвърли като неоснователно искането за определяне на марка „MERCK“ – словна, рег.№ 625, с притежател Merck KGaA, като общоизвестна на територията на Република България, към 01.09.2009 г. за следните стоки:

Клас 01: химически препарати за парфюмерийния бранш, галванопластика, за производството на фарис и масла, за дъбене на кожи за текстилни цели, за кожарство, за боядисване, за производство на ликьори;

Клас 05: превързочни материали за хора и животни, превързочен памук (вата) и превързочна муселиноподобна намучена тъкан.

На основание чл.506, ал. 6 от ЗМГО решениеето може да се обжалва в 14-дневен срок от съобщаването по реда на АПК пред Административен съд – град София.

ПРЕДСЕДАТЕЛ НА
ПАТЕНТНО ВЕДОМСТВО:

署名

Решение № 58-ОМ/09.12.2010 г. на Патентно ведомство

署名
PATENT OFFICE OF THE REPUBLIC OF BULGARIA

DECISION No 58-M
Sofia, 09.12.2010

Proceedings have been initiated with regard to a request filed on 05.10.1009 for recognition of a mark “MERCK”, word, reg. No 625 as well-known on the territory of the Republic of Bulgaria.

IDENTIFICATION OF THE PETITIONER

A request ref. No 70-00-12235 of 05.10.2009 for recognition of a mark “MERCK”, word, as well-known, was filed by MERCK KGaA, Frankfurter Strasse 250, 64271, Darmstadt, Germany, through a local IPA.

ESSENCE OF THE REQUEST

The request ref. No 70-00-12235 of 05.09.2009 for recognition of well-knownness of a mark “MERCK”, word, is with regard to an opposition filed under Article 36b of the LMGI with regard to an application for a national registration of a mark “Mercol”, word, ref. No 102695 applied for by GOLDEN MERCURY EOOD.

By a letter of 13.05.2010 the petitioner was notified that according to Article 16, paragraph 2 of the Regulation on the Order and Method for Determination at the Patent Office of a Mark as Well-Known and a Mark with Reputation on the Territory of the Republic of Bulgaria within a one-month term as of the date of receipt of the notification the same has to specify a date from which it considers its mark as well-known on the territory of the Republic of Bulgaria. In the letter, the petitioner was notified that there is nonconformity between the goods of class 05 cited in the request for recognition of the mark “Merck” reg. No 625 as well-known and the list of the goods of class 05 in the registration of the mark. With regard to that the petitioner was explicitly instructed to specify the list of the goods of class 05 for which well-knownness is claimed. Attention was also paid to it that according to the requirements of Article 14, paragraph 3 of the Administrative Procedure Code the evidences presented within the frames of the administrative proceedings should be in the Bulgarian language. It was ascertained during the verification of the evidences enclosed to the request that they are not in the Bulgarian language and no translation is presented. A possibility was provided to the petitioner to present within a one-month term a translation into Bulgarian of the evidences for well-knownness from of which it desires to make use.

In the letter of 13.05.2010, the petitioner was also notified that within the one-month term provided to it, it has a possibility to present also additional evidences that are to be used by the Commission in taking a decision on the present request.
Within the one-month term provided to it for eliminating the disadvantages, the petitioner submitted by a letter ref. No 70-00-12235 of 09.06.2010 a reply where:

- it specified the date from which it is claimed that a mark “MERCK” is well-known on the territory of the Republic of Bulgaria, namely, 01.09.2009;

- it pointed out that the claimed well-knownness should be considered to the list of goods in classes 01 and 05 for which a mark “MERCK” reg. No 625 is registered;

- it requested on the grounds of Article 35 and Article 36, paragraphs 2 and 3 of the ACP to be provided an additional term to it for gathering evidences being relevant and of an important significance to the case.

By a letter of 30.06.2010 the applicant was notified that with a view of clarifying all facts and circumstances on the specific case on the grounds of Article 35 and Article 36, paragraph 2 and 3 of the ACP it is provided a possibility to it to submit within a three-month term additional evidences that are to be used by the Commission in taking the decision for recognition of a mark “MERCK”, word, as well-known on the territory of the Republic of Bulgaria for the goods of classes 01 and 05. In the letter, the applicant was notified again that the list of goods of classes 01 and 05 for which a mark “MERCK”, word, was registered, reg. No 625, was formulated unclearly and needs to be specified.

By a letter ref. No 70-00-12235 of 15.10.2010 new evidences were submitted for the use of a mark “MERCK”.

By a letter ref. No 70-00-12235 of 25.06.2010 further evidences were submitted for the use of a mark “MERCK”.

By a letter ref. No 70-00-12235 of 23.07.2010 other evidences were submitted for the use of a mark “MERCK”.

In reply to the letter of 30.06.2010 ref. No 70-00-12235/27.07.2010, there was lodged the opinion of the petitioner with regard to specifying the list of goods of classes 01 and 05 for which well-knownness is claimed. According to the petitioner, specifying the goods for which a mark “MERCK” reg. No 625 has already been registered and enjoys legal protection according to an older version of the International Classification of Goods and Services, means that there will always be present a risk of limiting or going outside the scope of the legal protection the way as it has already been determined by the protection document. Such requirement according to the petitioner would bring forth legal uncertainty and unreasonable injury of the interests of the mark owner or of third parties respectively. Again, according to the petitioner, a statutory regulated requirement is that only the goods and/or services are to be described by terms, if possible, according to the terminology used in the ICGS. For greater clarity, the petitioner has formulated the lists of the goods for which well-knownness is claimed, as follows:

Class 1: Chemical preparations for the perfumery branch, electrotyping, for manufacturing of firmis and oils, for tanning of leathers for textile purposes, for leather-dressing, for dyeing, for manufacturing of liquors; chemical preparations for scientific and synthetic purpose; microscopic preparations, bacteriological preparations; chemical and
physiological preparations for plants and animals; minerals and mineral raw materials as well as salts thereof.

Class 05: Medicines and dressing materials for humans and animals, dressing cotton (cotton wool) and muslin-like cotton cloth; alkaloids, essential and fat oils, resins, rubber and gutta-percha as well as other preparations for medical purposes made of plants; extract of substances for use in medicine, namely of grass (herbs), roots, stalks, parts of stalks, leaves, blossom and fruits and parts thereof; extract of substances of animal origin for use in medicine; bibergeil (cheese-like substance which is produced from the two rear bags of beavers), fish oil, animal organs or extracts thereof, medicinal serums and bacterial poisons; preparations for extermination of plants and animals.

The petitioner enclosed to its reply of 27.10.2010 further evidences for the use of a mark “MERCK”.

By a letter ref. No 70-00-12235 of 23.08.2010 further evidences were submitted for the use of a mark “MERCK”.

By a letter ref. No 70-00-12235 of 15.09.2010 other evidences were submitted for the use of a mark “MERCK”.

In the request filed for recognition of a mark “MERCK”, word, reg. No 625 as well-known on the territory of the Republic of Bulgaria for goods of classes 01 and 05 as of the date 01.09.2009 the following marks of the company MERCK KGaA being valid on the territory of the Republic of Bulgaria are indicated:

- a CTM 2839986, word, MERCK for classes 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 16, 17, 19, 32, 33, 35, 37, 38, 39, 41, 42;

- an IR 547719, word, MERCK for classes 02, 09, 10 with priority of 03.01.1990;

- a national registration of a mark No 8522, word-and-design, MERCK for classes 1, 2, 3, 4, 5 with priority of 03.06.1972.

It is emphasized in the request that the company name dates back to 1668 and the trademark MERCK, to 1850. It is pointed out that at present there are 360 trademarks with the logo MERCK in 159 countries in the world in four unions: the European Union, the World Intellectual Property Organization, the African Intellectual Property Organization of the French-speaking countries, South Africa and the English-speaking countries. It is also stated that the company MERCK KGaA has subsidiaries in more than two thirds of the cited 159 countries in the world, its turnover amounting to Euro 3.5 billion. It is pointed out that the domain names of MERCK KGaA <merck.net> and <merck.org> were registered on 02.03.1990 with WIPO.

Enclosed to the request are the following evidences in support of the claim for well-knownness of a word mark “MERCK” reg. No 625:

Appendix No 1: An affidavit of Dr. Wolfgang Lozert and Mr. Ulrich Voger acting on behalf of Merck KGaA (a translation of the affidavit is submitted). The following documents are enclosed thereto:
1.1. A list of the countries in the world, where a mark MERCK was registered in the name of Merck KGaA (a translation is submitted);

1.2. Important data from the history of MERCK for the periods 1668-1995 and 1996-2005 (a translation is submitted);

1.3. Selection of the extracts from the archives describing the sales of pharmaceutical products of E. MERCK in the cities: Basel, Frankfurt am Mein, London, Zurich, Stuttgart, Smirna, Rotterdam, Paris, Sankt-Peterburg, Lausanne, Duesseldorf, during the years: 1822-1831, 1840-1841, 1831-1844 (no translation is submitted);

1.4. Selection of the extracts from the annual reports for financial years 1898/98, 1902/03, 1904/05, 1914, 1921, 1928, 1930, 1934 (no translation is submitted);

1.5. Total sales of products with the mark MERCK during 2002-2006 (no translation is submitted);

1.6. Copies of advertisement materials with the mark MERCK related to the years from 1950 till 2007 and for various countries in the world in various languages (no translation is submitted);

1.7. Bulletins advertising new products in Greece, France, Finland, Norway, Sweden, Holland, Switzerland, Columbia, Brazil, Belgium, Ecuador during 1950-1970 (no translation is submitted);

1.8. Standard advertisement brochures used during the 1950s in various languages (no translation is submitted);

1.9. Selection of instructions for use included in the packages of MERCK products of various years (1940-1963) and in various countries (no translation is submitted);

1.10. Copies of information about the products of MERCK in Dutch (1909), in Spanish, dating from the 1960s and 1970s as well as from Asia (1935) (no translation is submitted);

1.11. An index of the special MERCK products and the countries where they are distributed (1960s) (no translation is submitted);

1.12. Extracts from medical scientific literature denoting the advantages of the MERCK products (no translation is submitted);

1.13. Extracts from the MERCK Annals in German (1887, 1892), English (1930), Spanish (1926), Russian (1893) and French (1937). The annals were distributed along pharmacists, physicians and medical specialists (no translation is submitted);

1.14. An extract from the MERCK index of 1889 in the USA distributed among pharmacists and physicians and enumerating the various international awards received from MERCK for exclusive achievements and distinguished products (no translation is submitted);
Appendix No 2: Decision of the Administrative Panel of the WIPO Arbitration and Mediation Centre with regard to the MERCK domain-names (a translation is submitted);

Appendix No 3: Bibliographical references of nationally registered marks with owner MERCK KGaA (reg. No 623 and reg. No 8522) as well as certificates for renewal of the term of validity of these registrations;

Appendix No 4: A copy of an offer (10.12.1996) for delivery of measuring equipment for registering and archiving the values of indicators for quality of drinking and waste waters from the company MERCK;

Appendix No 5: A copy of a proforma-invoice (24.10.1997) for delivery of chemicals and reagents from the company MERCK;

Appendix No 6: A copy of a proforma-invoice (19.06.1997) for delivery of chemicals for diagnostics to the Institute of Neurology by the company MERCK;

Appendix No 7: A copy of a certificate issued by the National Centre of Metrology on 24.02.1998 to the company MERCK KGaA for an approved measuring appliance;

Appendix No 8: A copy of a certificate issued by the National Centre of Metrology on 04.11.1999 to the company MERCK KGaA for an approved type of analyzer;

Appendix No 9: Copies of brochures advertising analyzers and measuring appliance of MERCK KGaA;

Appendix No 10: Copies of delivery and acceptance protocols (04.06.1999) of the Hygienic and Epidemiological Inspectorate – Kyustendil, Vratza, Vidin, Blagoevgrad and the Sanitary and Hygienic and Epidemiological Inspectorate for provision of measuring equipment and supplied thereto, all of them manufactured by Merck KGaA;

Appendix No 11: A copy of a certificate issued by Merck KGaA certifying that AQUACHIM Sofia, Bulgaria, has the right to distribute, promote and store the company's products such as: reagents, chemicals, diagnostics (a translation of the certificate is also submitted);

Appendix No 12: A notarized copy of a certificate issued from Merck KGaA certifying that for 2002 and 2003 the Manager of Aquachim is authorized to negotiate and sign the necessary documents related to the delivery and prices of pharmaceutical products, chemicals and reagents on behalf of Merck KGaA with the Ministry of Health, the National Health Insurance Fund and the hospitals in Bulgaria (a translation is also submitted);

Appendix No 13: A copy of an information sheet issued on 09.01.2003 for safety of the product AZETONE manufactured by MERCK KGaA;

Appendix No 14: A copy of the title pages of the journal Hranitelno-vkusova promishlenost (Food, beverages and tobacco industries) issued 9/2004 and issue 12/2005 presenting MERCK KGaA products;
Appendix No 15: A copy of the title pages of the journal Hranitelna industriya i targoviya (Food-processing industry and trade) issue 2/2007 presenting Merck KGaA products;

Appendix No 16: Copies of Diplomas from the Plovdiv International Fair of 26.09.2007 and 14.05.2009 issued to the company MERCK KGaA for water control and analysis systems as well as leaflets indicating the method of operation of the said systems;

Appendix No 17: Bibliographical reference of a CTM 283986 (a translation is submitted);

Appendix No 18: A copy of a letter from Aquachim, Sofia, to Merck KGaA concerning requests for deliveries and proforma-invoices for placed orders of 28.11.2005 (a translation is also submitted);

Appendix No 19: A copy of a letter with an invoice from Merck KGaA to Aquachim, Sofia, concerning an offer No 1/32019342 of 12.09.1997 (a translation is submitted);

Appendix No 20: A copy of a letter with an invoice from MERCK KGaA to Aquachim, Sofia, concerning an offer No 01/32039619 of 14.07.1999 (a translation is submitted);

Appendix No 21: A copy of the campaign "Foods and drinks – Companies for Mineral Water Bottling" run in 2007, presenting the Merck KGaA products in Bulgaria (a translation is submitted);

Appendix No 22: Invoices of 2009 and 2010 for producing advertisement materials and brochures with the Merck KGaA products as well as samples thereof;

Appendix No 23: An invitation from Merck Bulgaria to visit the company's stand at the exhibition BULGARKONTROLA 13th – 16th April, 2010;

Appendix No 24: A letter of gratitude from Agria AD for the good cooperation with Merck Bulgaria and a high evaluation of the products offered by them (25.03.2010);

Appendix No 25: A recommendation from Tokuda Hospital Sofia AD with regard to the high-quality chemicals, reagents and nutritional media delivered by the company MERCK (11.11.2009);

Appendix No 26: A method for determination of calcium by a MERCK Calcium test addressed to the chemical laboratories with regard to environmental protection;

Appendix No 27: An invitation from Sopharma AD for participation in theoretical seminar organized on 08.06.2010 with the cooperation of MERCK concerning the novelties offered by the Company with regard to the sustained environmental and human protection;

Appendix No 28: Copies of warehouse receipts for Merck KGaA products provided to Aquachim, Sofia. The selection of warehouse receipts is for the period 20.01.2009 – 22.10.2009;

Appendix No 29: A copy of a contract between “District Out-Patient Ward for Oncological Diseases with Hospital – Veliko Tarnovo” EOOG and Aquachim EOOG for delivery of Medical Supplies from the company Merck KGaA;
Appendix No 30: A copy of a contract concluded on 24.07.2009 between “Specialized Hospital for Active Treatment of Cardiovascular Diseases – National Cardiologic Hospital” EAD and Aquachim EOOD for delivery of medical articles from the company Merck KGaA;

Appendix No 31: A value of the trademark MERCK as of 05.07.2010 (a translation is submitted);

Appendix No 32: A list of the registration of the company Merck KGaA marks under the provisions of the Madrid Agreement and the Protocol to it as Community Trademarks as well as under national provisions;

Appendix No 33: A value of the trademark MERCK as of 19.07.2010 duly signed and legalized by apostil (a translation is submitted);

Appendix No 34: Decision of the Incheon District Court (23.05.2008) on trial 2007GAHAP5089 – A writ of injunction for using the domain-names “merckserono.com” and “merck-serono.com” (a translation is submitted);

Appendix No 35: Appendix No 35: Copies of invoices of 2010 for designing and printing of advertisement materials – pen-balls, leaflets, paper bags, folders with the MERCK logo and products;

Appendix No 36: Copies of invoices of 15.07.2010, 10.08.2010 and 11.08.2010 for delivery from Merck Bulgaria of a mixture for anaerobic medium, a test kit for chlorine with liquid reagents and blood agar;

Appendix No 37: A reference of 06.08.2010 for long-term cooperation between NEOCHIM AD and Merck Bulgaria;


ASSESSMENT OF ADMISSIBILITY OF THE REQUEST

The request is admissible since it meets the requirements of Article 10 and Article 12 of the Regulation on the Order and Method for Determination at the Patent Office of a Mark as Well-Known and a Mark with Reputation on the Territory of the Republic of Bulgaria. A document for a paid-in fee and evidential materials are enclosed to the request.

ASSESSMENT OF REASONABLENESS OF THE REQUEST

Following the analysis of the arguments stated in the request for well-knownness of a mark “MERCK”, word, reg. No 625 and the submitted evidential materials, the following was accepted as ascertained:

1. Description of the subject matter
The request is about recognition of the word mark "MERCK" reg. No 625 as well-known on the territory of the Republic of Bulgaria for goods of classes 01 and 05 as of the date 01.09.2009.

2. Actual and legal conclusions

The submitted evidences should be assessed from the point of view of the criteria stated in Article 50a, paragraph 1 of the Law on Marks and Geographical Indications, which are taken into consideration in recognizing a mark as well-known/with reputation on the territory of the Republic of Bulgaria, namely:

- degree of reputation or recognition of the mark in the relevant circle of the public, which covers the real or potential consumers of goods and/or services, the persons engaged in the relevant distribution network and the business circles engaged with the particular goods and/or services (the so-called relevant sector or relevant circle of consumers);

- duration, degree and geographical area of the mark use;

- duration, degree and geographical area of public presentation of the mark, including advertising, disclosure or exposition at fairs and/or exhibitions of the goods and/or services for which the mark is being used;

- data about successful application of the rights in the mark if it is registered;

- the value of the mark.

2.1. Degree of reputation or recognition of the mark among the relevant circle of consumers.

The mark "MERCK" is used for denoting goods offered by the company Merck KGaA specialized in the manufacturing of chemical and pharmaceutical products.

Proceeding from the character of the goods for which the cited mark is used, the relevant public sector includes: manufacturers of pharmaceutical and chemical products; pharmacists; physicians; medical specialists; real or potential users of pharmaceutical and chemical goods; wholesale and retail merchants of pharmaceutical and chemical goods; owners of pharmacies.

For the degree of reputation of the mark "MERCK" among the relevant circle of consumers, one can judge from materials in Appendices 4, 5, 6, 10, 11, 12, 18, 19, 20. The cited appendices are copies of offers, proforma-invoices, delivery and acceptance protocols, certificates for delivery of measuring apparatus, chemicals, reagents, pharmaceutical products from MERCK KGaA through the commercial representatives in Bulgaria to various institutions, among which are the Hygienic and Epidemiological Inspectorate – Kustendil, Vratza, Vidin, Blagoevgrad, Sanitary and Hygienic and Epidemiological Inspectorate, Aquachim. The offers and proforma-invoices amount to Euro 7,378.91; DM 40,950.00 and DM 7,650. It is seen from the delivery and acceptance protocols that the supplies and reagents with which the Hygienic and Epidemiological
Inspectorate – Kustendil, Vratza, Vidin, Blagoevgrad, Sanitary and Hygienic and Epidemiological Inspectorate were working in 1999, are manufactured by Merck KGaA.

About the reputation of the mark “MERCK” among the relevant circle of specialists, a conclusion may also be drawn from the publications in specialized printed editions – the journals Hranitelno-vkusova promishlenost and Hranitelnia industriya i targoviya (Appendices 14 and 15). The presence of the mark “MERCK” and products manufactured by the company Merck KGaA on the title pages of the cited editions assume that a wide circle of specialists in the various spheres of the chemical and pharmaceutical industry are to be acquainted with the mark and products.

Appendix No 26 represents a brochure with a described method for determination of calcium by a MERCK Calcium test addressed to the chemical laboratories with regard to environmental protection. The fact itself that the addressee of these methods is the chemical laboratories in the Republic of Bulgaria assumes that a great part of the relevant sector is to be acquainted both with the mark “MERCK” and the other products of the company in the light of quite an actual topic of the present day – environmental protection.

Appendices Nos. 7 and 8 represent copies of certificates issued by the National Centre of Metrology, Sofia, certifying that on the ground of the positive results of the test there have been approved a photometer and an analyzer manufactured by Merck KGaA as types of measuring appliances. This demonstrates the recognition of the high-quality of the products manufactured by the company Merck KGaA that is appreciated not only by the consumers of their products but also by the state institutions of the Republic of Bulgaria.

Appendices Nos. 37 and 38 are Reference for long-term cooperation between NEOCHIM AD and Merck Bulgaria (by present day, an official representative of Merck KGaA, Germany) and Reference for successful collaboration of S & B Industrial Minerals AD with Merck Bulgaria. Appendices 24 and 25 represent a letter of gratitude from Agria AD for good cooperation with Merck Bulgaria and a recommendation from Tokuda Hospital Sofia AD with regard to the high-quality chemicals, reagents and nutritional media delivered by the company MERCK. The cited evidences although prepared on a later dated towards the claimed date of well-knownness and addressed to the manufacturer of products with a mark “MERCK”, Merck KGaA, demonstrate the high degree of reputation and recognition of the mark among the relevant circles of consumers.

The copies of warehouse receipts and contracts for delivery of medical supplies enclosed as evidences to the request, list a great number of products manufactured by MERCK KGaA. The cited evidences although being for periods after the date of the claimed well-knownness also demonstrate the high degree of knownness of the mark “MERCK” achieved in fact prior to the date of their preparation, among the relevant circle of consumers.

With a view of the above stated, the enclosed evidential materials and the information contained therein may be accepted as relevant relative to a degree of reputation or recognition of the mark among the relevant circle of users.

2.2. Duration, degree and geographical area of the mark use.

In Appendix 1.2 the petitioner has submitted important dates and data from the history of MERK for the period 1668-1995. It is seen from the appendix that on 26th August, 1668
Friedrich Jacob Merck acquired "Engel-Apotheke" (Angel Pharmacy) which is also considered to be the beginning of the first chemical and pharmaceutical company in the world. Later on, in 1850 the commercial company E. Merck was founded. From here on started the development of the company which by present has subsidiaries and divisions all over the world. The development of the company includes carrying-out of their own research, development, manufacturing and sale both of medicinal preparations, reagents and chemicals for the human and veterinary medicine and of preparations for the chemical industry. The sales and reputation of the goods with the mark "MERCK" have been growing more and more since then.

In its request, the petitioner emphasized that the first trademark "MERCK" dates back to 1850. The first registration of the mark "MERCK" for the Republic of Bulgaria is from 1950 and it is of a mark reg. No 625 which is a subject matter of the present proceedings. The registration of the mark has been renewed many times and by present its term of validity is till 18.07.2019.

On a world scale, the mark "MERCK" is registered in 159 countries. Appendix 1.1 is the list of the countries in which the mark with an owner Merck KGaA is registered.

The evidences commented in item 2.1 may be treated as relevant under this criterion as well since each of the actions submitted in item 2.1 is accepted for use in the trade activity, namely trade with products bearing the mark "MERCK" as well as the presentation of such products.

The commented evidences certify that the period of use of the mark "MERCK" is long enough so that it acquired well-knownness among the relevant circles of consumers.

2.3. Duration, degree and geographical area of public presentation of the mark, including advertising, disclosure or exposition at fairs and/or exhibitions of the goods/services for which the mark is being used.

Enclosed to the evidences are advertising materials and invoices for their producing (Appendices 9 and 22) which are distributed by different means and among various circles of consumers of preparations manufactured by the company Merck KGaA. The mark "MERCK" along with the trade name of the corresponding product has been affixed to pen-balls, paper bags, folders, notebooks, calendars, cards, covers of notebooks with the prescriptions used by physicians.

The variety of forms of advertisement materials being distributed by various means assumes a wide circle of consumers which perceive in one or another way the information both about the mark "MERCK" and about the other products manufactured by the company Merck KGaA.

Appendix No 16 are copies of Diplomas from the Plovdiv International Fair of 26.09.2007 and 14.05.2009 issued to the company Merck KGaA for water control and analysis systems. Enclosed to the appendix are also leaflets indicating the method of operation of the said systems. Although the diplomas were issued to the company Merck KGaA for systems denoted by other marks it may be construed as an indirect evidence for the petitioner's interest in uninterrupted presence at the market even more by high-quality products appreciated not only by specialists in the field.
Appendix No 21 is a copy of the campaign “Foods and Drinks – Companies for Mineral Water Bottling” run in 2007. Within the frames of the campaign, there were presented the products of the company Merck KGaA used in equipping laboratories in companies for mineral water bottling. It was ascertained that the company has equipped 6 laboratories in companies for mineral water bottling, where their own analytical control started (microbiological and chemical). Two clients of other companies turned entirely to products of Merck KGaA, and other two clients applying old standard during more than 15 years and using nutritional media from other manufacturers turned to the ISO standards with a Merck KGaA medium. The conclusion from the run campaign made by Merck KGaA is the company maintains its establishment at the Bulgarian market as an innovative company offering high-quality products. On the presentation of the products along with the marks of the corresponding products, the mark “MERCK” being a subject matter of the present proceedings is present invariably.

Besides, MERCK KGaA maintains also a web-site http://www.merck.de which presents the company products, news in the field of the pharmaceutical and chemical industry and other. The mark being a subject matter of the present request is present invariably on the cited web-site. This circumstance according to the General Recommendation for Rules Concerning the Protection of Well-Known Marks adopted by the WIPO General Assembly may be accepted as an evidence for public presentation of the mark “MERCK”.

From the submitted evidences, there may be drawn a conclusion that the mark “MERCK” has been presented and disclosed until now by various ways accessible to the relevant circles of consumers.

2.4. Data about successful application of the rights in the mark.

By present, marks “MERCK” have been registered in a great number of countries on all continents. An illustration of this assertion is Appendix 1.1 - a list of the countries in the world in which the mark “MERCK” is registered in the name of Merck KGaA.

Evidences for the successful application of the rights in the mark are Decision of the Administrative Panel of the WIPO Arbitration and Mediation Centre with regard to the MERCK domain-names (Appendix No 2) and Decision of the Incheon District Court on trial 2007GAHAP5089 – A writ of injunction for using a domain-name (Appendix No 34). A claimant to the disputes is Merck KGaA, the owner of the mark being a subject matter of the present proceedings. The panels to the two disputes have ascertained that the domain-names “merck.net”, “merck.org”, “merckserono.com” and “merck-serono.com” had been registered and used in bad faith by other persons with a view of making benefit of the MERCK reputation.

The above stated certifies that the company is conducting active policy for protection through registration of rights in the trade signs by which it denotes its products, which on its part is a prerequisite both for their use and for exercising the acquired rights.

2.5. Value of the mark.
Appendices Nos. 31 and 33 present the value of the trademark MERCK. The evaluation has been made by Diana Schmerler and Jonas Koele, authorized representatives of Merck KGaA. According to the submitted evaluation:

- the name Merck KGaA is related for the first time with pharmaceutical goods in 1668 and used as a trademark in 1850 when the company E. Merck was founded;
- the mark “MERCK” has acquired reputation and fame all over the world;
- the value of the trademark “MERCK” amounts to at least Euro 3 billion.

The points cited so far certifies about the high value of the mark “MERCK.”

With regard to Article 14, paragraph 3 of the APC according to which the evidences submitted within the frames of the administrative proceedings should be presented into Bulgarian the non-translated documents are excluded from the scope of the evidences on the request.

Relative to the claimed well-knownness for the goods of class 01: Chemical preparations for the perfumery branch, electrotyping, for manufacturing of firmis and oils, for tanning of leathers for textile purposes, for leather-dressing, for dyeing, for manufacturing of liquors; the goods of class 05: dressing materials for humans and animals; dressing cotton (cotton wool) and muslin-like cotton cloth, the petitionner has not submitted evidences on the basis of which to assess whether and how the mark “MERCK” is related to them.

It is seen from the factual circumstances so ascertained and the analysis made that the submitted evidential materials may be accepted as a sufficient evidence for recognition of a mark “MERCK” as well-known on the territory of the Republic of Bulgaria for the following goods:

Class 01: Chemical preparations for scientific and synthetic purpose, microscopic preparations, bacteriological preparations; chemical and physiological preparations for plants and animals; minerals and mineral raw materials as well as salts thereof;

Class 05: Medicines; alkaloids, essential and fat oils, resins, rubber and gutta-percha as well as other preparations for medical purposes made of plants; extract of substances for use in medicine, namely of grass (herbs), roots, stalks, parts of stalks, leaves, blossom and fruits and parts thereof; extract of substances of animal origin for use in medicine; bibergeil (cheese-like substance which is produced from the two rear bags of beavers), fish oil, animal organs or extracts thereof, medicinal serums and bacterial poisons; preparations for extermination of plants and animals.

On the basis of the above stated and on the grounds of Article 50b, paragraph 2 of the Law on Marks and Geographical Indications the President of the Patent Office

DECIDED:

On the grounds of Article 50b, paragraph 2 of the LMGI to recognize a mark “MERCK”, word, reg. No 625, with owner Merck KGaA, as well-known on the territory of the Republic of Bulgaria as of 01.09.2009 for the following goods:
Class 1: Chemical preparations for scientific and synthetic purpose, microscopic preparations, bacteriological preparations; chemical and physiological preparations for plants and animals; minerals and mineral raw materials as well as salts thereof;

Class 05: Medicines; alkaloids, essential and fat oils, resins, rubber and gutta-percha as well as other preparations for medical purposes made of plants; extract of substances for use in medicine, namely of grass (herbs), roots, stalks, parts of stalks, leaves, blossom and fruits and parts thereof; extract of substances of animal origin for use in medicine; bibergeil (cheese-like substance which is produced from the two rear bags of beavers), fish oil, animal organs or extracts thereof, medicinal serums and bacterial poisons; preparations for extermination of plants and animals.

On the grounds of Article 50b, paragraph 2 of the LMGI to revoke as groundless the request for recognition of a mark “MERCK”, word, reg. No 625, with owner Merck KGaA, as well-known on the territory of the Republic of Bulgaria as of 01.09.2009 for the following goods:

Class 01: Chemical preparations for the perfumery branch, electrotyping, for manufacturing of firmis and oils, for tanning of leathers for textile purposes, for leather-dressing, for dyeing, for manufacturing of liquors;

Class 05: dressing materials for humans and animals; dressing cotton (cotton wool) and muslin-like cotton cloth.

On the grounds of Article 50b, paragraph 6 of the LMGI the decision may be appealed before the Sofia City Administrative Court within a 14-day period as of its notification under the provisions of the ACP.

PRESIDENT OF THE PATENT OFFICE:

KOSTADIN MANEV (sgn.)
(round seal of the Patent Office of the Republic of Bulgaria)
Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt
POB 64271 Darmstadt
GERMANY

Sofia, May 16, 2011
Your ref: 5600 TD/M

Re: Bulgaria – Recognition of the Well-known Status of the Mark № 625 MERCK
Owner: MERCK KGaA - Germany

Dear Sirs,

With reference to the request for recognition of the mark MERCK for well-known and further to our message of December 15, 2010 by confirmation copy we are sending you:

2. Translation of the Decision into English;
3. Evidence materials presented for recognition of the mark as well-known;
4. Our Debit Notes № 625 / 16.05.2011 and № 625.1 / 16.05.2011.

You are kindly requested to remit the said amounts in favor of Mr. Todor Daraktschiew to the account stated on the Debit Note and to acknowledge safe receipt of the present letter.

Looking forward to hearing from you,

Sincerely yours,

Lyudmila Velkova
Trademark Dept.
OFEIBEA PATENT

ENCLOSURES
TRANSLATION

Industrial Property Office
Antonínova Čermáka 2a, 160 68 Prague 6 –
Bubeneč tel.: 220383011

LAKMA Int. s.r.o., Karviná-Fryštát,
Czech Republic
Deliver to:
Ing. Iva Rylková, Patent Representative
Polská 1525
CZ-708 00 Ostrava-Poruba, Czech Rep.

MERCK KGaA, Germany
Deliver to:
JUDr Jan Matějka,
Attorney-at-Law
Lawyers and Patent Attorneys
Čermák, Hořejší, Myslíl
Národní 32
CZ-110 00 Prague 1

To Ref.: 05-1121-03-Čj/Kopl

At Prague 28-Nov 2003

File No.: 0-185326
Reference number: 37611/2003
Attended by: Ing. Richard Tichý

DECISSION

The Industrial Property Office (hereafter the “Office”) held in the case of opposition of MERCK KGaA, Germany, represented by JUDr Jan Matějka, Prague, against registration, into the Trademark Register, of the sign “MERTZ” applied for on 6 November 2002 under File No. O-185326 and published in the Official Journal (Vestník) of the Office on 16 April 2003, whose applicant is LAKMA Int. s.r.o., Karviná-Fryštát, represented by patent representative Ing. Iva Rylková, Ostrava-Poruba, as follows:

The opposition filed under the provision of Section 9(1)(b) of Act No. 137/1995 Coll., on Trademarks, as amended, against the registration of the published sign “MERTZ” into the Trademark Register is in its entirety upheld, and, the application of the trademark File No. O-185326 shall be dismissed.
Justification

The Opposition delivered to the Office on 27 May 2003, filed under provision of Section 9(1)(a), (b) and (d) of the above Act were justified in substance by the fact that the Opponent is a proprietor of international trademarks with the dominant verbal element “MERCK/Merck” (No. 2R 177006, No. R 279186, No. R 396098 and No. 547719), which are valid (in force) and properly/genuinely used on the territory of the Czech Republic for all goods registered for the latter trademarks. The Opponent referred to the fact that it is a world-known and long-term manufacturer of various products (the history of the Company allegedly started on 26 August 1668), in particular in the field of chemistry, pharmacy, dyes, cleaning and washing products, preservative preparations of all kind, pesticides, herbicides, lubricants, minerals, as well as measuring and laboratory instruments and tools, etc. The Opponent stressed that he contested sign “MERTZ” is confusingly similar to the above-mentioned well-known opposing international trademarks and its commercial name used since 1863. The Opponent observed that its company was delivering the products designated by the opposing trademarks already to the former Czechoslovakia; after 1989, the volume of deliveries of the entire range of products significantly increased, therefore it was necessary (since 25 April 1991) to establish a branch office in the Czech Republic, through Merck spol. s r.o., Říčany. The Opponent added that the Company continues in distributing its deliveries of goods to Czech purchasers, where the volume of delivered goods into the Czech Republic increased during the last ten years up to CZK 480 million in year 2001. It pointed out that it has its branches also in other states, where those enterprises form a large world industrial concern. The Opponent considers that the sign “MERCK” symbolizes a high quality which by long term using acquired world-wide goodwill and became well-known. With respect of the opposition filed under the provision of Section 9(1)(d) of the above Act, the Opponent produced an extract from the Commercial/Companies Register administered by a Court in Darmstadt, part A volume XIV section No. 2636 (incorporation of the Company on 18 February 1863). The Opponent considers that contested sign “MERTZ” is confusingly similar with the opposing trademarks and its commercial name in particular because they share the first three letters, and, phonetically, endings “TZ” and “CK” come together (sound almost identically). In Opponent’s opinion, the average consumer might take the view that Applicant’s products originate from it, or that there is some commercial connection between it and the Applicant; The Opponent stressed that the contested sign, or its Applicant, thus could take advantage of the goodwill of the opposing, generally known
trademarks “MERCK”.

On the basis of the foregoing facts, the Opponent suggested, that the Office should dismiss the trademark application File No. 0-185326 “MERTZ” under provision of Section 9(1)(a), (b) and (d) of the above Act.

The Applicant in its Observations on the Objections delivered to the Office on 22 August 2003 objects to the Opponent’s view and as to the substance of the matter it essentially states that, in its opinion, the different endings “TZ” and “CK” are for an average consumer so much different that they exclude the likelihood of confusion between the signs concerned both visually and phonetically. It adds that the contested products are neither identical nor similar to the opposing products, since they are intended for utterly different purpose than the opposing products. Therefore, common consumers cannot come across both signs next to each other, not even with identical distributors or in the same stores, and thus it does not occur to them that the signs concerned could be mutually linked in any respect.

Owing to the above-cited facts, the Applicant suggests that the opposition should be dismissed and the contested sign should be entered into the Trademark Register.

The Decision on opposition relies on the following facts and reasons:

Under provision of Section 11(3) of Act No. 137/1995 Coll., the Office shall refuse the trademark application where it finds that the sign applied for does not fulfill the requirements for registration into the Register and the Office shall deliver the decision in writing to the applicant and the opposing party.

Under provision of Section 9(1)(a) of the above Act, the proprietor, or the applicant, of a trademark likely to be confused with the earlier priority may file reasoned objections against the registration of published sign in the Register, if such trademark is registered, or applied for identical or similar goods or services.

Under provision of Section 9(1)(b) of the above Act, the proprietor of an earlier identical or confusingly similar trademark which, before the date of application for registration of the trade
mark, in the sense of the Paris Convention or as a result of the promotion of the trademark, became well known in the Czech Republic in the respective circle of the public for its proprietor, may lodge an objection against the registration of the trademark in the Register.

Under provision of Section 4(3) of Decree No. 213/1995 Coll. Implementing the Act on Trade Marks, if the opposition is lodged because of the identity or similarity with the well known trade mark, the opponent is obliged to document that its trademark has reputation in the Czech Republic before the priority right of the sign applied for began.

Under the provision of Section 9(1)(d) of the above Act, the proprietor of an earlier trademark registered in the Commercial or similar Register, if its commercial name or its significant part, is identical or confusingly similar to the published sign and if it manufactures identical or similar goods or provides identical or similar services, for which the published sign is applied for, or such goods are subject of its commercial activity.

Under provision of Section 4(5) of Decree No. 213/1995 Coll., that must be supported by the scope of goods or services de facto provided by the opponent and registered for the opposing commercial name. That opposition cannot be satisfied, if the subject of the contested application of the trademark is an identical or confusingly similar commercial name of the applicant or its dominant part, registered in the Commercial Register earlier than the Opponent under identical or confusingly similar trade name.

From the Register of trademarks, it was found that the application of the word trademark “MERTZ” was filed on 6 November 2002 and published in the Official Bulletin/Journal of the Office (Vestník Úřadu) on 16 April 2003 for goods classified into the following classes of the International Classification of Goods and Services: (1) anti-freezing fluids, chemicals used in industry, preparations against glass (windshield) misting; (3) cleaning, polishing, scouring and washing preparations; (5) air fresheners, antibacterial preparations, disinfectants.

It was also found that the opposing international word trademark No. R 279186 “Merck” was registered in the International Register on 31 January 1964 with priority right in the territory of the Czech Republic as per the same day for products in the classes 1 to 6, 17, 19 and 33 of the International Classification of Goods and Services.
The opposing international word trademark No. R 547719 “Merck” was registered in the International Register on 9 January 1990 with priority right in the territory of the Czech Republic as per the same day for products in the classes 2, 9 and 10 of the International Classification of Goods and Services.

The opposing international complex trademark No. R 396098 “Merck” was registered in the International Register on 2 February 1973 with priority right in the territory of the Czech Republic as per the same day for products in the classes 1, 2 and 3 of the International Classification of Goods and Services.

The opposing international word trademark No. R 177006 “E. Merck” was registered into the Register on 14 May 1954 with priority right in the territory of the Czech Republic as per the same day for products in the classes 1 to 5 of the International Classification of Goods and Services.

It is apparent from the foregoing facts that all the opposing trademarks have earlier priority right for the territory of the Czech Republic than the contested sign “MERTZ”.

As for the opposition filed under provision of Section 9(1)(b) of the above Act, it should first of all be noted that when assessing the likelihood of confusion of signs account must be first taken of the fact which elements of the signs are identical, not which elements are different. The leading idea of the trademark law are the freedom of each applicant in the selection of the trademark motif and the elements of the sign which not in the least can evoke relatedness to signs already registered.

As far as the confusing similarity proper of the word sign “MERTZ” with the opposing trademarks with the dominant verbal element “Merck” or “MERCK” it must be stated that, the earliest opposing word trademarks “E. Merck” No. 2R 177006 and “Merck” No. R 279186 are registered in the Register at least since 1964 (the first quoted trademark even by 10 years earlier). Visually, the published sign “MERTZ” shares with the opposing word trademarks “Merck” and with the verbal element “MERCK” in the opposing complex trademark, except for opposing trademark No. 2R 177006, where the verbal element “Merck” is preceded by capital letter “E”, identical first three letters. In the opposing complex trademark, the verbal element “MERCK” is to be regarded as the dominant component, since at the first sight it is able to draw attention of an
average consumer. The change of the last two letters of the verbal element “MERCK”, i.e. “CK” for letters “TZ” in the published sign cannot be considered to be a difference that would be able to exclude the likelihood to confuse the opposing trademarks, apart from the aforementioned complex international trademark “E. Merck”, with the published sign. The published sign is phonetically almost the same as those opposing trademarks, since in the Czech language always the beginning of word is stressed and the consumers often do not pronounce the ends of word, since they “swallow” them. The last sound “s” in the pronunciation (merits) of the contested sign fades out and the sign sounds almost identically with the opposing trademarks. A consumer will probably pay no attention to the semantic aspect of the compared signs for the aforementioned reasons. only in the opposing marks the older consumers might relate the opposing sign “Merck” to the founder of the company and would thus consider it to be a surname of a person. From respect of trademark law, both verbal elements “MERTZ” and “MERCK/Merck” represent a fanciful/imaginative sign, which do not have any semantic content for the consumer in respect of the protected products.

For the reasons set forth above, it is wholly clear that the published sign “MERTZ” is confusingly similar with the opposing trademarks (except for opposing word trademarks “E. Merck” No. 2R 177006, from which it is at the first sight clear, that it is an abbreviation of an own name and surname of a person) both visually and phonetically. The above-mentioned facts then apply also to the likelihood for the contested sign to be confused with the opposing commercial name of the Opponent, whose dominant verbal element is also the word “MERCK”.

In order to prove the fact that the opposing trademarks are well known, the Opponent submitted the following documentary evidence:

1. Extracts of opposing international trademarks registered in more than twenty countries;

2. the extract from the Commercial Register administered by the Court in Darmstadt, part A, volume XIV, section No. 2636 of 18 February 1863 in the name of the founder of Opponent’s company, Mr. E. Merck;

3. the extract from the Commercial Register, administered by the District Court in Darmstadt, No. 6164 of MERCK Kommanditgesellschaft auf Aktien, or the Opponent, entered in that Register on 6 July 1995, from which is also evident the legal succession in respect of company E. Merck seated in Darmstadt;

4. a (large) amount of copies of invoices as indicators of continuous delivery of goods of
the Opponent to the Czech Republic from the period 1995 to 1999;

5. Statement of the representatives of the company of the Opponent in which they describe in detail the list of annexes to prove that the sign is well known, or of international trademarks “MERCK” in the Czech Republic:

- the summary list of trademarks “Merck” registered all over the world including copies of registration certificates (renewals of registrations) for some of them (more than 60),
- a detailed history of the sign (name) “MERCK” beginning in year 1668, which inter alia includes data on foundation of a daughter company in Prague, i.e. Merck spol. s r.o. on 15 April 1991,
- business development of company Merck,
- Revenues from products which were covered by the opposing trademarks from years 1988-1998,
- advertising materials for promotion of the opposing trademarks “MERCK” from the period 1950 - 1998,
- informing documents on the new products from period 1950 - 1970,
- standard promotion brochures published in various languages for products “MERCK”,
- Application guidance for use of pharmaceutical preparations of company “MERCK” in various languages in the period 1940-1963,
- contents of detailed filing systems of products of company Merck,
- extracts from medical literature.

6. the Decision of the President of the Office of 27 August 2002 (became effective on 29 August 2002) on rejection of the application for registration of trademark “MERX” File No. O-126918.

By assessment of the submitted relevant documents, when based on provision of Section 34(5) of Act No. 71/1967 Coll., on Administrative Procedure, as amended, the administrative authority shall assess the evidence on its own discretion, both individually and in their mutual relations, it was found that Opponent’s company MERCK KGaA, Germany, with the trade name part of the commercial name identical with the opposing signs “Merck/MERCK”, which is the proprietor of all opposing trademarks “Merck/MERCK”, which has been existing on long-term basis, which is known worldwide by its high quality products, in particular from pharmaceutical
and chemical industry. From the above, it is clear that the Opponent is the proprietor of tens of other (more than 60) registered trademarks "Merck" or "MERCK" worldwide, by which it designates and markets its products, including the territory of the Czech Republic, which for example follows from a number of copies of invoices from period 1995 to 1999 as indicators of deliveries of goods of the Opponent to the Czech Republic and also from the submitted list of international trademarks from the Romarin database, which was attached to the opposition. The opposing trademarks which represent the pivotal part of the commercial name of the Opponent are introduced to the Czech market by means of products distributed by Opponent's daughter company, i.e. Merck spol. s r.o. That company was checked by the Office by means of the Internet. On the website, today accessible to each average user or consumer, there is presented detailed information on mutual, long-term cooperation between the Opponent and this Czech company (since 1991) in connection with medicinal products tied to a medical prescription and non-prescription preparations, but also with chemicals and laboratory aids and devices. Using the confusingly similar contested sign “MERTZ” on products applied for that published sign is likely to deceive the average consumers since they could consider that Applicant's products marked that way come from the Opponent.

For that reason, it is necessary to regard the opposition, in the meaning of provision of Section 9(1)(b) of Act No. 137/1995 Coll., concerning the fact that the opposing trademarks are well known, as well founded and sufficient to reject registration of the published sign File No. O-185326 „MERTZ" in the Trademark Register.

As has been stated above, the opposing international trademarks No. "MERCK" or "Merck" due to its long-term use by the Opponent in the Czech Republic undoubtedly have a character of a well-known trademark, or trademarks. The assessment of the identity or similarity of products thus is not decisive, since the proprietor of opposing international trademarks its being placed under the protection of Article 6bis of the Paris Convention for the Protection of Industrial Property. In the meaning of Article 16 of the TRIPs Agreement, the member states shall be required to apply the provision of Article 6bis of the Paris Convention even if the conflicting trademark is used on different goods or in connection with different services than the ones for which the well-known trademark was granted protection, if such using would refer to a relation between thus marked goods or services and the proprietor of the/a well-known trademark.
In support of the observation that the above trademarks are well known (even if it is a decision in another case), the Office deemed necessary to state for the sake of completeness that the fact that the opposing trademarks are well known was recognized also in the opposition proceedings on the application of the trademark File No. O-126918 “MERX”, by decision of the President of the Office of 27 August 2002, which became effective on 29 August 2002. By the latter decision of the President of the Office, on the basis of the documents submitted by the Opponent, the fact that the opposing trademarks “MERCK/Merck” are well known was recognized/acknowledged. A large number of documents demonstrating use of the opposing sign “MERCK” in the Czech Republic, was submitted by the Opponent (which are included in the respective files) to applications for cancellation of the opposing international trademarks (No. 2R 177006, No. R 279186, No. R 396098 and No. 547719), filed by the applicant of the contested sign “MERX”, i.e. by MERX, s.r.o., Strážně, Czech Republic, and all the applications were rejected.

Since the well-known trademark enjoys legal protection which, in the meaning of the above Act and international agreements, goes beyond identity or similarity of goods and services, for the decision on opposition, the list of goods and services for which the registration of the sign (applied for) into the Register of Trademarks is sought and a list of goods and services for which the opposing trademarks are registered into the Register are not decisive. Therefore, it is not necessary to compare the products applied for that published sign with the products registered for the opposing trademarks.

In view of the fact that the opposition, filed under provision of Section 9(1)(b) of Act No. 137/1995 Coll., was upheld in its entirety, the assessment of the filed opposition under provision of Section 9(1)(a) and (d) of the above Act is for these opposition proceedings no longer decisive.

On the basis of the matters taken to be facts, the Office concluded that by the registration of the published sign “MERTZ” into the Trademark Register would infringe upon the earlier rights of the proprietor of the well-known trademarks as protected by law “MERCK” or “Merck”, in this case No. R 279186, No. R 396098 and No. 547719.

For the reasons set forth above, a decision was taken about this opposition as first stated above.
Advice

Under provision of Section 38(7) of Act No. 137/1995 Coll., an appeal shall lie from this decision of the Office within the time limit of one month from the delivery of the decision with the Office. The appeal shall be delivered in two counterparts. The appeal submitted in time shall have suspensive effect. Filing of the appeal is charged by amount of CZK 1,000. Under provision of Section 39 of the above Act, apart from the above charge, a condition for processing of the appeal is also deposition of a security (guarantee deposit) in the amount of CZK 2,500, which will be returned in the full amount, should the filing of the appeal be justified.

JUDr Rovan Horáček Head of
Legislative and Legal Division of and Inter Parties Procedures

TIME LIMIT: 12 January -2004

Lawyers and Patent Attorneys
ČERVÁK HOREJŠ MYSIL

12-December-
2003

Sign.:
(Signed)
I certify hereby that this photocopy consisting of 5 pages, corresponds exactly with the original from which has been made, consisting of 5 pages.

In Prague on June 5, 2008

Helena Čapková
Notary

[Stamp]

Helena Čapková
Notary
In Prague

An illegible signature
I certify hereby as permanent sworn interpreter of the Czech, English and French languages appointed by the decree of the Minister of Justice of the Czech Republic number of reference 1773/56, that the above is true and exact translation of the document annexed hereto.

Prague, on June 65, 1965

JUDr. Milan Keselý
Sworn Interpreter
Tokyo, 24. Januar 1974
S/lg

Betr.: Einspruch gegen Warenzeichenanmeldung der Firma
Japan Optical in Klasse 23

Sehr geehrte Herren!


Wir schlagen vor, nach Ablauf von 6 Monaten zu überprüfen, ob die Anmelderin ein Rechtsmittel eingelegt hat.

Da die Angelegenheit in dieser Instanz abgeschlossen ist, erlauben wir uns, die Liquidation für unsere Bemühungen und Auslagen beizufügen.

Wir begrüßen Sie

mit vorzüglicher Hochachtung
SONDERHOFF & EINSEL

Anlagen

cc: Messrs. Merck Japan
Übersetzung

Entscheidung über den Einspruch gegen die Eintragung eines Warenzeichens

Warenzeichenanmeldung Nr. 27 030/68

Wareneinteilung: Klasse 23

Anmelderin: Japan Optical K.K.

Vertreter: Masaya Ohashi

Einsprechende: E. Merck AG

Vertreter: Dr. Roland Sonderhoff

TENOR

Es wird gemäß Art. 17 des Warenzeichenengesetzes (in entsprechender Anwendung des Art. 58 Abs. 1 des Patentgesetzes) entschieden, daß dieser Einspruch begründet ist.

GRÜNDE

Das vorl. angemeldete Warenzeichen setzt sich aus den in zwei Stufen quer geschriebenen europäischen Buchstaben "MERCK" und Katakana-Buchstaben " " (=me-ru-ku) zusammen und ist für die Waren der Klasse 23 "Uhren, Brillen und deren Teile und Zubehör" bestimmt.

Dagegen behauptet die Einsprechende folgendes: Das vorl. Warenzeichen " " (=me-ru-ku) ist ein berühmter Abkürzungsname einer anderen Person, nämlich der Firma "E.MERCK AG" und ist sowohl bei Konsumenten als auch bei Händlern auf dem
Gebiet der Waren "Arzneien" weltbekannt. Ferner muß das vorl.
Warenzeichen abgelehnt werden, da das vorl. Warenzeichen "
(=me-ru-ku) sowie die Entgegenhaltungen "
(=me-ru-ko-n) und "
(=me-ru-ko) aussprachemäßig voneinander schwer
to unterscheiden sind. Dagegen behauptet die Anmelderin wie
folgt:

Es ist nicht festzustellen, daß das vorl. Warenzeichen "me-ru-ku"
ein berühmter Abkürzungsname der Firma "E. Merck AG" ist. Ferner
ist das vorl. Warenzeichen "me-ru-ku" den Entgegenhaltungen
"me-ru-ko-n" und "me-ru-ko" aussprachemäßig nicht ähnlich. Es ist
nicht nur im Patentamt, sondern weltweit bekannt, daß die Firma
E. Merck AG. als Hersteller und Verkäufer von "Arzneien" bereits
vor der Anmeldung des vorl. Warenzeichens bekannt war und das vorl.
Warenzeichen "me-ru-ku" als Abkürzungsname der Firma E. Merck AG.
bei Konsumenten und Händlern allgemein bekannt ist. 
Daher wird festgestellt, daß man sich an den Abkürzungsnamen
"MERCK" oder "me-ru-ku" der Firma E. Merck AG. erinnert, wenn man
das vorl. Warenzeichen "MERCK" ( ) für seine bestimmten Waren
gebraucht.

Außerdem hat die Anmelderin keine Zustimmung der Einsprechenden
erhalten, um das angemeldete Zeichen als Warenzeichen zu gebrauchen.

Folglich wird die Entscheidung gemäß dem Tenor getroffen, daß das
vorl. angemeldete Warenzeichen unter Art. 4 Abs. 1 Ziff. 8 des
Warenzeichengesetzes fällt.

Ryoichi Shibata, Prüfer des Patentamtes

Es wird bestätigt, daß diese Abschrift mit dem Original überein-
Tetsu Nakamura, Beamter des Ministeriums für Handel und
Industrie (Siegel).
登録異議の申立てについての決定

商標登録出願番号 昭和43年商標登録第27030号
商品の区分 第23類
商標登録出願人 ジャパンオプティカル株式会社
代理人 大橋正雄

登録異議申立人

代理人 ローランド・ゾンデルホフ

結論

この登録異議申立ては、商標法第17条（特許法第58条第1項準用）の規定に基づき、理由あるものと決定する。

理由

本願商標は「M E R O X」、「メルク」の元文字及び片仮名文字を二段に併記して、第23類 時計、眼鏡これらの部品および付属品をその指定商品とするものである。

上記に対して登録異議申立人は、本願商標は他人の著名を略称、知らず「メルク」は「E、M,E, R, O, X」の商号の略称である。かつ、架空については世界的に著名であることが需要者および取引者の間にも周知であり、又、本願商標「メルク」と引用登録商標「メルコン」、「メルコ」は、称呼上彼等を指すわしいから、本願

この原稿は原件と相違ないことを認証する。
昭和 年 月 日

通商産業事務官
これに対して、出願人は「メルク」は「E、MERCK、A、G」の著名な略称とは認められない。又、本願商標「メルク」と引用登録商標「メルコ、メルコン」とは呼称上類似商標でないと主張している。

よっておもうに「E、MERCK、A、G」が本願商標登録出願前から薬剤の製造販売会社として世界的に有名であり又「メルク」が「E、MERCK、A、G」の略称として取引、需要者の間においても周知、著名であることは、当庁においてのみならず、世人のよく知る所である。

してみれば「MERCK」の文字を書してなる本願商標をその指定商品に使用する場合には、「E、MERCK、A、G」の略称である「MERCK」を想起させるものと認められる。

なお、出願人は商標として使用するために異議申立人の承諾を得ていないものである。

したがって本願商標は、商標法第4条第1項第8号の規定に該当するものと認め結論の如く決定する。

昭和48年8月30日

特許庁審査官 柴田良一

商標44

紹用（タイプ用）
Trial Decision
(translation)

MUKO 2007-890132

Demandant: Merck KGaA
Demandee: Banyu Pharmaceutical Co., Ltd.

Conclusion:

The trademark registration (No. 4965331) shall be invalidated.
The costs of the trial shall be borne by Demandee.

Grounds:

I. Present Trademark (Omitted)
II. Demandee's Trademark (Omitted)
III. Gist of Demandant's Agreements (Omitted)
IV. Gist of Demandee's Answer (Omitted)
V. Decision of the Patent Office

1. Facts relating to this case

From the evidences submitted by the parties concerned, the following facts are recognized:

(1) Demandant has roots back to 1668 when Friedrich Jacob Merck acquired the "Engel-Apotheke" (Angel Pharmacy) in Darmstadt. In 1827 Emanuel Merck, who is a descendant of Friedrich Jacob Merck, succeeded in the production of Morphine and other alkaloids, and then started the production of chemical products. In 1850, Emanuel Merck established E. Merck which is the forerunner of Merck KGaA (Demandant) and began selling chemicals and pharmaceutical products in Europe, and established a sales network for its products throughout Europe.

E. Merck continued to make progress thereafter, and in 1904, they started selling liquid crystals ahead of other countries in the world, and from 1934 to 1942, they successfully produced the world's first synthetic vitamins C, B1, E and K. In the 1960s, E. Merck saw early success in developing pearl-luster pigments. In 1995, Merck KGaA (Demandant) was established in Darmstadt, Germany as part of a change in the management structure of E. Merck and its group of companies and now plays a key role in the business operations of the Merck Group of companies. On the other, E. Merck continues to exist as general partner of Demandant.

Demandant is engaged mainly in the manufacture and sale of pharmaceuticals and chemical products and, at the present, holds more than 200 companies and has its own production facilities at more than 60 locations.

In 1968, Merck Japan Ltd. was established in Japan as a Japanese corporation of the Merck Group, and in 2002 its corporate name was changed to Merck Ltd. (hereinafter referred to as "Merck Japan") At first, Merck Japan was mainly engaged in the business of sale, import and export of the Merck Group products in Japan and overseas, and then established facilities for research and production in Japan. Today, Merck Japan conducts business in the fields of liquid crystals, pigments, chemicals, pharmaceuticals and reagents etc. (Exhibit A Nos. 2-1-1 and 2-1-2, Exhibit A Nos. 3, 12, 13, 255 and 261, Exhibit B No. 5-2)

In 1998, Demandant and Merck Japan Ltd. jointly created Merck Hoei K.K. (whose corporate name was changed to "Merck Seiyaku Ltd." in 2006) and expanded its interests to the field of generic drugs. Merck Hoei K.K. has marketed a number of generic drugs (Exhibit A No. 2-1-1, Exhibit A Nos. 7-205, 10 and 11 and Exhibit A Nos. 25
to 34).

(2) Demandee is a pharmaceutical company, founded in 1915, which is engaged mainly in the manufacture, sale, import and export of pharmaceutical products, such as cardiovascular drugs, anti-inflammatory preparations and antibiotic drugs etc., for the use of medical physicians. In 1952, Demandee and the US Merck agreed on a sales alliance, and in 1954 Demandee and the US Merck established a joint venture company, Nippon Merck-Banyu K.K. In 1984 the US Merck held over 50% of Demandee's issued shares. Demandee was delisted and in 2004 became a wholly-owned subsidiary of the US Merck (see Exhibit A No. 4, Exhibit B Nos. 5 and 6).

(3) The US Merck, a parent company of Demandee, was founded in New York, the United States originally as a subsidiary of E. Merck by George Merck who was a grandson of Emanuel Merck. The United States declared war on Germany in World War I and, as a consequence, the US Merck was confiscated by the US Government. Ever since then, the US Merck has been an American company entirely independent of the Merck Group including E. Merck. Today, the US Merck is one of major pharmaceutical companies. In Japan, a subsidiary of the US Merck, Nippon Merck Sharp & Dohme Co., Ltd. existed, however, the said subsidiary was merged with Demandee and dissolved as Demandee became a wholly-owned subsidiary of the US Merck in 2004 (Exhibit A No. 2-1-1, Exhibit B No. 5-2).

(4) As stated above, despite the fact that E. Merck and the US Merck have the same origin, the US Merck became an independent American company. As E. Merck and the US Merck grew independently of each other, they came to compete against each other, and faced problems over the use of the name "Merck". In order to solve such problems, E. Merck and the US Merck entered into an agreement in 1955 (the "1955 Agreement") defining the use of the name "Merck" (Exhibit A No. 183). The conditions thereof are basically as follows:

a) The US Merck has the exclusive right to use the trademark "Merck" in the United States and Canada. In such countries, E. Merck will not use or acquire rights in any trademark containing "Merck".

b) E. Merck has the exclusive right to use the trademark "Merck" in Germany. In Germany, the US Merck will not use or acquire rights in any trademark containing "Merck".

c) For all other countries (excluding Germany, the United States and
Canada, but including Japan), Merck & Co. recognizes that E. Merck is entitled to use the word "Merck" or combinations of the word "Merck" and any other word as a trade-mark or name (provided that any such marks or names adopted in the future shall not be confusingly similar to marks or names adopted or used by Merck & Co.) and shall cancel all existing registrations, withdraw all applications and discontinue all use of the trademark "Merck", "Merck Cross" and "MerckMerckMerckMerck".

In order to replace the 1955 Agreement, a new agreement was entered into between the two companies on January 1, 1970 (the "1970 Agreement"). The conditions under the 1970 Agreement are substantially the same as those under the 1955 Agreement (Exhibit A No. 184).

(5) Under these circumstances, E. Merck found that Nippon Merck-Banyu K.K. filed an application for registration of "Nippon Merck-Banyu" as a trademark in Japan. E. Merck, therefore, requested the US Merck in a letter of February 5, 1972 that the application for trademark registration be withdrawn because the said application constituted a breach of the provisions of the 1970 Agreement. In response to the said letter, the US Merck sent to E. Merck a letter of March 9, 1972 to the effect that they admitted such an application would be in violation of the 1970 Agreement. (Exhibit A Nos. 185 and 186)

(6) After that, on July 18, 2007, Demandee issued a press release announcing that they would change their corporate name ("万有製薬株式会社 [Banyu Pharmaceutical Co., Ltd. in English]") to "メルク万有株式会社 (Merck-Banyu Co., Ltd. in English)" as of January 1, 2008. However, on October 22, 2007, Demandee issued a press release announcing their postponement of the change of their corporate name. (Exhibit A Nos. 188 and 189)

2. Fame and Publicity of Demandant's Trademarks

(1) From the evidences submitted by the parties concerned, the following facts are recognized:

(i) According to the sales ranking of pharmaceutical products of major pharmaceutical manufacturers in the world, the US Merck is always ranked the German Merck (Demandant). Specifically, the US Merck, which is indicated by "メルク(Merck)"
as the manufacturer's name in the ranking list, was ranked 3rd in 2002 and 2003, 4th in 2004, 7th in 2005, and 8th in 2006, while on the other hand, the German Merck was ranked 27th in 2002, 23rd in 2003, 25th in 2004 and 2005, and 24th in 2006. Further, in the explanation of the ranking and in the table showing pretax profit ratio and effective tax rate, the US Merck is simply indicated as "Merck", while on the other hand, the German Merck is indicated as "Merck KGaA", "German Merck" or "Merck in Germany" (Exhibit B Nos. 2-1 to 2-5).

(ii) "Merck's Manual of the Materia Medica" published by the US Merck in 1899 (currently "The Merck Manual of Diagnosis and Therapy") is a basic and standard medical book which compactly contains vast amounts of medical information for the use of healthcare professionals and is referred to as the "Merck Manual". There is also the "Merck Manual - Home Edition" which is written in an easy style based on the "Merck Manual", and these books are published in Japanese. (Exhibit A No. 2-1-1, Exhibit B No. 3)

(iii) Various newspapers issued during the period from February 2, 1988 to June 8, 2006 reported a variety of stories about E. Merck, the German Merck and/or the Merck Group. Most of these stories did not refer to specific trademarks. Further, few stories described E. Merck, the German Merck and/or the Merck Group simply as "Merck", most stories describing them as "E. Merck", "German Merck" or "E. Merck in Germany" etc. (Exhibit A Nos. 7 -1 to 7-407). However, among corporate advertisements of Merck Japan placed more than once in these above newspapers, advertisements of a product handled by Merck Japan placed in newspapers (which were issued before filing an application for registration of Demandee's Trademark) submitted as Exhibit A Nos. 7-75, 7-212 and 7-271 show the word "MERCK", together with the description of the product, in a distinctive way that can be perceived as a trademark.

(iv) In the journal "Chemistry and Chemical Industry" issued during the period from March 1970 to May 1980, Merck Japan frequently published advertisements about chromatography products, various reagents and others handled by it and such advertisements contain the trademark "MERCK" (Exhibit A Nos. 190 through 247). Further, during the period from January 1988 to October 2005, Merck Japan held seminars titled the "Merck Liquid Crystal Seminar", the "Merck Microbiology Seminar" etc. and brochures which were presumably distributed in such seminars clearly show the mark "MERCK" together with or separately from the designation of Japan Merck (Exhibit A Nos.
36 through 46, and Nos. 48 through 51).

(v) The company profile, product descriptions, guide books and catalogues etc. for pharmaceutical products, which are recognized as those published by Japan Merck or Merck Seiyaku before filing the application for registration of Demandee's Trademark, clearly show the company name "Merck Ltd." or "Merck Seiyaku Ltd." (Exhibit A Nos. 3, 19 through 23 and 63) and also the mark "MERCK" (Exhibit A Nos. 3 and 63)

(2) Considering all the facts stated in 1 and 2 together, it is reasonable to determine as follows:

(i) The US Merck and the German Merck have the same origin and both companies are global pharmaceutical companies (it is true that the US Merck always ranks ahead of the German Merck in the sales of pharmaceutical products, but the German Merck was ranked high enough to be called a major global company in the pharmaceutical industry, specifically, the 27th rank in 2002, the 23rd in 2003, and the 25th rank in 2004 and 2005 in the world.). Therefore, the word "Merck" or "メルク(katakana)" was generally known as indicating either the US Merck or the German Merck at least at the time of filing the application for registration of Demandee's Trademark.

It is reasonable to understand that the indications "Merk KGaA", "German Merck" and "Merck in Germany" etc. are used for the German Merck in newspaper stories or the sales ranking list of pharmaceutical products in the world etc. in order to distinguish the German Merck from the US Merck.

(ii) With respect to the mark "Merck" or "メルク(katakana)", the US Merck may not register or use the same as a trademark or name in Japan in accordance with the 1955 Agreement and the 1970 Agreement. However, the US Merck entered into the Japanese market before the conclusion of those Agreements, because in 1952 Demandee and the US Merck agreed on a sales alliance and in 1954 Demandee and the US Merck established a joint venture company, Nippon Merck-Banyu K.K. Therefore, it is conceivable that, before the conclusion of those Agreements, pharmaceutical products etc. of the US Merck came into the Japanese market and were traded under the trademark "Merck" or "メルク(katakana)". Further, the "Merck Manual" has been used by healthcare professionals for a long time and a Japanese version has been published. Considering the foregoing and the scale of the US Merck business in the pharmaceutical industry together, it can be said that the word "Merck" or "メルク(katakana)" was known in Japan to a considerable degree as
indicating the US Merck (as its short name) and as a trademark for pharmaceutical products of the US Merck.

On the other hand, the German Merck owns the trademark registration No. 496397 with respect to the mark "Merck" (the application for registration filed on May 31, 1955), the designated goods and services covered by which are "Chemicals, pharmaceutical and supporters for medical purposes", and other trademarks cited in Section II above. As stated above, the German Merck has been using the mark "MERCK" for its pharmaceutical products, reagents and chemicals etc. and the stories about E. Merck, the Merck Group and/or the German Merck have been repeatedly reported in newspapers etc. From these facts, it can be said that the word "Merck" or "メルク (katakana)" is known as indicating the German Merck (as its short name) or as a trademark being used for pharmaceutical products related to the German Merck. After all, it can be said that Demandant's trademarks were widely recognized among traders and/or consumers as trademarks indicating goods or services of Demandant at the time of filing the application for registration of Demandee's Trademark.

3. Applicability of Article 4 Paragraph 1, Item 15 of the Trademark Act to Demandee's Trademark

(1) From the evidences submitted by Demandant, the following facts are recognized:

(i) It has been reported in newspapers that the German Merck made a statement saying it has no relation to the US Merck, because the German·Merck received so many inquiries and questions from the media about the legal action regarding side-effects of a COX-2 inhibitor drug "VIOXX" manufactured by the US Merck, and it has been also reported that the German Merck is often confused with the US Merck (Exhibit A Nos. 249 and 256).

(ii) The Merck Group led by Demandant is engaged in not only the pharmaceutical products business, but also business in the fields of health care products, chromatography products, environmental analysis/microbiology/stains-related products, various reagents, pigments, optics and other chemicals. In addition, they have participated in the "Tokyo International Packaging Exhibitions" hosted by the Japan Packaging Institute and the "Paint Shows" hosted by the Japan Paint Manufactures Association, and also held various seminars for researchers etc. (Exhibit A No. 3, Nos. 16 through 23, Nos. 25 through 34 and Nos. 36 through 63).
(2) Demandee's Trademark covers the designated goods and services as stated in Section I above. Among the said designated goods and services, for example, chemicals, plant growth regulating agents, testing papers (Class 1); rust removing agents, exfoliating agents for paints (Class 3); medicines (Class 5); physical and chemical apparatus and instruments (Class 9); medical apparatus and instruments (Class 10); Planning, management or holding of seminars (Class 41); and Testing, evaluating or researching medicines, cosmetics or foods (Class 42) are the same as, or closely related to, the designated goods or services for which Demendant's trademarks are used. Therefore, it can be said that the fame of Demendant's trademarks is known to traders and/or consumers in the fields of the designated goods/services covered by Demandee's Trademark.

(3) Demandee's Trademark (メルク万有[Merck Banyu]) is composed of a combination of a word written in kanji characters and a word written in katakana phonetic scripts as stated in Section I above. It cannot be denied that, viewed as a whole, Demandee's Trademark may be associated with a "joint venture between the US Merck and Demandee" or a "joint venture between the German Merck and Demandee" as asserted by Demendant. However, it is difficult to say that Demandee's Trademark is familiar to the general public as a compound word made up of the word "メルク(Merck)" and another word (万有[Banyu]), and thus these words are not always recognized as being one inseparably connected word. Consequently, it is reasonable to understand that Demandee's Trademark is recognized as a trademark which includes the word "メルク(Merck)."

As stated above, the word "メルク(Merck)" is widely recognized among traders and/or consumers as a short name or trademark of Demendant (the German Merck) and of the US Merck, and it is thus difficult to say that the word "メルク(Merck)" is associated only with a short name or trademark of the US Merck. Further, the designated goods/services covered by Demandee's Trademark are closely related to those covered by Demendant's trademarks, and Demendant is engaged in the business in the fields of pharmaceutical products and other various goods and services, and has been promoting diversification of its business. Furthermore, it has been reported in newspapers that there is a likelihood of confusion actually arising between Demendant and the US Merck. In addition, Demandee has postponed its plan to change their corporate name, which seems as though Demandee has admitted the possibility of a breach of the 1970 Agreement. Considering all these factors together, it is understood that if Demandee's Trademark is used for the designated goods/services covered thereby, any trader/consumer who sees Demandee's Trademark may notice the word "メルク(Merck)" included therein and associate Demendant's well-known trademarks or Demendant with the said word, and it is
thus highly likely to cause them to be confused over the source of the goods, and mistakenly recognized that the said goods are connected with a business of Demandant or any person who has a financial or organizational relationship with Demandant.

(4) Accordingly, Demandez's Trademark falls under Article 4, Paragraph 1, Item 15 of the Trademark Act.

4. Conclusion

As stated above, Demandez's Trademark has been registered in violation of the provision of Article 4, Paragraph 1, Item 15 of the Trademark Act, and, therefore, the registration of Demandez's Trademark should be invalidated in accordance with Article 46, Paragraph 1, Item 1 of the said Act, without discussing other grounds for invalidation asserted by Demandant.

Therefore, we have decided as stated in the Conclusion.

December 9, 2008
Incheon District Court
13th Civil Division

DECISION

Case No.: 2007GAHAP5089 (Principal lawsuit) Domain name use injunction
and non-existence of right of claim to domain name registration.
2007GAHAP17037 (Counterclaim) Right of claim to domain name transfer.

Plaintiff: Joo, Sang Jae
(Counterclaim Respondent) Samwon Villa 104
570-14, Cheonghak-dong, Yeonsu-gu
Incheon, Korea

Defendant: MERCH KGaA
(Counterclaim Plaintiff) Frankfurter Str. 250
64293 Darmstadt, Germany
Dr. Martin Andre, Ulrich Fogel

Closing Arguments: April 11, 2008

Decision: May 23, 2008

Order

1. Defendant’s (Counterclaim Plaintiff) alleged right to claim transfers of Plaintiff’s
(Counterclaim Defendant) domain names of “merckserono.com” and “merck-
serono.com,” registered with Hangang Systems, Inc., does not exist.

2. It is ordered for Plaintiff (Counterclaim Defendant) to carry out cancellation procedures for each domain name listed in Order 1 for Defendant (Counterclaim Plaintiff).

3. All other claims of Plaintiff’s (Counterclaim Defendant) action and Defendant’s (Counterclaim Plaintiff) counteraction are dismissed.

4. Combined legal fees of action and counteraction shall be combined, with Plaintiff to pay 2/3, and Defendant to pay 1/3 of the total amount.

**Intent of Petition**

Principal action: Confirm the non-existence of Defendant’s (Counterclaim Plaintiff, herein referred to as “Defendant”) rights to claim injunction of the use and transfer of Plaintiff’s (Counterclaim Defendant, herein referred to as “Plaintiff”) domain names “merckserono.com” and “merck-serono.com,” as registered with Hangang Systems, Inc.

Counterclaim: Principally, Plaintiff shall transfer domain names “merckserono.com” and “merck-serono.com” to Defendant.

**Reasoning**

1. **FACTS**

A. Parties involved

   (1) Plaintiff is the creator and webmaster of a website using the domain names “merckserono.com” and “merck-serono.com” (herein referred to as “the domain names”). Plaintiff registered the domain names with Hangang Systems, Incorporated (herein referred to as “Hangang Systems”), an entity certified by the Internet Corporation for Assigned Names and Number (herein referred to as “ICANN”) to register domain names falling under generic Top Level Domain, or gTLD.

   (2) Defendant is a German conglomerate over 100 years old involved in the manufacture and sales of chemicals and pharmaceuticals. Defendant has over 500 registered “Merck” or “MERCK” marks in over 171 countries worldwide. Defendant registered the marks “EMerck” and “E.merckDarmstadt” in Korea in 1958 designated for chemicals and pharmaceuticals, and subsequently
registered the mark “MERCK” and numerous variations for the domestic market. Serono International S.A. (herein referred to as “Serono”) is a Switzerland-based bioengineering company founded in 1906 that specializes in fertility pharmaceuticals with sales of $2.6 billion in 2005.

B. Defendant’s acquisition of Serono and the registration of the domain names

(1) Defendant acquired Serono to form Merck-Serono Biopharmaceuticals on September 21, 2006. The acquisition was promulgated through a press release, and was widely distributed through media outlets both domestically and internationally and was regarded as major news in the pharmaceutical industry. Defendant subsequently (November 1, 2006) registered “MERCK-SERONO” and “MERCK SERONO” as trademarks in Germany.

(2) (i) Plaintiff registered the domain name “merckserono.com” with Hangang Systems on September 21, 2006; the date Defendant’s acquisition was publicized.

(ii) Among the domain names, “merck-serono.com” was registered with Hangang Systems on September 21, 2006 by NameInc (herein referred to as “NameInc”). Upon contacting NameInc, Defendant learned NameInc had transferred the particular domain name to an entity named “mGm” (herein referred to as “mGm”); Plaintiff continues to own “merck-serono.com” upon receiving the rights from mGm on December 11, 2006.

C. WIPO Arbitration and Mediation Center’s domain name dispute resolution

(1) Defendant brought forth action on December 5, 2006, in WIPO Arbitration and Mediation Center (herein referred to as “WIPO Arbitration and Media Center”) to force “JSJ Incheon,” the registrant of the domain names, to transfer the rights to the domain names to Defendant under the Uniform Domain Name Dispute Resolution Policy (herein referred to as “UDRP”) and Rules for Uniform Domain Name Dispute Resolution Policy (herein referred to as “Rules”). The WIPO Arbitration and Media Center handed down a decision on April 3, 2007, ordering Plaintiff to transfer the rights to the domain names to Defendant.

(2) Ten days following the WIPO Arbitration and Media Center’s decision, Plaintiff brought forth this action on April 13, 2007 in accordance with Article 4(k) of UDRP, and has thus caused a delay in WIPO Arbitration and Media Center’s order.

D. Actual use of the domain names

Using the domain names, Plaintiff created Internet websites consisting of “Homepage
Introduction; “Main issues”; “News Opinions”; “Global Pharmaceutical Companies”; “Problems with Mergers”; and “Disclaimer.” Plaintiff likens himself as a voice of constructive criticism of global pharmaceutical companies, displaying writing from related newspaper articles and other websites.

2. Arguments and Judgment
A. Arguments of the Parties
   1) Plaintiff’s Argument
      a) In the event the registrant of a domain name brings forth an action at a forum in his jurisdiction to temporarily delay an order stemming from a UDRP related dispute, the court is granted the authority to rule independent of the UDRP by applying related jurisdictional laws.
      b) Defendant’s marks “MERCK” and “SERONO” are not widely known in Korea; and even if widely known, the recognition does not span into other industries. Such conditions do not place the marks under the Korean Unfair Competition Prevention and Trade Secret Protection Act (herein referred to as “Unfair Competition Prevention Act”). In addition, Plaintiff registered the domain names with the intention to create a forum to discuss the negative aspects of global pharmaceutical companies, an exercise in freedom of expression protected by the Korean Constitution, making Plaintiff a lawful owner of the domain names. The claims against Plaintiff are groundless, and Plaintiff’s registration and use of the domain names are not malicious, and Defendant has no claim against Plaintiff on grounds of the Unfair Competition Prevention Act and cannot compel the cancellation or conveyance of the domain names.

   2) Defendant’s Argument
      a) Defendant has a valid claim to compel Plaintiff to cease to use and transfer the domain names. Though the agreement to follow UDRP is a part of the contract between the Registrar and the Registrant, the agreement is included in the contract for a third party like a rightful trademark owner. Therefore, the agreement to abide by UDRP is also applied to a dispute between the Registrant and a third party.
      b) Even in the event the UDRP is inapplicable, the domain names are combinations of “MERCK,” “SERONO,” and “-SERONO” resembling Defendant’s mark of “MERCK” that is already widely
known in Korea. There is a high likelihood Plaintiff has the intent to commit one or more of the following: (1) Sell or lease the domain names to a third party (2) Interfere with the registration and use of a domain name by a lawful user (3) Financially benefit from the ownership of the domain names. Such activities already threaten or will threaten Defendant’s businesses operations. Therefore, Defendant has the rights to demand the transfer of the domain names based on Article 4(2)iv of the Unfair Competition Prevention Act or the cancellation of the domain names based on Article 4(2)iii.

B. Judgment
1) Applicable Law
   The UDRP’s outline for dispute resolution between a domain registrant and a third party holding the rights to a service mark (herein referred to as “the third party”) is only a guideline to expedite registration administrative procedures and holds no authority to bind the registrant and the third party. The UDRP does not give the third party any actual right to preclude the registrant from using a particular domain name. Therefore, the court should render its decision based on applicable Korean laws rather than on UDRP (Korean Supreme Court. 2004DA72457. Feb. 1, 2008). The case before the court shall be decided according to the Unfair Competition Prevention Act, rather than the UDRP.

2) Determination of Unfair Competition
   a) Evidence of whether Defendant’s trademark/service mark “MERCK” is widely known
   The condition that the name, trademark, service mark or trade name shall be widely known among Korean consumers does not mean that the mark should be known to all Koreans throughout Korea, but means that the mark should be known among ‘traders or consumers of the goods or services bearing the mark’ (2000DA4487. Apr. 10, 2001), and the extent of recognition shall be judged considering the mark’s duration of use, method, extent of use, transaction range, and other objective aspects (2003DO5837. July 9, 2004).

The presented evidence shows Defendant is an international corporation that has been in the chemical and pharmaceutical
industry for over a century. Defendant has consistently been listed in “The Forbes 500” by Forbes magazine from 2003 to 2005, and has a 50% market share of the world’s liquid crystals market, including Korea’s Samsung and LG. Considering the production of liquid crystals is not localized in Korea, it is a widely known fact Korean companies are dependent on Defendant and has raised considerable debate and discussions in the media on the need to fortify domestic parts and materials industries. It is also a widely known fact Defendant established Merck Advanced Technologies in 2002 to operate a liquid crystal manufacturing, research, and development complex. Defendant has participated in International Meeting on Information Displays (“IMID”) held in Korea since 2004, conducting presentations on new ventures and upcoming display technologies. Defendant was awarded the Breakthrough Technology recognition by the Ministry of Science and Technology in 2007; recognized by the Ministry of Commerce, Industry and Energy for contribution to Korean scientific research; and awarded the Prime Ministry Award for contribution to the Korean economy. Defendant established Merck Korea, Inc. in 1989 for its pharmaceutical sales operations, and later changed to Merck, Inc. in 2002. Defendant began domestic sales of blood pressure medicine in 2000, and ranks third in that market. Defendant has entered agreements with Green Cross PBM for cooperative promotion in domestic hospitals and clinics, and to provide information about Defendant’s blood pressure medicine for a period of three years. Defendant began sales of blood sugar level suppressants in 2003, with sales amounting to 13.3 billion won and 9% of the domestic diabetes pharmaceutical market through cooperative marketing with the Korean pharmaceutical company, Daewoong Pharmaceuticals. Defendant introduced a cancer fighting medicine targeting large intestine cancer, giving new hope to intestinal cancer patients. Defendant’s Korean corporate entities Merck, Inc. and Merck Advanced Technologies have achieved the following sales figures for the past four years: 2004 – 32,879,904,570 won and 289,350,303,097 won; 2005 – 33,493,549,806 won and 370,352,488,374 won; 2006 – 39,243,228,919 won and 404,103,407,603 won; 2007 –
47,740,428,739 won and 441,062,128,694 won. The sales amounts number in trillions of wons and has steadily been increasing. In addition, Merck, Inc. and Merck Advanced Technologies have spent the following amounts for advertisement over the past four years: 2004 – 1,043,132,000 won and 75,957,000 won; 2005 – 1,782,611,000 won and 220,926,000 won; 2006 – 2,144,304,000 won and 208,391,000 won; 2007 – 2,851,384,000 won and 223,456,000 won.

Upon consideration of the evidence, it is reasonable to come to the conclusion the mark “MERCK” of Defendant is widely known among consumers and merchants of specialized pharmaceuticals and liquid crystals for LCD’s, sufficiently satisfying the recognition requirements of the Unfair Competition Prevention Act.

b) Determination of resemblance between the domain names and Defendant’s mark
The standard to determine resemblance and similarities between marks in question is to determine collectively and objectively the likelihood of confusion considering the marks’ appearance, appellation, concept from the perspective of a reasonable consumer or trader of the good or service. The examination of marks that combine text and graphics does not stop at examining the mark as a whole, but determining whether any element of the mark resembles or is the same as the mark of another (98HU2627, Apr. 11, 2000).

The domain names “merckserono” and “merck-serono” are combinations of “serono” and “-serono” with Defendant’s trademark and service mark “MERCK,” and is likely to be referred to separately as “merck” or “serono,” thereby having the same appellation as Defendant’s trademark and service mark.

c) Plaintiff’s bad faith
It has already been established Plaintiff registered the domain name “merckserono.com” on September 21, 2006, the same date Defendant’s acquisition was publicized. According to the evidence, the domain name “merck-serono.com” was registered by NameInc
on September 21, 2005, to which Defendant emailed requesting a return of the domain name. On November 7, 2006, NameInc replied asking for time to seek legal counsel and consider. Defendant contacted NameInc on November 16, 2006 to notify plans to resort to dispute resolution by the UDRP unless a decision is communicated by November 20, 2006. On November 21, 2006, NameInc replied intentions to come to an amiable settlement, and plans to take legal action in the event Defendant took the domain by force, all signed by a “Hyosang Yoon.” Defendant discovered on November 22 of the same year the email address used by NameInc had “JSJ Incheon” as the sender. The registrant of “merck-serono.com” changed to mGm on December 5, 2006, and Defendant sent an email the following day requesting the transfer of the domain name. mGm replied they were in negotiations with a party interested in purchasing the rights to the domain name, to where the registrant subsequently changed to JSJ Incheon. The mentioned facts show sufficient compelling evidence that Plaintiff acquired and registered the domain names in bad faith to interfere and prevent Defendant from rightfully acquiring ownership of the “MERCK” name in domain form. Plaintiff’s claims the website is irrelevant to Defendant due to its usage as a message forum does not hold ground.

Accordingly, the registration, ownership, and use of the domain names by Plaintiff constitute unfair competition in accordance with the Unfair Competition Prevention Act.

3) Effects of unfair competition

Defendant is entitled to move for an injunction of Plaintiff’s unfair competition practices in accordance with the Unfair Competition Prevention Act Article 4, and Plaintiff has a legal obligation to refrain from using the domain names. Thus, Plaintiff’s claim to determine the non-existence of the right to prevent usage has no cause, but Defendant’s preliminary motions to seek the cancellation of the domain names’ registrations have sufficient cause (Unfair Competition Prevention Act Article 4(2)iii).
But as the result of preclusion of unfair competition acts under the Unfair Competition Prevention Act, Defendant does not have the right to transfer the domain name subsequent to cancellation. Thus, Plaintiff’s claim of the non-existence of Defendant’s right to claim the transfer of the domain names has cause, and Defendant’s collective claim has insufficient grounds.

3. Conclusion

Accordingly, valid claims of Plaintiff’s principal action and Defendant’s counterclaims shall be observed; other claims are dismissed.

Presiding justice
Lee, Geon Bae
Justice
Choi, Mi Bok
Justice
Jeon, Kyung Ho
Beschluß

In Sachen
des Warenzeichens Nr. 778 594
der Byk-Gulden-Lomberg, Chemische Fabrik G.m.b.H.,
Konstanz, Obere Laube 40,

- Zeicheninhaberin,

Verfahrensbeteiligte:
Emanuel Merck o.H.G.,
Darmstadt, Frankfurter Str. 250,

- Widersprechende und Beschwerdeführerin

hat der 28. Senat (Warenzeichen-Beschwerdesenat V) des Bundespatentgerichts in der Sitzung vom 1. März 1968 unter Mitwirkung des Senatsrats Ostwald als Vorsitzenden, des Senatsrats Dr. Herold und des Senatsrats Dr. Dürschke (Richter kraft Auftrags) beschlossen:

Gründe:


Die Widersprechende beantragt unter Aufhebung des angefochtenen Beschlusses die Übereinstimmung ihres Zeichens 45 659 mit dem jüngeren Zeichen festzustellen und diesem die Eintragung zu versagen.

Die Inhaberin des angegriffenen Zeichens beantragt die Beschwerde der Widersprechenden als unbegründet zurückzuzweisen. Es möge zwar zutreffen, so führt sie aus, daß es sich bei dem Zeichen "Merck" um einen bekannten Firmennamen handele. Neben
der Firma Merck gebe es in der Bundesrepublik Deutschland auf den pharmazeutischen Sektor u. a. aber auch noch die durch- aus nicht unbekannten Drittfirmen L. Merckle G. m. b. H., Merz & Co., sowie Werner & Mertz AG., deren Namen leicht mit "Merck" verwechselt werden könnten. Der Verkehr sei also ge- zwungen, auf feinere Unterschiede in den Bezeichnungen zu achten. Die Schlußsilbe "-byk" des jüngeren Zeichens werde darum nicht unbemerkt bleiben, sie trete als betoner "selbständiger Teil klangstark hervor"; auch unter ungünstigen Übermittlungsbedingungen werde sie nicht überhört oder übersehen werden. Außerdem sei die Endung "byk" als Firma hinweis (Byk-Gulden) weiten Kreisen geläufig, eine Unterschei- dung der Bezeichnungen werde dadurch wesentlich erleichtert.

Wegen der Einzelheiten des Vorbringens der Beteiligten wird auf deren Schriftsätze Bezug genommen.

Die statthafte, sowie form- und fristgerecht erhobene Be- schwerde konnte keinen Erfolg haben, da die erstinstanzliche Entscheidung im Ergebnis der Sach- und Rechtslage entspricht.

In Übereinstimmung mit den Beteiligten geht der Senat davon aus, daß das Widerspruchszeichen 45 659 "Merck" auf dem Arz- neimittelsektor eine sehr bekannte Firma verkörpert. Trotzdem besteht keine Gefahr, daß die Vergleichszeichen im Verkehr füreinander gehalten werden.

Zutreffend hat die Prüfungsstelle die Frage in den Vorder- grund gestellt, ob das ältere Zeichen "Merck" mit dem selb- ständigen Kenn- und Merkwort "Merbyk" des angegriffenen Zeichens dem Klang nach verwechselt werden könnte. Es be- stehen keine Bedenken dagegen, daß die Vorentscheidung das Bestehen einer klanglichen Verwechslungsgefahr verneint hat. Die Zeichenworte haben sich in ihrem Gesamteindruck hinrei- chend voneinander ab. Bei relativ kurzen Zeichen(teilen) — die Vergleichsworte bestehen nur aus 5 bzw. 6 Buchstaben — können bereits geringfügige Unterschiede, möglicherweise auch nur in einem Buchstaben ausreichen, einer Verwechslungs-


Bei der gegebenen Sach- und Rechtslage erschien es dem Senat billig, von einer Kostenauflegung abzusehen (§§ 13 Abs.3 WZG, 36 q Abs.1 PatG).

Ostwald
Dr. Herold

Dr. Mürschke

[Unterschrift]
Firma
Emanuel Merck o.H.G.,
61 Darmstadt
Frankfurter Str. 250

28. IV. (1966) = 14.74/66

Z. U.

Bescheid untersagt (August)
ANNEX 06
Redacted pursuant to Merck KGaA's request for confidentiality
ANNEX 07
Die Marke im Wandel der Zeit

Branding – As time goes by

The pharmaceutical and chemical company Merck has its roots in the Engel pharmacy in Darmstadt. Consequently, the picture of an angel as shown here on a compounding vessel from 1838 was the earliest known “trademark”. The pharmacist turned industrialist Heinrich Emanuel Merck started the mass production of alkaloids in 1827 and founded the...
von Arzneimitteln realisiert hatte, mit seinen Söhnen die „Geschäftssocietät E. Merck“ Seither ist die Firmenbezeichnung „E. Merck“ etabliert. Der Ursprung der Bildmarke ist das Wappen, das auf dem Grabstein für Johann Franz Merck, gestorben 1741, zu sehen ist. Ab den 1870er Jahren wird dieser „Wappenschild“ in das Geschäftszeichen der Firma eingeführt. „Das Erinnerungsvermögen wird fest verwurzelt in einem erfolgreichen Zeichen, das knapp, deutlich, und leicht einprägsam, sowie von einer gefälligen, ansprechenden Form ist.“ 1894 wird es in dieser Form nach neuer Gesetzgebung erneut geschützt. Abänderungen gibt es je nach Verwendungszweck – das Briefseal von Franz Merck, who died in 1741. From the 1870s onwards, it became the symbol of the company. "Memory will be assisted by a successful symbol which must be concise, clear and easy to remember as well as have a pleasant, aesthetic form". In 1894, it was again registered in this form under the new legislation. Changes were made to suit the purpose – as on the letter seals.

E. Merck, Darmstadt.

of 1907 and 1910. As this example dated 1900 shows, variations were always possible. Alongside the picture mark, a word mark was also used - as in an advertising brochure of 1902. In 1912, the signature of Dr. Emanuel August Merck (1855–1923), whose name is closely associated with the building of the new factory, the development of the control laboratory and the warehouses as well as the pharmacy, was registered, as was the EMD mark mainly used for packages and labels on special preparations. It persisted until around 1924.
1919 – 1933

Various symbols date back to these years of considerable economic and political change. The examples are from 1920, 1925, and 1927. Particularly in the foreign subsidiaries, the design is modified artistically. The globe sign was registered as a trademark in 1931.

In the 1930s, the German industry started systematic advertising for its products. An instruction by the German Reich to promote exports had to be followed. In 1934, the company Bayer started a major advertising campaign at home and abroad. At huge cost, the Bayer cross and logo were advertised to doctors and the public at large.


Merck lacked a similarly powerful advertising logo; it was decided to focus more on the name and find a script which would be typical of Merck. The first attempt to set the name in Gothic type failed – it met with resistance abroad, especially in Latin America. In June 1935, a new logo using a more moderate Gothic type was created. In 1937, the picture mark was revised.
der Werbung für die mit Bayer gemeinsam vertriebenen Präparate, wie etwa die Schlafmittel Veronal, Luminal, Prominal oder Phanodorm, ist es entscheidend, dass Merck „bei Angabe der beiden Hersteller-Firmen gegenüber dem Firmennamen ‚Bayer’ gleich deutlich und auffallend“ hervortritt.


Durchsetzen kann sich schließlich eine Version, die an die Unterschrift von Heinrich Emanuel Merck aus seinen späteren Lebensjahren angelehnt ist: „Der Vertrauen erweckende Namenszug des Apothekers […] der symbolhaft zum Ausdruck bringt, was uns wichtig ist: gute Qualität und höchste Reinheit“. Merck bemüht sich, dass „Anzeigen und Drucksachen in einem neuen sachlichen und bewusst zurückhaltenden Stil“ ausgeführt werden. Der Schriftzug wird auch nach dem Krieg noch bei Anzeigen mit längeren Texten und Werbbriefen benutzt.

Especially in the advertisements for preparations distributed jointly with Bayer, such as the soporifics Veronal, Luminal, Prominal or Phanodorm, it was crucial for Merck’s logo “to appear as prominently as Bayer’s on the package”.

During World War II, this picture mark was common. From 1942, the Gothic logo was replaced by new word marks in handwriting style in order to “create harmony between this word mark and the ubiquitous signature of the founder”.

However, a different version prevailed, based on Heinrich Emanuel Merck’s signature from his later years: “The trust-inspiring signature of the pharmaceutist, expressed symbolically what is important to us: good quality and the utmost purity”. Merck tried to design “adverts and printed matter in a new, matter-of-fact and subdued style”. Even after the war, the logo appeared in adverts with long texts as well as advertising letters.
1946 wird als Untergrund der Universaletiketten für Chemikalien, Reagenzien und Analysenpräparate dieser Schriftzug verwendet und die 1920 eingetragene Siegelmarke auf Packungen für Chemikalien, Reagenzien und Analysenpräparate geklebt. Sie wird vorwiegend dort verwendet, „wo es sich um ein Garantiezeichen für Identität und Güte der Ware oder eine Erinnerung an diese Garantiefunktion handelt“. Für Schädlingsbekämpfungsmittel oder für bestimmte Halbspezialitäten, etwa „Traubenzuckerampullen Merck“, werden weitere Zeichen verwendet – man ist sich jedoch klar darüber, dass die „Verwendung von 8 grundverschiedenen Zeichen – objektiv beurteilt – niemals vertretbar“ ist. Eine kritische Beurteilung der Situation zeigt, dass die Bildmarke „zu viele Verzierungen trägt, die etwas Markantes nicht hervortreten lassen“ und die Unter-

In 1946, the logo was used as a background on standardized labels for chemicals, reagents and analytical preparations, while the seal was registered in 1920 for packages of chemicals, reagents and analytical products. It was mainly chosen "where it constitutes a warranty sign for the identity and quality of the product or a reminder of this warranty function". For pesticides or some semi-specialties products such as "Merck glucose vials", still other signs applied. However, people in the company were aware that "from an objective point of view, the use of 8 totally different symbols is completely unacceptable". A critical analysis of the situation showed that the picture mark "contains too many frills so that no clear profile can emerge" and the signatures "are difficult to read".
schriften „durch die schmalen und kleinen Buchstaben schlecht lesbar“ sind. Vor allem in der Konkurrenz zu Bayer sieht man sich nicht optimal präsentiert. Man erkennt, dass das Wappen zwar beim Empfänger das Bewusstsein erweckt, „dass mit dem Zeichen ein Unternehmen mit Tradition wirbt“, es mit der Ware und ihrer Eigenart aber nichts zu tun hat. „Es muss dementsprechend etwas geschaffen werden, das auf den ersten Blick alle Artikel deckt, ohne dabei langweilig oder inhaltlos zu wirken“. „Von Grund auf hat sich heute durch die Folgen des […] Weltkrieges auch das Ausschen der Firma Merck gewandelt. Soll es später keine schweren Er schütterungen geben, so muss dieses neue Bild, dieser neue Merck durchgesetzt werden mit allen Mitteln.“ Es gibt Überlegungen, das Markenzeichen „zu verlassen“ und ein völlig neues graphisches Element zu verwenden – Vorbild ist dabei das Bildzeichen der Firma Schering, der „Schering-Winkel“. Allerdings ist es „eine Erfahrungssache, dass ältere Firmen sich nur schwer dazu entschlossenen können, von ihrer alten, eingeführten Marke abzugehen“ – die neuen Vorstellungen können nicht realisiert werden. 1954 zeigt etwa der Titel der Firmenzeitung, dass man sich von traditioneller Gestaltung nicht lösen wollte.

due to the narrow and small letters. The feeling was that the company's presentation left much to be desired, particularly compared with Bayer. Management realized that although the seal made the reader aware "that the sign stands for a company of great tradition" it was completely unrelated to the product and its characteristics. "Accordingly, we must create something which, at a glance, identifies all products as Merck without appearing boring or meaningless... As a result of World War II, the appearance of Merck has changed fundamentally. If we want to avoid serious disturbances in the future, we must implement this new image, this new Merck by all means". There were plans to "drop" the trademark and use a completely new graphical element – along the lines of the Schering "angle". However, "we know from experience that older companies find it hard to depart from an old, well-established mark" – the new ideas could not be realized. In 1954, the title page of the corporate magazine showed that people were unwilling to abandon the traditional design.

Die Merck word mark, e.g. removing the frill on the letter “R” ®. 

"Whereas previously, the brand implied tradition and respectability, it is now also associated with modernity and individuality." The last step for the time being was the decision announced on 1 October 2001 to uniformly use the umbrella brand EMD in the strategically important North American market, where rights to the name Merck are held by the company Merck & Co., and to streamline the historic variety of company and product brands using a consistent brand architecture: Business sectors with a strong focus on research and innovation now appear under the Merck ® and EMD ® brands. For the global laboratory distribution business, the strong separate brand VWR was created. In order for Merck to be seen as one and the same company on both sides of the Atlantic, both brands are based on the same design principles, since "a strong brand needs a strong brand design". The combination of design and logo is the reflection of the brand values and the new corporate vision: "In its core businesses, Merck will be No. 1 – through innovation by talented employees thinking and acting as entrepreneurs". As a symbol of the continuity of the company and in appreciation of the special Merck culture spanning many generations, Merck's typical shade of blue survives in the new logo. The colors red and yellow are added for the first time not just for aesthetic reasons: They strongly symbolize the launch into a new era. The open-ended elements above and below the name are a metaphor for the flow of ideas and innovations – a symbol of having one's eyes on the future while remaining fully aware of the company's unique history. The new logo therefore visualizes the transition from a successful past into a promising future.
Merck KGaA
Corporate Communications
E-Mail: history@merck.de
D-64293 Darmstadt
Germany

www.merck.de
ANNEX 08
Redacted pursuant to Merck KGaA's request for confidentiality
ANNEX 09
Printout of Respondent’s website at <merck.com>, accessed from Germany (March 2013)
ANNEX 10
Printout of Respondent’s website at <merckservices.com>, accessed from Germany (March 2013)
Printout of Respondent’s website at <merckformothers.com>, accessed from Germany (March 2013)
Printout of the Facebook Website after search for “Merck” (March 2013)
Printout of the Respondent’s Facebook Presence (March 2013)
Printout of Respondent’s Twitter Presence (March 2013)
Printout of Respondent’s YouTube Feed (March 2013)
ANNEX 11
Klage

der Merck KGaA, vertreten durch die persönlich haftenden Gesellschafter als Geschäftsleitung Dr. Karl-Ludwig Kley, Dr. Kai Beckmann, Dr. Stefan Oschmann, Dr. Bernd Reckmann, Matthias Zachert, Frankfurter Straße 250, 64293 Darmstadt

- Klägerin -

Prozessbevollmächtigte: Gleiss Lutz, Dr. Stefan Völker, Maybachstraße 6, 70469 Stuttgart

gegen

1. Merck & Co. Inc., One Merck Drive, Whitehouse Station, NJ 08889, New Jersey, Vereinigte Staaten von Amerika,

zustellungsbevollmächtigt:

The Corporation Trust Company, 820 Bear Tavern Road, West Trenton, New Jersey 08628, Vereinigte Staaten von Amerika,

- Beklagte zu 1 -

2. Merck Sharp & Dohme Corp., One Merck Drive, Whitehouse Station, NJ 08889, New Jersey, Vereinigte Staaten von Amerika,

zustellungsbevollmächtigt:

The Corporation Trust Company, 820 Bear Tavern Road, West Trenton, New Jersey 08628, Vereinigte Staaten von Amerika,

- Beklagte zu 2 -
Klage

der Merck KGaA, vertreten durch die persönlich haftenden Gesellschafter als Geschäftsleitung Dr. Karl-Ludwig Kley, Dr. Kai Beckmann, Dr. Stefan Oschmann, Dr. Bernd Reckmann, Matthias Zachert, Frankfurter Straße 250, 64293 Darmstadt

prozessbevollmächtigte: Gleiss Lutz, Dr. Stefan Völker, Maybachstraße 6, 70469 Stuttgart

gegen

1. Merck & Co. Inc., One Merck Drive, Whitehouse Station, NJ 08889, New Jersey, Vereinigte Staaten von Amerika,

zustellungsbevollmächtigt:

The Corporation Trust Company, 820 Bear Tavern Road, West Trenton, New Jersey 08628, Vereinigte Staaten von Amerika,

– Beklagte zu 1 –

2. Merck Sharp & Dohme Corp., One Merck Drive, Whitehouse Station, NJ 08889, New Jersey, Vereinigte Staaten von Amerika,

zustellungsbevollmächtigt:

The Corporation Trust Company, 820 Bear Tavern Road, West Trenton, New Jersey 08628, Vereinigte Staaten von Amerika,

– Beklagte zu 2 –
3. MSD Sharp & Dohme GmbH, vertreten durch die Geschäftsführer Hanspeter Quodt, Dr. Claus Dollinger, Dr. Veit Stoll, Lindenplatz 1, 85540 Haar,

- Beklagte zu 3 -

wegen: Verletzung von Marken bzw. Kennzeichenrechten

Gegenstandswert (geschätzt): EUR 1 Mio.

Namens und im Auftrag der Klägerin erheben wir Klage und werden im Termin zur mündlichen Verhandlung folgende Anträge stellen:

I. Beklagte zu 1 und 2

1. Die Beklagten zu 1 und 2 werden verurteilt, es zu unterlassen, im geschäftlichen Verkehr in der Europäischen Union
   a) die Domains
      - merck.com
      - jobs.merck.com
      - merck-jobs.com
      - merckresponsibility.com
      - mercknewsroom.com
      - merckengage.com
      - merckvaccines.com
      - merckmanuals.com
      - merckbooks.com
      - merckservices.com
      - merck-animal-health.com
      - .merck und
      - .merckmsd
b) auf den unter den vorstehend unter a) aufgeführten Domains sowie unter den Domains

- msdformothers.com und
- migrainesupport.com,

abrufbaren Internetseiten die Kennzeichen

- MERCK Be well und/oder
- MERCK und/oder
- merckEngage* und/oder
- MerckVaccines.com* und/oder
- MERCK SERVICES, und/oder
- „MERCK“ bzw. „Merck“ und/oder
- „Merck & Co.“ und/oder
- „Merck & Co., Inc.“ und/oder
- E-Mail-Adressen mit dem Bestandteil @merck.com und/oder Hyperlinks, durch die sich auf dem Computer des Nutzers, der sie anklickt, im jeweils installierten E-Mail-Programm oder Web-Browser ein Fenster mit einer neuen Nachricht an eine E-Mail-Adresse mit dem Bestandteil @merck.com öffnet und/oder
das Kennzeichen „MERCK“ als Metatag im HTML-Code

- „facebook.com/MerckBeWell“, 
Gleiss Lutz

- "youtube.com/user/merck",
- "twitter.com/merck",
- "twitter.com/MerckJobs",
- "twitter.com/MerckManual",
- "twitter.com/MerckCareers1",
- "twitter.com/MerckAH",
- "twitter.com/Merckff",
- "twitter.com/MerckManualApps",
- "twitter.com/MerckManualPet",
- "twitter.com/MerckVetManual",
- "twitter.com/MerckOnCampus",
- "twitter.com/MerckCampusRecruit" und
- "twitter.com/Merck_IT_Jobs"

d) die vorstehend unter b) genannten Kennzeichen im Zusammenhang mit dem Vertrieb von Software und/oder Dateien für mobile Multimediageräte (sogenannte "Apps" und/oder "E-Books" und/oder "Podcasts")

für Arzneimittel, Waren zur Haut- und Gesundheitspflege sowie Dienstleistungen im Bereich des Gesundheitswesens zu benutzen.


4. Für jeden Fall der Zuwiderhandlung gegen eine der Unterverschuldungspflichten gemäß Ziffern 1. bis 3. wird den Beklagten zu 1 und 2 ein Ordnungsgeld bis zu EUR 250.000,00, ersetztweise Ordnungshaft, oder Ordnungshaft bis zu sechs Monaten, im Wiederholungsfall bis zu zwei Jahren, zu vollziehen an einem der Mitglieder des Board of Directors („Directors“) oder des Executive Committee („Officers“) der Beklagten zu 1 und/oder 2, angedroht.

5. Die Beklagten zu 1 und 2 werden verurteilt, der Klägerin Auskunft darüber zu erteilen, in welchem Umfang sie die vorstehend in Ziffern 1. und 3. bezeichneten Handlungen begangen haben, insbesondere

   a) über Herkunft und Vertriebsweg der unter Ziffern 1. d) und 2. genannten Waren, hier insbesondere über Namen und Anschriften der Entwickler, Hersteller, gewerblichen Abnehmer und Verkaufsstellen oder sonstigen Plattformen, für welche die Waren bestimmt waren, über die Menge der zur Verfügung gestellten und abgerufenen oder heruntergeladenen Waren sowie über die Preise, die für die Waren bezahlt wurden;

   b) durch Vorlage eines Verzeichnisses mit den „Uniform Resource Locators“ (einheitlichen Quellenanzeigen, umgangssprachlich „Internetadressen“) sämtlicher Internetseiten, die von der Beklagten zu 1 und/oder der Beklagten zu 2 betrieben werden und/oder auf die Beklagte zu 1 und/oder die Beklagte zu 2 registriert sind, und über die die Beklagte zu 1 und/oder die Beklagte zu 2 die in Ziffern 1 und 3 genannten Handlungen vornehmen oder vorgenommen haben, inklusive des jeweiligen Zeitraumes des Betriebs dieser Internetseiten und der Abrufzahlen aus der Europäischen Union in Bezug auf die in Ziffer 1. genannten Handlungen und aus der Bundesrepublik Deutschland in Bezug auf die in Ziffer 3. genannten Handlungen.

6. Es wird festgestellt, dass die Beklagten zu 1 und 2 verpflichtet sind, der Klägerin alle Schäden zu ersetzen, welche dieser durch die in Ziffern 1. und 3. bezeichneten Handlungen entstanden sind und künftig noch entstehen werden.
Claim

by Merck KGaA, represented by personally liable managing directors Dr. Karl-Ludwig Kley, Dr. Kai Beckmann, Dr. Stefan Oschmann, Dr. Bernd Reckmann, Matthias Zachert, Frankfurter Straße, 64293 Darmstadt

- Plaintiff -

against

1. Merck & Co., Inc. One Merck. Drive, Whitehouse Station, NJ 08889, New Jersey, United States of America

Agent for service:

The Corporation Trust Company, 820 Bear Tavern Road, West Trenton, NJ 08628, New Jersey, United States of America

- Defendant 1 -

2. Merck Sharp & Dohme Corp., One Merck. Drive, Whitehouse Station, NJ 08889, New Jersey, United States of America

Agent for service:

The Corporation Trust Company, 820 Bear Tavern Road, West Trenton, NJ 08628, New Jersey, United States of America

- Defendant 2 -

3. MSD Sharp & Dohme GmbH, represented by its managing directors Hanspeter Quodt, Dr. Claus Dollinger, Dr. Veit Stoll, Lindenplatz 1, 85540 Haar,

- Defendant 3 -

because of: infringement of trade marks and trade names
In the name and on behalf of the Plaintiff we hereby file an action and will move as follows in the hearing:

I. **Defendants 1 and 2**

1. For Defendants 1 and 2 to be ordered to cease and desist
   a) from using the domains
      - merck.com
      - jobs.merck.com
      - merck-jobs.com
      - merckresponsibility.com
      - mercknewsroom.com
      - merckengage.com
      - merckvaccines.com
      - merckmanuals.com
      - merckbooks.com
      - merckservices.com
      - merck-animal-health.com
      - .merck and
      - .merckmsd
   b) from using the marks
      - [MERCK](#) Be well and/or
      - [MERCK](#) and/or
      - [merckEngage®](#) and/or
      - MerckVaccines.com® and/or
1828247601

Gleiss Lutz

– and/or
– “MERCK” / “Merck” and/or
– “Merck & Co.” and/or
– “Merck & Co., Inc.” and/or
– e-mail addresses that include the element @merck.com and/or hyperlinks that cause a window with a new message to an e-mail address with the element @merck.com to open in the e-mail program or web browser installed on the computer of the user that clicks on them and/or
– the word “MERCK” as a meta tag in the HTML code on websites accessible at the domains listed in a), above, and at the domains
  – msdformothers.com and
  – migrainesupport.com,

c) from using the marks listed in b), above, in the names and contents of websites on the web platforms www.facebook.com, www.youtube.com and www.twitter.com, especially in the following user names and in the contents accessible via said user names
  – “facebook.com/MerckBeWell”,
  – “youtube.com/user/merck”,
  – “twitter.com/merck”,
  – “twitter.com/merckjobs”,
  – “twitter.com/MerckManual”,
  – “twitter.com/MerckCareers1”,
  – “twitter.com/MerckAH”,
  – “twitter.com/Merckff”,
  – “twitter.com/MerckManualApps”,
  – “twitter.com/MerckManualPet”,
  – “twitter.com/MerckVetManual”,
  – “twitter.com/MerckOnCampus”, and

1828247601

3/5

414
d) from using the marks listed in b), above, in connection with the sale of software and/or files for mobile multimedia appliances (so-called “apps” and/or “e-books” and/or “podcasts”) for medicinal products, skin and healthcare products, and healthcare services in the course of trade in the European Union;

2. for Defendants 1 and 2 to be ordered to cease and desist from using the mark “Merck Sharp & Dohme Corp.” on the domains listed in 1.a), above, and the websites listed in c), above, and in connection with the sale of software and/or files for mobile multimedia appliances (so-called “apps” and/or “e-books” and/or “podcasts”) for medicinal products, skin and healthcare products, and healthcare services in the course of trade in Germany;

3. for Defendants 1 and 2 to be ordered to cease and desist from using, in the course of trade in Germany, the domains listed in 1.a), above, and the marks listed in 1.b), above, and the mark “Merck Sharp & Dohme Corp.” on said domains and the websites listed in 1.c), above, and in connection with the sale of software and/or files for mobile multimedia appliances (so-called “apps” and/or “e-books” and/or “podcasts”) in connection with a business the purpose of which is the development, manufacture and sale of medicinal products, skin and healthcare products, and the provision of healthcare services;

4. for Defendants 1 and 2 to be threatened – for each single infringement of one of the cease and desist obligations in points 1 to 3, above – with an administrative fine of up to EUR 250,000 for contempt of court, alternatively imprisonment for contempt of court, or imprisonment of up to six months for contempt of court, or of up to two years in the event of repeated offences, to be enforced by imprisonment of one of the members of the Board of Directors (“directors”) or the Executive Committee (“officers”) of Defendant 1 and/or 2;

5. for Defendants 1 and 2 to be ordered to provide the Plaintiff with information as to the extent to which they have committed the acts referred to in points 1 and 3, above, in particular
   a) the origin and the distribution channels of the goods referred to in point 1.d) and 2., in particular the names and addressed of the developers, manufacturers, trade customers and points of sale or other platforms for which the goods were intended, the quantity of goods made available, retrieved or downloaded, and the prices paid for the goods;
   b) a list with the uniform resource locators (colloquially known as “web addresses”) of all the websites operated by Defendant 1 and/or Defendant 2 and/or which have been registered by the Defendant 1 and/or Defendant 2, and through the intermediary of which Defendant 1 and/or 2 are committing/have committed the acts referred to in points 1 and 3, including the period over which said websites were/have been operated and the volume of retrievals from the European Union with regard to the acts referred to in point 1, and from Germany with regard to the acts referred to in point 3;
6. for the court to declare that Defendants 1 and 2 must reimburse the Plaintiff for all past and future losses it sustains as a result of the acts referred to in points 1 and 3.

II. Defendant 3

1. For Defendant 3 to be ordered to cease and desist from using the marks
   a) “merck.com”
   b) “Merck”
   c) “Merck & Co.”
   d) “Merck & Co., Inc.”
   e) “mercksharpdohme.com”

   in the course of trade in Germany in connection with a business the purpose of which is the development, manufacture and sale of medicinal products, skin and healthcare products, and the provision of healthcare services.

2. For Defendant 3 to be ordered to cease and desist from using hyperlinks to Defendant 2’s website on the website with the internet address www.msd.de, insofar as trademark infringements referred to in points I.1. and/or 2 are being committed on the hyperlinked pages of that website;

3. for Defendant 3 to be threatened – for each single infringement of one of the cease and desist obligations in points 1 and 2, above – with an administrative fine of up to EUR 250,000 for contempt of court, alternatively imprisonment for contempt of court, or imprisonment of up to six months for contempt of court, or of up to two years in the event of repeated offences, it being understood that imprisonment would be enforced on its managing directors;

4. for Defendant 3 to be ordered to provide information as to the extent to which it has committed the acts referred to in point 1, above, in particular by providing a list of the uniform resource locators (colloquially known as “web addresses”) of all the websites operated by Defendant 3 and/or which have been registered by Defendant 3 and through the intermediary of which Defendant 3 is committing/has committed the acts referred to in point 1, including the period over which said websites were/have been operated and the volume of retrievals from Germany;

5. for the court to declare that Defendant 3 must reimburse the Plaintiff for all past and future losses it sustains as a result of the acts referred to in point 1.
ANNEX 12
New gTLD Application Submitted to ICANN by: Merck Registry Holdings, Inc.

String: MERCK

Originally Posted: 13 June 2012

Application ID: 1-1702-28003

Applicant Information

1. Full legal name

Merck Registry Holdings, Inc.

2. Address of the principal place of business

One Merck Drive
Whitehouse Station  08889
US

3. Phone number

+1 908 423 1000

4. Fax number

+1 908 423 1487
5. If applicable, website or URL

Primary Contact

6(a). Name
Mr. Joshua Bourne

6(b). Title
Managing Partner

6(c). Address

6(d). Phone Number
+1 202 223 9252

6(e). Fax Number

6(f). Email Address
bourne.mk@fairwindspartners.com

Secondary Contact

7(a). Name
Ms. Rashi Rai
7(b). Title
Manager - Strategic Architecture

7(c). Address

7(d). Phone Number
+1 908 423 2831

7(e). Fax Number

7(f). Email Address
rashi_rai@merck.com

Proof of Legal Establishment

8(a). Legal form of the Applicant
Corporation

8(b). State the specific national or other jurisdiction that defines the type of entity identified in 8(a).
New Jersey

8(c). Attach evidence of the applicant’s establishment.
Attachments are not displayed on this form.

9(a). If applying company is publicly traded, provide the exchange and symbol.
9(b). If the applying entity is a subsidiary, provide the parent company.

Merck Sharp & Dohme Corp.

9(c). If the applying entity is a joint venture, list all joint venture partners.

Applicant Background

11(a). Name(s) and position(s) of all directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>John C. Filderman</td>
<td>Director</td>
</tr>
<tr>
<td>Joseph Brian Promo</td>
<td>Director</td>
</tr>
<tr>
<td>Stephen C. Propper</td>
<td>Director</td>
</tr>
</tbody>
</table>

11(b). Name(s) and position(s) of all officers and partners

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>James N. Ciriello</td>
<td>President</td>
</tr>
</tbody>
</table>

11(c). Name(s) and position(s) of all shareholders holding at least 15% of shares

<table>
<thead>
<tr>
<th>Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck Sharp &amp; Dohme Corp.</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

11(d). For an applying entity that does not have directors, officers, partners, or shareholders: Name(s) and position(s) of all individuals having legal or executive responsibility

Applied-for gTLD string

13. Provide the applied-for gTLD string. If an IDN, provide the U-label.
14(a). If an IDN, provide the A-label (beginning with "xn--").

14(b). If an IDN, provide the meaning or restatement of the string in English, that is, a description of the literal meaning of the string in the opinion of the applicant.

14(c). If an IDN, provide the language of the label (in English).

14(c). If an IDN, provide the language of the label (as referenced by ISO-639-1).

14(d). If an IDN, provide the script of the label (in English).

14(d). If an IDN, provide the script of the label (as referenced by ISO 15924).

14(e). If an IDN, list all code points contained in the U-label according to Unicode form.

15(a). If an IDN, Attach IDN Tables for the proposed registry.

Attachments are not displayed on this form.

15(b). Describe the process used for development of the IDN tables submitted, including consultations and sources used.

15(c). List any variant strings to the applied-for gTLD string according to the relevant IDN tables.
16. Describe the applicant's efforts to ensure that there are no known operational or rendering problems concerning the applied-for gTLD string. If such issues are known, describe steps that will be taken to mitigate these issues in software and other applications.

Merck Registry Holdings, Inc. ("MRH") foresees no known rendering issues in connection with the proposed .MERCK gTLD for which it is applying. This answer is based upon consultation with MRH's selected back-end provider, VeriSign, Inc., which has successfully launched a number of new gTLDs over the last decade. In reaching this determination, the following data points were analyzed:

- ICANN’s Security Stability Advisory Committee (SSAC) entitled Alternative TLD Name Systems and Roots: Conflict, Control and Consequences (SAC009);
- IAB - RFC3696 “Application Techniques for Checking and Transformation of Names”
- Known software issues which Verisign has encountered during the last decade launching new gTLDs;
- Character type and length;
- ICANN supplemental notes to Question 16; and
- ICANN’s presentation during its Costa Rica regional meeting on TLD Universal Acceptance.

17. (OPTIONAL) Provide a representation of the label according to the International Phonetic Alphabet (http://www.langsci.ucl.ac.uk/ipa/).

Mission/Purpose

18(a). Describe the mission/purpose of your proposed gTLD.

18.1 Mission and Purpose of .MERCK

Merck Registry Holdings, Incorporated’s ("MRH") parent company, MSD Sharp & Dohme, Corp. ("MSD"), is a leading healthcare company serving the wide-ranging needs of end-users and providers around the world, with approximately 86,000 employees in more than 140 countries. MSD serves a variety of retailers, physicians, veterinarians, managed health care providers, food chain and mass merchandiser outlets, hospitals, and government agencies. MSD’s stated mission is to discover, develop, and provide innovative products and services that save and improve lives.

MSD has operations in several main business segments:

- PHARMACEUTICAL: MSD’s Pharmaceutical segment offers therapeutic and preventive agents for the treatment of human disorders in the areas of bone, respiratory, immunology, dermatology, cardiovascular, diabetes and obesity, oncology, infectious diseases, etc. The unit also offers preventive vaccines for children, adolescents, and adults.
- ANIMAL HEALTH: MSD’s Animal Health segment provides antibiotics, anti-inflammatory products, vaccines, and parasiticides for a variety of animals including cats, dogs, cattle, horses, and fish.
- CONSUMER CARE: In addition, MSD offers a wide range of over-the-counter products such as antihistamines, foot and skin care lotions, heartburn medication, and constipation...
relief treatments.

-ALLIANCES: MSD partners with a variety of corporations, organizations and educational institutions in product development and research efforts across the world.

The potential use of the .MERCK gTLD by these or other business segments will primarily be driven by MSD’s future business strategies as identified in its annual report and investor filings, see http://www.merck.com/investors/home.html.

The intended future mission and purpose of the .MERCK gTLD is to serve as a trusted, hierarchical, and intuitive namespace for MSD and end-users, and potentially MSD’s qualified subsidiaries and affiliates and potentially its licensees and other strategic parties.

Recognizing the potential dynamic evolution of the .MERCK gTLD as a trusted brand namespace, MSD has decided to utilize a wholly owned subsidiary, MRH, as the entity to file this application and bring the .MERCK gTLD to market. Although MRH is committed to moving forward with the .MERCK gTLD application, it has not at the time of filing this application been able to fully vet and analyze all potential use case options.

Although ICANN has not specifically recognized a .BRAND gTLD specification in the current gTLD application round, it is widely anticipated in the brand owner community that this will become a specialty subset of gTLDs.

.MERCK is intended to be one of those .BRAND gTLDs, with the goal of protecting MSD’s online presence and identity, expanding its marketing and promotion efforts, providing a secure channel for online products and services, and offering a platform through which to consolidate many of the intellectual property activities of MSD.

MRH intends to initially limit registration and use of domain names within the .MERCK gTLD to MSD and potentially its qualified subsidiaries and affiliates. This initial limited use will allow MSD to establish its operations and achieve full sustainability. This limited distribution, coupled with the other requirements set forth in Specification 9 of the template Registry Agreement, is intended to exempt MSD from its annual Code of Conduct Compliance requirements.

After Stage Three, MSD will evaluate whether opportunities exist to carry out the business strategy for the .MERCK gTLD through expansion that continues the sustainable operations of the registry through registrations that may or may not be fee-based to parties other than MSD and potentially its qualified subsidiaries and affiliates.

MRH currently plans a four-stage rollout for the .MERCK gTLD:

1. Stage One

The initial stage of implementation of the gTLD will involve MRH registering a limited number of .MERCK second-level domain names.

This initial use will provide MSD’s IT and security personnel the time to run a number of tests to ensure seamless and secure access using the .MERCK gTLD domain names, interoperability with various software and Web-based applications, and unbroken and secure use of all names. This initial allocation will also allow the appropriate MRH staff to coordinate with the internal and external staff responsible for the delegation and setup phases of the .MERCK gTLD to ensure a proper transition from delegation to full operation.

2. Stage Two

Once all testing has been successfully completed, MRH will begin allocating domain names in .MERCK for more widespread internal corporate use.

It is in Stage Two that MRH will evaluate expanding the operations of the .MERCK gTLD to permit registration by other registrants, such as licensees of MSD or other strategic parties. Should an assessment of its expansion strategy lead to a decision to extend registration rights to other parties, this expansion is currently planned to take place during Stage Three.
However, any expansion would be conditioned upon a review of Specification 9 (Registry Code of Conduct) set forth in the template Registry Agreement to ensure compliance with MRH’s business model.

3. Stage Three

It is in this stage that MRH may implement its decision to extend registration rights to MSD licensees or strategic parties, depending upon compliance with Specification 9 as noted above. The dates of such expansion are subject to change depending upon business, strategic, and industry factors at the time.

After consideration of the following factors: analysis of MSD’s existing domain name portfolio; internal analysis of marketing initiatives; and the fact that MRH will have full control over the number of registrations in the .MERCK gTLD namespace, MRH is confident that the number of domain name registrations will be less than 10,000 in the first five years of operation.

4. Stage Four

Based on its experience to the end of Year 5, and based on its experience with any expansion implemented in Stage Three, MRH will assess whether its business plan and expansion strategy should be augmented by extending registration rights to a broader class of licensees and strategic parties. It is anticipated by MSD that changes to the domain name industry, and particularly the impact of .BRAND gTLDs, will take a number of years to be realized and assessed. Any decision to expand the gTLDs beyond corporate use, and potentially use by qualified subsidiaries, affiliates, licensees, and strategic parties, will take into account this experience as well as the technical analysis of potential expansion.

Utilizing current projections based upon MSD’s existing businesses, future business plans, current domain name portfolio, and other strategic factors, MRH estimates second-level domain name registrations to be in line with the projections set forth in the financial template provided in the response to Question 46 of this application.

18(b). How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

18.2 How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

MRH believes that the proposed .MERCK gTLD has the potential to offer a variety of benefits to Internet end users, such as establishing a trusted source of information and online marketplace for the millions of end-users searching for related information through MSD’s online resources.

In addition, MRH anticipates that .MERCK can provide MSD and potentially its qualified subsidiaries and affiliates with short and memorable Internet addresses, as well as provide increased navigation to products, services, advertising campaigns, public interest content, and public awareness initiatives.

A .MERCK gTLD can also minimize the cost and need for defensive registrations because domain names within the .MERCK gTLD will initially only be allocated by MRH to MSD’s internal departments and potentially to qualified subsidiaries and affiliates of MSD.

Also, end users may benefit from lower incidents of phishing and malware often associated with mistypes of domain names in the .COM space that are owned by cybersquatters since they will be navigating to domain names in the .MERCK gTLD.

18.2.1 What is the goal of your proposed gTLD in terms of areas of specialty, service levels, or reputation?
The primary mission and purpose of the .MERCK gTLD is to provide a trusted, hierarchical, and intuitive online marketplace for MSD content and other products and services. Given that end-users are increasingly demanding access to MSD information through a variety of channels, which include domain names, MRH believes that the .MERCK gTLD has the potential to provide an innovative, virtual avenue to content from MSD that will deepen and broaden its relationship with these end-users.

As MRH’s parent company, MSD, continues to expand its product offerings and research areas, the company has considered using .MERCK to pursue and develop opportunities to market and distribute its online content and products to end users on various platforms, including the Internet and mobile devices, among others. Providing end-users with a trusted experience is paramount to MRH and its parent company, MSD, and the .MERCK gTLD will be used to further that goal.

While healthcare companies, such as MSD, fight never-ending battles to protect their valuable intellectual property from fraud and piracy on the Internet, the .MERCK gTLD would offer end-users a safe and intuitive means of accessing authorized content from MSD and potentially MSD’s qualified subsidiaries and affiliates and potential licensees and strategic parties.

18.2.2 What do you anticipate your proposed gTLD will add to the current space, in terms of competition, differentiation, or innovation?

As a .BRAND gTLD, the primary driving factors of the .MERCK gTLD are differentiation and innovation. The success of the gTLD will not be measured by the number of domain names registered. Instead, it will be measured by the levels of consumer recognition and trust that are placed in the .MERCK gTLD. Using this benchmark, MRH will strive to build consumer recognition and trust that rise to the levels of those found in the .EDU and .GOV gTLDs.

As noted above, MRH’s parent, MSD, is a leading healthcare company that leverages emerging technologies to deliver healthcare information, products, and services internationally.

The .MERCK gTLD has the potential to aid this online strategy, if potential consumer benefits that ICANN experts have anticipated become a reality.

18.2.3 What goals does your proposed gTLD have in terms of user experience?

MRH believes that the .MERCK gTLD will provide a single, trusted ecosystem experience for the millions of end-users seeking information about MSD and its products and services. In addition to providing end-users with short, memorable, and intuitive domain names, MRH will have best-in-class safeguards to minimize any potential infringing or pirated content within the .MERCK gTLD.

MSD will continue to stay abreast of changes in the new gTLD space following commencement of operations and will adjust its strategy as needed to ensure it is providing the most valuable and relevant experience for end users.

18.2.4 Provide a complete description of the applicant’s intended registration policies in support of the goals listed above.

The .MERCK gTLD is currently intended to be exclusively used by MSD and potentially MSD’s qualified subsidiaries and affiliates. Because of this condition precedent, any registration and use requirements are more appropriately vested in corporate-affiliate agreements and not in a domain name registration agreement. MRH reserves the right to consider allowing third party registrants outside of current affiliate or subsidiary relationships to own .MERCK domains for a fee at a future date. This would only be determined following an extensive, internal evaluation of MSD’s on-going branding and online goals, and discussions with MSD’s registry services provider.

MRH will incorporate all required ICANN consensus policies and other legal-policy requirements imposed on new gTLD applicants into the appropriate agreements.
18.2.5 Will your proposed gTLD impose any measures for protecting the privacy or confidential information of registrants or users? If so, please describe any such measures.

MSD recognizes first hand that this is an evolving area of law in which there is no uniform international standard. As a global healthcare company, MSD respects the privacy of its end-users. The company employs a variety of physical, electronic, contractual, and managerial safeguards to protect personal and confidential information on its websites. MRH will take similar precautions to protect registrant and user data associated with the .MERCK gTLD.

Furthermore, given that every domain name will be registered to MSD or potentially a qualified subsidiary or affiliate and potentially licensees or strategic parties, MRH has a vested interest in ensuring that accurate and current registrant information is readily available in connection with each .MERCK domain name.

MSD will ensure that the operation of the .MERCK gTLD will be consistent with Merck’s Statement of Privacy Principles, available on its website at http://www.merck.com/privacy/.

In addition, MRH intends to incorporate contractual language in its Registry-Registrar Agreement (RRA) modeled after language that has been included in the template Registry Agreement and that has been successfully utilized by existing ICANN gTLD Registry Operators. The template Registry Agreement states “Registry Operator shall (i) notify each ICANN-accredited registrar that is a party to the registry-registrar agreement for the TLD of the purposes for which data about any identified or identifiable natural person (“Personal Data”) submitted to Registry Operator by such registrar is collected and used under this Agreement or otherwise and the intended recipients (or categories of recipients) of such Personal Data, and (ii) require such registrar to obtain the consent of each registrant in the TLD for such collection and use of Personal Data. Registry Operator shall take reasonable steps to protect Personal Data collected from such registrar from loss, misuse, unauthorized disclosure, alteration or destruction. Registry Operator shall not use or authorize the use of Personal Data in a way that is incompatible with the notice provided to registrars.”

18.2.6 Describe whether and in what ways outreach and communications will help to achieve your projected benefits.

MRH plans to start using .MERCK domain names primarily as redirects to existing .COM and other domains that MSD and potentially, MSD’s qualified subsidiaries and affiliates, currently operate. MRH also plans to carefully review the response from search engines to .BRAND gTLDs, and the perception of end users.

As the marketplace evolves, MRH will invest in outreach and communication as needed to ensure that its end-users continue to interact with MRH content, services, and products in a simplified, efficient, and productive manner.

18(c). What operating rules will you adopt to eliminate or minimize social costs?

18.3.1 What operating rules will you adopt to eliminate or minimize social costs (e.g., time or financial resource costs, as well as various types of consumer vulnerabilities)?

MRH has proposed operating rules to limit registration to MRH and potentially qualified subsidiaries and affiliates and will provide a trusted online environment for end-users.

Therefore, one way in which social costs will be eliminated is that there will be no defensive need for other trademark and brand owners to register second-level domains in the .MERCK gTLD. In addition, the .MERCK gTLD will provide end-users with a trusted
source for MRH information, goods, and services.

18.3.2 What other steps will you take to minimize negative consequences⁄costs imposed upon consumers?

MRH believes that the proposed operation of the .MERCK gTLD as set forth in this application has no known negative consequences or cost implications to end users. On the contrary, the proposed operation of this registry will likely lead to direct and quantifiable benefits to end users.

18.3.3 How will multiple applications for a particular domain name be resolved, for example, by auction or on a first-come⁄first-serve basis?

MRH does not envision multiple applicants for the same domain name, as domain names will only be allocated to its parent company, MSD, and potentially MSD’s qualified subsidiaries and affiliates.

18.3.4 Explain any cost benefits for registrants you intend to implement (e.g., advantageous pricing, introductory discounts, bulk registration discounts).

MRH does not envision any advantageous pricing, introductory discounts, or bulk registration discounts at this time because these marketing⁄commercial initiatives are inconsistent with the mission and purpose of the .MERCK gTLD as a trusted online source identifier for MSD, and potentially its qualified subsidiaries and affiliates.

Moreover, it is the current intention of MSD to have MRH provide domain name registrations initially at no cost, at least for the first five years of operation.

However, the company reserves the right to reevaluate this decision and may choose to impose a fee in the future. Any potential registrant fees imposed upon licensees or strategic parties will be commensurate with commercial agreements and made if this class of registrants is permitted to register domain names in the .MERCK gTLD.

18.3.5 Note that the Registry Agreement requires that registrars be offered the option to obtain initial domain name registrations for periods of one to ten years at the discretion of the registrar, but no greater than ten years. Additionally, the Registry Agreement requires advance written notice of price increases. Do you intend to make contractual commitments to registrants regarding the magnitude of price escalation? If so, please describe your plans.

MRH is committed to providing the domain name registration periods set forth in the Registry Agreement. Moreover, it is the current intention of MSD to have MRH provide domain name registrations initially at no cost, at least for the first five years of operation. Therefore, providing contractual commitments in a domain name Registrant Agreement regarding the magnitude of price escalations does not seem relevant or appropriate. MRH acknowledges that the current template Registry Agreement requires that the Registry Operator “shall offer registrars the option to obtain registration periods for one to ten years at the discretion of the registrar.”

MRH acknowledges that the current template Registry Agreement requires that the Registry Operator “shall offer registrars the option to obtain registration periods for one to ten years at the discretion of the registrar.” However, MSD, as the sole registrant within the .MERCK gTLD, intends to only register domain names on an annual basis through a single registrar.

This is done to better account for costs on an annual basis as well as to provide for more concise financial statements in Question 46, (e.g., no multi-year registration or deferred revenue).

Community-based Designation
19. Is the application for a community-based TLD?

No

20(a). Provide the name and full description of the community that the applicant is committing to serve.

20(b). Explain the applicant's relationship to the community identified in 20(a).

20(c). Provide a description of the community-based purpose of the applied-for gTLD.

20(d). Explain the relationship between the applied-for gTLD string and the community identified in 20(a).

20(e). Provide a description of the applicant's intended registration policies in support of the community-based purpose of the applied-for gTLD.

20(f). Attach any written endorsements from institutions/groups representative of the community identified in 20(a).

Attachments are not displayed on this form.

Geographic Names

21(a). Is the application for a geographic name?

No
Protection of Geographic Names

22. Describe proposed measures for protection of geographic names at the second and other levels in the applied-for gTLD.

Merck Registry Holdings, Incorporated ("MRH") is keenly aware of the sensitivity of national governments in connection with protecting country and territory identifiers in the DNS. In preparation for answering this question, MRH reviewed relevant background material regarding the protection of geographic names in the DNS including:

- ICANN Board Resolution 01-92 regarding the methodology developed for the reservation and release of country names in the .INFO top-level domain (see http://www.icann.org/en/minutes/minutes-10sep01.htm);
- ICANN’s Proposed Action Plan on .INFO Country Names (see http://www.icann.org/en/meetings/montevideo-action-plan-country-names-09oct01.htm);
- ICANN’s Governmental Advisory Committee (GAC) Principles Regarding New gTLDs, (see https://gacweb.icann.org/download/attachments/1540128/gTLD_principles_0.pdf?version=1&modificationDate=1312358178000); and

MRH is committed to initially reserving the country and territory names contained in the internationally-recognized lists described in Article 5 of Specification 5 attached to the New gTLD Applicant Guidebook at the second level and at all other levels within the .MERCK gTLD at which MRH will provide for registrations. Specifically, MRH will reserve:

- The short form (in English) of all country and territory names contained on the ISO 3166-1 list, as updated from time to time, including the European Union, which is exceptionally reserved on the ISO 3166-1 list, and its scope extended in August 1999 to any application needing to represent the name European Union (see http://www.iso.org/iso/support/country_codes/iso_3166_code_lists/iso-3166-1_decoding_table.html#EU);
- The United Nations Group of Experts on Geographical Names, Technical Reference Manual for the Standardization of Geographical Names, Part III Names of Countries of the World; and

MRH’s parent company, Merck Sharp & Dohme Corp., (“MSD”), is a leading healthcare company serving the wide-ranging needs of patients and providers around the world, with more than 86,000 employees in upwards of 140 countries. Given this geographic approach to finding localized MSD content, MRH intends to explore the option of providing a hierarchical and intuitive framework for the .MERCK namespace by using geographical identifiers as second-level domain names.

MRH, either directly or through its designated representatives, will monitor efforts by other new gTLD Registry Operators in potentially working with ICANN’s GAC to explore potential processes that could permit the release of initially-reserved country names (including ISO-3166 two characters). Specifically, MRH is interested in exploring Registry Service Evaluation Processes (RSEP) requests that have been filed by other gTLD Registry Operators in releasing reserved domain names.
23. Provide name and full description of all the Registry Services to be provided.

Q.23 – Registry Services

23.1 Customary Registry Services

As Merck Registry Holdings, Inc.’s selected provider of backend registry services, Verisign provides a comprehensive system and physical security solution that is designed to ensure a TLD is protected from unauthorized disclosure, alteration, insertion, or destruction of registry data. Verisign’s system addresses all areas of security, including information and policies, security procedures, the systems development lifecycle, physical security, system hacks, break-ins, data tampering, and other disruptions to operations. Verisign’s operational environments not only meet the security criteria specified in its customer contractual agreements, thereby preventing unauthorized access to or disclosure of information or resources on the Internet by systems operating in accordance with applicable standards, but also are subject to multiple independent assessments as detailed in the response to Question 30, Security Policy. Verisign’s physical and system security methodology follows a mature, ongoing lifecycle that was developed and implemented many years before the development of the industry standards with which Verisign currently complies. Please see the response to Question 30, Security Policy, for details of the security features of Verisign’s registry services.

Verisign’s registry services fully comply with relevant standards and best current practice RFCs published by the Internet Engineering Task Force (IETF), including all successor standards, modifications, or additions relating to the DNS and name server operations including without limitation RFCs 1034, 1035, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 3901, 4343, and 4472. Moreover, Verisign’s Shared Registration System (SRS) supports the following IETF Extensible Provisioning Protocol (EPP) specifications, where the Extensible Markup Language (XML) templates and XML schemas are defined in RFC 3915, 5730, 5731, 5732, 5733, and 5734. By strictly adhering to these RFCs, Verisign helps to ensure its registry services do not create a condition that adversely affects the throughput, response time, consistency, or coherence of responses to Internet servers or end systems. Besides its leadership in authoring RFCs for EPP, Domain Name System Security Extensions (DNSSEC), and other DNS services, Verisign has created and contributed to several now well-established IETF standards and is a regular and long-standing participant in key Internet standards forums.

Figure 23-1 summarizes the technical and business components of those registry services, customarily offered by a registry operator (i.e., Verisign), that support this application. These services are currently operational and support both large and small Verisign-managed registries. Customary registry services are provided in the same manner as Verisign provides these services for its existing gTLDs.

Through these established registry services, Verisign has proven its ability to operate a reliable and low-risk registry that supports millions of transactions per day. Verisign is unaware of any potential security or stability concern related to any of these services.

Registry services defined by this application are not intended to be offered in a manner unique to the new generic top-level domain (gTLD) nor are any proposed services unique to this application’s registry.

See Figure 0-1: Registry Services. Each proposed service has been previously approved by ICANN to ensure registry security and stability.

In addition the registry services found in Table 23-1, Merck Registry Holdings, Inc. is
evaluating offering the following registry services:

1. Imposition of an annual cost recovery based fee to validate registrars that will be providing domain name registration services in the .MERCK gTLD.

2. The use of RFPs (Request for Proposals) and Auctions to determine string allocation in appropriate circumstances.

As further evidence of Verisign’s compliance with ICANN mandated security and stability requirements, Verisign allocates the applicable RFCs to each of the five customary registry services (items A – E above). For each registry service, Verisign also provides evidence in Figure 23 2 of Verisign’s RFC compliance and includes relevant ICANN prior-service approval actions.

See: Figure 23 2: ICANN RFC Compliance. Verisign currently operates TLDs in full compliance with each registry service’s applicable RFC(s). Each listed Verisign service has been previously approved by ICANN and is now operational on registries under Verisign management.

23.1.1 Critical Operations of the Registry

i. Receipt of Data from Registrars Concerning Registration of Domain Names and Name Servers
See Item A in Figure 23 1 and Figure 23 2.

ii. Provision to Registrars Status Information Relating to the Zone Servers
Verisign is Merck Registry Holdings, Inc.’s selected provider of backend registry services. Verisign registry services provisions to registrars status information relating to zone servers for the TLD. The services also allow a domain name to be updated with clientHold, serverHold status, which removes the domain name server details from zone files. This ensures that DNS queries of the domain name are not resolved temporarily. When these hold statuses are removed, the name server details are written back to zone files and DNS queries are again resolved. Figure 23 3 describes the domain name status information and zone insertion indicator provided to registrars. The zone insertion indicator determines whether the name server details of the domain name exist in the zone file for a given domain name status. Verisign also has the capability to withdraw domain names from the zone file in near-real time by changing the domain name statuses upon request by customers, courts, or legal authorities as required.

See: Figure 23 3: Zone Server Status Information. Verisign provisions to registrars status information related to the TLD.

iii. Dissemination of TLD Zone Files
See Item B in Figure 23 1 and Figure 23 2.

iv. Operation of the Registry Zone Servers
Verisign is Merck Registry Holdings, Inc.’s selected provider of backend registry services. Verisign, as a company, operates zone servers and serves DNS resolution from 76 geographically distributed resolution sites located in North America, South America, Africa, Europe, Asia, and Australia. Currently, 17 DNS locations are designated primary sites, offering greater capacity than smaller sites comprising the remainder of the Verisign constellation. Verisign also uses Anycast techniques and regional Internet resolution sites to expand coverage, accommodate emergency or surge capacity, and support system availability during maintenance procedures. Verisign operates Merck Registry Holdings, Inc.’s gTLD from a minimum of eight of its primary sites (two on the East Coast of the United States, two on the West Coast of the United States, two in Europe, and two in Asia) and expands resolution sites based on traffic volume and patterns. Further details of the geographic diversity of Verisign’s zone servers are provided in the response to Question 34, Geographic Diversity. Moreover, additional details of Verisign’s zone servers are provided in the response to Question 32, Architecture and the response to Question 35, DNS Service.

v. Dissemination of Contact and Other Information Concerning Domain Name Server Registrations
See Item C in Figure 23 1 and Figure 23 2.
23.2 Other Products or Services the Registry Operator Is Required to Provide Because of the Establishment of a Consensus Policy

Verisign, Merck Registry Holdings, Inc.’s selected provider of backend registry services, is a proven supporter of ICANN’s consensus-driven, bottom-up policy development process whereby community members identify a problem, initiate policy discussions, and generate a solution that produces effective and sustained results. Verisign currently provides all of the products or services (collectively referred to as services) that the registry operator is required to provide because of the establishment of a Consensus Policy. For the .MERCK gTLD, Verisign implements these services using the same proven processes and procedures currently in-place for all registries under Verisign’s management. Furthermore, Verisign executes these services on computing platforms comparable to those of other registries under Verisign’s management. Verisign’s extensive experience with consensus policy required services and its proven processes to implement these services greatly minimize any potential risk to Internet security or stability. Details of these services are provided in the following subsections. It shall be noted that consensus policy services required of registrars (e.g., WHOIS Reminder, Expired Domain) are not included in this response. This exclusion is in accordance with the direction provided in the question’s Notes column to address registry operator services.

23.2.1 Inter-Registrar Transfer Policy (IRTP)
Technical Component: In compliance with the IRTP consensus policy, Verisign, Merck Registry Holdings, Inc.’s selected provider of backend registry services, has designed its registration systems to systematically restrict the transfer of domain names within 60 days of the initial create date. In addition, Verisign has implemented EPP and “AuthInfo” code functionality, which is used to further authenticate transfer requests. The registration system has been designed to enable compliance with the five-day Transfer grace period and includes the following functionality:
- Allows the losing registrar to proactively ‘ACK’ or acknowledge a transfer prior to the expiration of the five-day Transfer grace period
- Allows the losing registrar to proactively ‘NACK’ or not acknowledge a transfer prior to the expiration of the five-day Transfer grace period
- Allows the system to automatically ACK the transfer request once the five-day Transfer grace period has passed if the losing registrar has not proactively ACK’d or NACK’d the transfer request.

Business Component: All requests to transfer a domain name to a new registrar are handled according to the procedures detailed in the IRTP. Dispute proceedings arising from a registrar’s alleged failure to abide by this policy may be initiated by any ICANN-accredited registrar under the Transfer Dispute Resolution Policy. Merck Registry Holdings, Inc.’s compliance office serves as the first-level dispute resolution provider pursuant to the associated Transfer Dispute Resolution Policy. As needed, Verisign is available to offer policy guidance as issues arise.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the service, on throughput, response time, consistency, or coherence of the responses to Internet servers or end-user systems. By implementing the IRTP in accordance with ICANN policy, security is enhanced as all transfer commands are authenticated using the AuthInfo code prior to processing.

ICANN Prior Approval: Verisign has been in compliance with the IRTP since November 2004 and is available to support Merck Registry Holdings, Inc. in a consulting capacity as needed.

Unique to the TLD: This service is not provided in a manner unique to the .MERCK gTLD.

23.2.2 Add Grace Period (AGP) Limits Policy
Technical Component: Verisign’s registry system monitors registrars’ Add grace period deletion activity and provides reporting that permits Merck Registry Holdings, Inc. to assess registration fees upon registrars that have exceeded the AGP thresholds stipulated in the AGP Limits Policy. Further, Merck Registry Holdings, Inc. accepts and evaluates all exemption requests received from registrars and determines whether the exemption request meets the exemption criteria. Merck Registry Holdings, Inc. maintains all AGP Limits Policy exemption request activity so that this material may be included within Merck Registry Holdings, Inc.’s Monthly Registry Operator Report to ICANN.
Registrars that exceed the limits established by the policy may submit exemption requests to Merck Registry Holdings, Inc. for consideration. Merck Registry Holdings, Inc.’s compliance office reviews these exemption requests in accordance with the AGP Limits Policy and renders a decision. Upon request, Merck Registry Holdings, Inc. submits associated reporting on exemption request activity to support reporting in accordance with established ICANN requirements.

Business Component: The Add grace period (AGP) is restricted for any gTLD operator that has implemented an AGP. Specifically, for each operator:
- During any given month, an operator may not offer any refund to an ICANN-accredited registrar for any domain names deleted during the AGP that exceed (i) 10 percent of that registrar’s net new registrations (calculated as the total number of net adds of one-year through ten-year registrations as defined in the monthly reporting requirement of Operator Agreements) in that month, or (ii) fifty (50) domain names, whichever is greater, unless an exemption has been granted by an operator.
- Upon the documented demonstration of extraordinary circumstances, a registrar may seek from an operator an exemption from such restrictions in a specific month. The registrar must confirm in writing to the operator how, at the time the names were deleted, these extraordinary circumstances were not known, reasonably could not have been known, and were outside the registrar’s control. Acceptance of any exemption will be at the sole and reasonable discretion of the operator; however “extraordinary circumstances” that reoccur regularly for the same registrar will not be deemed extraordinary.

In addition to all other reporting requirements to ICANN, Merck Registry Holdings, Inc. identifies each registrar that has sought an exemption, along with a brief description of the type of extraordinary circumstance and the action, approval, or denial that the operator took.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the policy, on throughput, response time, consistency, or coherence of the responses to Internet servers or end-user systems.
ICANN Prior Approval: Verisign, Merck Registry Holdings, Inc.’s backend registry services provider, has had experience with this policy since its implementation in April 2009 and is available to support Merck Registry Holdings, Inc. in a consulting capacity as needed.
Unique to the TLD: This service is not provided in a manner unique to the .MERCK gTLD.

23.2.3 Registry Services Evaluation Policy (RSEP)
Technical Component: Verisign, Merck Registry Holdings, Inc.’s selected provider of backend registry services, adheres to all RSEP submission requirements. Verisign has followed the process many times and is fully aware of the submission procedures, the type of documentation required, and the evaluation process that ICANN adheres to.
Business Component: In accordance with ICANN procedures detailed on the ICANN RSEP website (http://www.icann.org/en/registries/rsep/), all gTLD registry operators are required to follow this policy when submitting a request for new registry services.
Security and Stability Concerns: As part of the RSEP submission process, Verisign, Merck Registry Holdings, Inc.’s backend registry services provider, identifies any potential security and stability concerns in accordance with RSEP stability and security requirements. Verisign never launches services without satisfactory completion of the RSEP process and resulting approval.
ICANN Prior Approval: Not applicable.
Unique to the TLD: gTLD RSEP procedures are not implemented in a manner unique to the .MERCK gTLD.

23.3 Products or Services Only a Registry Operator Is Capable of Providing by Reason of Its Designation As the Registry Operator

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, has developed a Registry-Registrar Two-Factor Authentication Service that complements traditional registration and resolution registry services. In accordance with direction provided in Question 23, Verisign details below the technical and business components of the service, identifies any potential threat to registry security or stability, and
lists previous interactions with ICANN to approve the operation of the service. The Two-Factor Authentication Service is currently operational, supporting multiple registries under ICANN’s purview.

Merck Registry Holdings, Inc. is unaware of any competition issue that may require the registry service(s) listed in this response to be referred to the appropriate governmental competition authority or authorities with applicable jurisdiction. ICANN previously approved the service(s), at which time it was determined that either the service(s) raised no competitive concerns or any applicable concerns related to competition were satisfactorily addressed.

23.3.1 Two-Factor Authentication Service

Technical Component: The Registry-Registrar Two-Factor Authentication Service is designed to improve domain name security and assist registrars in protecting the accounts they manage. As part of the service, dynamic one-time passwords augment the user names and passwords currently used to process update, transfer, and/or deletion requests. These one-time passwords enable transaction processing to be based on requests that are validated both by “what users know” (i.e., their user name and password) and “what users have” (i.e., a two-factor authentication credential with a one-time-password).

Demonstration of Technical & Operational Capability

24. Shared Registration System (SRS) Performance

Q.24 – Shared Registration System (SRS) Performance

24.1 Robust Plan for Operating a Reliable SRS

24.1.1 High-Level Shared Registration System (SRS) System Description

VeriSign, Inc. ("Verisign"), Merck Registry Holdings, Inc.’s selected provider of back-end registry services, provides and operates a robust and reliable SRS that enables multiple registrars to provide domain name registration services in the top-level domain (TLD). Verisign’s proven reliable SRS serves approximately 915 registrars, and Verisign, as a company, has averaged more than 140 million registration transactions per day. The SRS provides a scalable, fault-tolerant platform for the delivery of gTLDs through the use of a central customer database, a Web interface, a standard provisioning protocol (i.e., Extensible Provisioning Protocol, "EPP"), and a transport protocol (i.e., Secure Sockets Layer, "SSL").

The SRS components include:

-Web Interface: Allows customers to access the authoritative database for accounts, contacts, users, authorization groups, product catalog, product subscriptions, and customer notification messages.

-EPP Interface: Provides an interface to the SRS that enables registrars to use EPP to register and manage domains, hosts, and contacts.

-Authentication Provider: A Verisign-developed application, specific to the SRS, that authenticates a user based on a login name, password, and the SSL certificate common name and client IP address.

The SRS is designed to be scalable and fault tolerant by incorporating clustering in multiple tiers of the platform. New nodes can be added to a cluster within a single tier to scale a specific tier, and if one node fails within a single tier, the services
will still be available. The SRS allows registrars to manage the .MERCK gTLD domain names in a single architecture.

To flexibly accommodate the scale of its transaction volumes, as well as new technologies, Verisign employs the following design practices:

- **Scale for Growth:** Scale to handle current volumes and projected growth.

- **Scale for Peaks:** Scale to twice base capacity to withstand “registration add attacks” from a compromised registrar system.

- **Limit Database CPU Utilization:** Limit utilization to no more than 50 percent during peak loads.

- **Limit Database Memory Utilization:** Each user’s login process that connects to the database allocates a small segment of memory to perform connection overhead, sorting, and data caching. Verisign’s standards mandate that no more than 40 percent of the total available physical memory on the database server will be allocated for these functions.

Verisign’s SRS is built upon a three-tier architecture as illustrated in Figure 24-1 and detailed here.

(See Figure 24-1, SRS Architecture: Verisign’s SRS is hierarchically designed to meet the forecasted registration volume of the .MERCK gTLD, and it can be scaled to meet future registration volume increases.)

- **Gateway Layer:** The first tier, the gateway servers, uses EPP to communicate with registrars. These gateway servers then interact with application servers, which comprise the second tier.

- **Application Layer:** The application servers contain business logic for managing and maintaining the registry business. The business logic is particular to each TLD’s business rules and requirements. The flexible internal design of the application servers allows Verisign to easily leverage existing business rules to apply to the .MERCK gTLD. The application servers store Merck Registry Holdings, Inc.’s data in the registry database, which comprises the third and final tier. This simple, industry-standard design has been highly effective with other customers for whom Verisign provides backend registry services.

- **Database Layer:** The database is the heart of this architecture. It stores all the essential information provisioned from registrars through the gateway servers. Separate servers query the database, extract updated zone and WHOIS information, validate that information, and distribute it around the clock to Verisign’s worldwide domain name resolution sites.

- **Scalability and Performance:** Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, implements its scalable SRS on a supportable infrastructure that achieves the availability requirements in Specification 10. Verisign employs the design patterns of simplicity and parallelism in both its software and systems, based on its experience that these factors contribute most significantly to scalability and reliable performance. Going counter to feature-rich development patterns, Verisign intentionally minimizes the number of lines of code between the end-user and the data delivered. The result is a network of restorable components that provide rapid, accurate updates. Figure 24-2 depicts EPP traffic flows and local redundancy in Verisign’s SRS provisioning architecture. As detailed in the figure, local redundancy is maintained for each layer as well as each piece of equipment. This built-in redundancy enhances operational performance while enabling the future system scaling necessary to meet additional demand created by this or future registry applications.

(See Figure 24-2, Built-in SRS Redundancy: Verisign’s SRS system is built upon multiple layers of redundancy to ensure the system remains highly available.)

Besides improving scalability and reliability, local SRS redundancy enables Verisign to
take down individual system components for maintenance and upgrades, with little to no performance impact. With Verisign’s redundant design, Verisign can perform routine maintenance while the remainder of the system remains online and unaffected. For the .MERCK gTLD registry, this flexibility minimizes unplanned downtime and provides a more consistent end-user experience.

24.1.2 Representative Network Diagrams

Figure 24-3 provides a summary network diagram of Merck Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) SRS. This configuration at both the primary and alternate-primary Verisign data centers provides a highly reliable backup capability. Data is continuously replicated between both sites to ensure failover to the alternate-primary site can be implemented expeditiously to support both planned and unplanned outages.

(See Figure 24-3, SRS Network Diagram: Verisign’s fully redundant SRS design and geographically separated data centers help ensure service level availability requirements are met.)

24.1.3 Number of Servers

As Merck Registry Holdings, Inc.’s selected provider of back-end registry services, Verisign continually reviews its server deployments for all aspects of its registry service. Verisign evaluates usage based on peak performance objectives as well as current transaction volumes, which drive the quantity of servers in its implementations. Verisign’s scaling is based on the following factors:

Server configuration is based on CPU, memory, disk IO, total disk, and network throughput projections.

Server quantity is determined through statistical modeling to fulfill overall performance objectives as defined by both the service availability and the server configuration.

To ensure continuity of operations for the .MERCK gTLD, Verisign uses a minimum of 100 dedicated servers per SRS site. These servers are virtualized to meet demand.

24.1.4 Description of Interconnectivity with Other Registry Systems

Figure 24-4 provides a technical overview of the Merck Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) SRS, showing how the SRS component fits into this larger system and interconnects with other system components.

(See Figure 24-4, Technical Overview: Verisign’s SRS provides the registrar-facing component of the system establishing the zone file needed to enable DNS and WHOIS services.)

24.1.5 Frequency of Synchronization Between Servers

As Merck Registry Holdings, Inc.’s selected provider of back-end registry services, Verisign uses synchronous replication to keep the Verisign SRS continuously in sync between the two data centers. This synchronization is performed in near-real time, thereby supporting rapid failover should a failure occur or a planned maintenance outage be required.

24.1.6 Synchronization Scheme

Verisign uses synchronous replication to keep the Verisign SRS continuously in sync between the two data centers. Because the alternate-primary site is continuously up, and built using an identical design to the primary data center, it is classified as a “hot standby.”

24.2 Scalability and Performance Are Consistent with the overall business approach and planned size of the registry

Verisign is an experienced back-end registry provider that has developed and uses...
proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

24.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, the Merck Registry Holdings, Inc.’s selected provider of back-end registry services, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services provided to Merck Registry Holdings, Inc. fully accounts for this personnel-related cost, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31 of this application, Technical Overview of Proposed Registry, to support SRS performance:

- Application Engineers: 19
- Database Administrators: 8
- Database Engineers: 3
- Network Administrators: 11
- Network Architects: 4
- Project Managers: 25
- Quality Assurance Engineers: 11
- SRS System Administrators: 13
- Storage Administrators: 4
- Systems Architects: 9

To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates.
These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide the execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

24.4 Evidence of Compliance with Specification 6 and 10 to the Registry Agreement

24.4.1 Section 1.2 (EPP) of Specification 6, Registry Interoperability and Continuity Specifications

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, provides these services using its SRS, which complies fully with Specification 6, Section 1.2 of the Registry Agreement. In using its SRS to provide back-end registry services, Verisign implements and complies with relevant existing RFCs (i.e., 5730, 5731, 5732, 5733, 5734, and 5910) and intends to comply with RFCs that may be published in the future by the Internet Engineering Task Force (IETF), including successor standards, modifications, or additions thereto relating to the provisioning and management of domain names that use EPP. In addition, Verisign’s SRS includes a Registry Grace Period (RGP) and thus complies with RFC 3915 and its successors. Details of the Verisign SRS’ compliance with RFC SRS-EPP are provided in the response to Question 25, Extensible Provisioning Protocol, of this application. Verisign does not use functionality outside the base EPP RFCs, although proprietary EPP extensions are documented in Internet-Draft format following the guidelines described in RFC 3735 within the response to Question 25 of this application. Moreover, prior to deployment, Merck Registry Holdings, Inc. will provide to ICANN updated documentation of all the EPP objects and extensions supported in accordance with Specification 6, Section 1.2.

24.4.2 Specification 10, EPP Registry Performance Specifications

Verisign’s SRS meets all EPP Registry Performance Specifications detailed in Specification 10, Section 2. Evidence of this performance can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports, which Verisign files with ICANN. These reports detail Verisign’s operational status of the .COM and .NET registries, which use an SRS design and approach comparable to the one proposed for the .MERCK gTLD. These reports provide evidence of Verisign’s ability to meet registry operation service level agreements (SLAs) comparable to those detailed in Specification 10. The reports are accessible at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

In accordance with EPP Registry Performance Specifications detailed in Specification 10, Verisign's SRS meets the following performance attributes:

- EPP service availability: ≤ 864 minutes of downtime (≈98%)
- EPP session-command round trip time (RTT): ≤4000 milliseconds (ms), for at least 90 percent of the commands
- EPP query-command RTT: ≤2000 ms, for at least 90 percent of the commands
- EPP transform-command RTT: ≤4000 ms, for at least 90 percent of the commands

Registrars can use the one-time-password when communicating directly with Verisign’s Customer Service department as well as when using the registrar portal to make manual updates, transfers, and/or deletion transactions. The Two-Factor Authentication Service is an optional service offered to registrars that execute the Registry-Registrar Two-Factor Authentication Service Agreement.

Business Component: There is no charge for the Registry-Registrar Two-Factor Authentication Service. It is enabled only for registrars that wish to take advantage of the added security provided by the service.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the service, on throughput, response time, consistency, or coherence of the responses to
Internet servers or end-user systems. The service is intended to enhance domain name security, resulting in increased confidence and trust by registrants.

ICANN Prior Approval: ICANN approved the same Two-Factor Authentication Service for Verisign’s use on .COM and .NET on 10 July 2009 (RSEP Proposal 2009004) and for .NAME on 16 February 2011 (RSEP Proposal 2011001).

Unique to the TLD: This service is not provided in a manner unique to the .MERCK gTLD.

25. Extensible Provisioning Protocol (EPP)

Q.25 - Extensible Provisioning Protocol (EPP)

25.1 Complete knowledge and understanding of this aspect of registry technical requirements

VeriSign, Inc. (“Verisign’), Merck Registry Holdings, Inc.’s selected back-end registry services provider, has used Extensible Provisioning Protocol (EPP) since its inception and possesses complete knowledge and understanding of EPP registry systems. Its first EPP implementation – for a thick registry for the .NAME generic top-level domain (gTLD) – was in 2002. Since then Verisign has continued its RFC-compliant use of EPP in multiple TLDs. as detailed in Figure 25-1.

(See: Figure 25 1: EPP Implementations. Verisign has repeatedly proven its ability to successfully implement EPP for both small and large registries.)

Verisign’s understanding of EPP and its ability to implement code that complies with the applicable RFCs is unparalleled. Mr. Scott Hollenbeck, Verisign’s director of software development, authored the Extensible Provisioning Protocol and continues to be fully engaged in its refinement and enhancement (U.S. Patent Number 7299299 – Shared registration system for registering domain names). Verisign has also developed numerous new object mappings and object extensions following the guidelines in RFC 3735 (Guidelines for Extending the Extensible Provisioning Protocol). Mr. James Gould, a principal engineer at Verisign, led and co-authored the most recent EPP Domain Name System Security Extensions (DNSSEC) RFC effort (RFC 5910).

All registry systems for which Verisign is the registry operator or provides back-end registry services use EPP. Upon approval of this application, Verisign will use EPP to provide the back-end registry services for this gTLD. The .COM, .NET, and .NAME registries for which Verisign is the registry operator use an SRS design and approach comparable to the one proposed for this gTLD. Approximately 915 registrars use the Verisign EPP service, and the registry system performs more than 140 million EPP transactions daily without performance issues or restrictive maintenance windows. The processing time service level agreement (SLA) requirements for the Verisign operated .NET gTLD are the strictest of the current Verisign managed gTLDs. All processing times for Verisign-operated gTLDs can be found in ICANN’s Registry Operator’s Monthly Reports at http://www.icann.org/en/tlds/monthly-reports/.

Verisign has also been active on the Internet Engineering Task Force (IETF) Provisioning Registry Protocol (provreg) working group and mailing list since work started on the EPP protocol in 2000. This working group provided a forum for members of the Internet community to comment on Mr. Scott Hollenbeck’s initial EPP drafts, which Mr. Hollenbeck refined based on input and discussions with representatives from registries, registrars, and other interested parties. The working group has since concluded, but the mailing list is still active to enable discussion of different aspects of EPP.

25.1.1 EPP Interface with Registrars

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, fully supports the features defined in the EPP specifications and provides a set of software development kits (SDK) and tools to help registrars build secure and stable interfaces. Verisign’s SDKs give registrars the option of either fully writing their own EPP client software to integrate with the Shared Registration System (SRS), or
using the Verisign-provided SDKs to aid them in the integration effort. Registrars can download the Verisign EPP SDKs and tools from the registrar website (http://www.Verisign.com/domain-name-services/current-registrars/epp-sdk/index.html).

The EPP SDKs provide a host of features including connection pooling, Secure Sockets Layer (SSL), and a test server (stub server) to run EPP tests against. One tool—the EPP tool—provides a web interface for creating EPP Extensible Markup Language (XML) commands and sending them to a configurable set of target servers. This helps registrars in creating the template XML and testing a variety of test cases against the EPP servers. An Operational Test and Evaluation (OT&E) environment, which runs the same software as the production system so approved registrars can integrate and test their software before moving into a live production environment, is also available.

25.2 Technical plan scope/scale consistent with the overall business approach and planned size of the registry

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

25.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance.

Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .com, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the provisioning of EPP services:
- Application Engineers: 19
- Database Engineers: 3
- Quality Assurance Engineers: 11
To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

25.4 Ability to comply with Relevant RFCs

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, incorporates design reviews, code reviews, and peer reviews into its software development lifecycle (SDLC) to ensure compliance with the relevant RFCs. Verisign’s dedicated QA team creates extensive test plans and issues internal certifications when it has confirmed the accuracy of the code in relation to the RFC requirements. Verisign’s QA organization is independent from the development team within engineering. This separation helps Verisign ensure adopted processes and procedures are followed, further ensuring that all software releases fully consider the security and stability of the TLD.

For the .MERCK gTLD, the Shared Registration System (SRS) complies with the following IETF EPP specifications, where the XML templates and XML schemas are defined in the following specifications:
- EPP 5730 (http://tools.ietf.org/html/rfc5730): Base EPP specification (authored by Verisign’s Scott Hollenbeck)
- EPP Domain 5731 (http://tools.ietf.org/html/rfc5731): EPP Domain Name Mapping specification (authored by Verisign’s Scott Hollenbeck)
- EPP Contact 5733 (http://tools.ietf.org/html/rfc5733): EPP Contact Mapping specification (authored by Verisign’s Scott Hollenbeck)

25.5 Proprietary EPP Extensions

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, uses its SRS to provide registry services. The SRS supports the following EPP specifications, which Verisign developed following the guidelines in RFC 3735, where the XML templates and XML schemas are defined in the specifications:
- IDN Language Tag (http://www.verisigninc.com/assets/idn-language-tag.pdf): EPP internationalized domain names (IDN) language tag extension used for IDN domain name registrations
- WHOIS Info Extension (http://www.verisigninc.com/assets/whois-info-extension.pdf): EPP extension for returning additional information needed for transfers
- EPP Consolidate Mapping (http://www.verisigninc.com/assets/consolidate-mapping.txt): EPP mapping to support a Domain Sync operation for synchronizing domain name expiration dates
- NameStore Extension (http://www.verisigninc.com/assets/namestore-extension.pdf): EPP extension for routing with an EPP intelligent gateway to a pluggable set of back-end products and services
- Low Balance Mapping (http://www.verisigninc.com/assets/low-balance-mapping.pdf): EPP mapping to support low balance poll messages that proactively notify registrars of a low balance (available credit) condition

As part of the 2006 implementation report to bring the EPP RFC documents from Proposed Standard status to Draft Standard status, an implementation test matrix was completed. Two independently developed EPP client implementations based on the RFCs were tested against the Verisign EPP server for the domain, host, and contact transactions. No compliance-related issues were identified during this test, providing evidence that these extensions comply with RFC 3735 guidelines and further demonstrating Verisign’s ability to design, test, and deploy an RFC-compliant EPP implementation.

25.5.1 EPP Templates and Schemas

The EPP XML schemas are formal descriptions of the EPP XML templates. They are used to express the set of rules to which the EPP templates must conform in order to be considered valid by the schema. The EPP schemas define the building blocks of the EPP templates, describing the format of the data and the different EPP commands’ request and response formats. The current EPP implementations managed by Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, use these EPP templates and schemas, as will the proposed TLD. For each proprietary XML template/schema Verisign provides a reference to the applicable template and includes the schema.

25.5.1.1 XML templates/schema for idnLang-1.0
Schema: This schema describes the extension mapping for the IDN language tag. The mapping extends the EPP domain name mapping to provide additional features required for the provisioning of IDN domain name registrations.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.Verisign.com/epp/idnLang-1.0"
         xmlns:idnLang="http://www.Verisign.com/epp/idnLang-1.0"
         xmlns="http://www.w3.org/2001/XMLSchema"
         elementFormDefault="qualified">
  <annotation>
    <documentation>
      Extensible Provisioning Protocol v1.0 domain name extension schema for IDN Lang Tag.
    </documentation>
  </annotation>

  <!--
  Child elements found in EPP commands.
  -->
  <element name="tag" type="language"/>

  <!--
  End of schema.
  -->
</schema>
```

25.5.1.2 XML templates/schema for rgp-poll-1.0
Template: The templates for rgp-poll-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/rgp-poll-
Schema: This schema describes the extension mapping for poll notifications. The mapping extends the EPP base mapping to provide additional features for registry grace period (RGP) poll notifications.

```xml
<?xml version="1.0" encoding="UTF-8"?>

<schema targetNamespace="http://www.Verisign.com/epp/rgp-poll-1.0"
     xmlns:rgp-poll="http://www.Verisign.com/epp/rgp-poll-1.0"
     xmlns:eppcom="urn:ietf:params:xml:ns:eppcom-1.0"
     xmlns:rgp="urn:ietf:params:xml:ns:rgp@1.0"
     xmlns="http://www.w3.org/2001/XMLSchema"
     elementFormDefault="qualified">
    <!--
    Import common element types.
    -->
    <import namespace="urn:ietf:params:xml:ns:eppcom-1.0"
             schemaLocation="eppcom-1.0.xsd"/>
    <import namespace="urn:ietf:params:xml:ns:rgp@1.0"
             schemaLocation="rgp-1.0.xsd"/>

    <annotation>
        <documentation>
            Extensible Provisioning Protocol v1.0
            Verisign poll notification specification for registry grace period poll notifications.
        </documentation>
    </annotation>

    <!--
    Child elements found in EPP commands.
    -->
    <element name="pollData" type="rgp-poll:pollDataType"/>

    <!--
    Child elements of the <notifyData> element for the redemption grace period.
    -->
    <complexType name="pollDataType">
        <sequence>
            <element name="name" type="eppcom:labelType"/>
            <element name="rgpStatus" type="rgp:statusType"/>
            <element name="reqDate" type="dateTime"/>
            <element name="reportDueDate" type="dateTime"/>
        </sequence>
    </complexType>

    <!--
    End of schema.
    -->
</schema>
```

25.5.1.3 XML templates—schema for whoisInf-1.0

Template: The templates for whoisInf-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/whois-info-extension.pdf.

Schema: This schema describes the extension mapping for the Whois Info extension. The mapping extends the EPP domain name mapping to provide additional features for returning additional information needed for transfers.

```xml
<?xml version="1.0" encoding="UTF-8"?>
```
<schema targetNamespace="http://www.Verisign.com/epp/whoisInf-1.0"
xmlns:whoisInf="http://www.Verisign.com/epp/whoisInf-1.0"
xmlns:eppcom="urn:ietf:params:xml:ns:eppcom-1.0"
xmlns="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified"/>

<import namespace="urn:ietf:params:xml:ns:eppcom-1.0"
schemaLocation="eppcom-1.0.xsd"/>

<annotation>
  <documentation>
  Extensible Provisioning Protocol v1.0
  extension schema for Whois Info
  </documentation>
</annotation>

<!-- Possible Whois Info extension root elements. -->
<element name="whoisInf" type="whoisInf:whoisInfType"/>
<element name="whoisInfData" type="whoisInf:whoisInfDataType"/>

<!-- Child elements for the <whoisInf> extension which is used as an extension to an info command. -->
<complexType name="whoisInfType">
  <sequence>
    <element name="flag" type="boolean"/>
  </sequence>
</complexType>

<!-- Child elements for the <whoisInfData> extension which is used as an extension to the info response. -->
<complexType name="whoisInfDataType">
  <sequence>
    <element name="registrar" type="string"/>
    <element name="whoisServer" type="eppcom:labelType" minOccurs="0"/>
    <element name="url" type="token" minOccurs="0"/>
    <element name="irisServer" type="eppcom:labelType" minOccurs="0"/>
  </sequence>
</complexType>

</schema>

25.5.1.4 XML templates/schema for sync-1.0 (consoliDate)
Template: The templates for sync-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/consolidate-mapping.txt.
Schema: This schema describes the extension mapping for the synchronization of domain name registration period expiration dates. This service is known as "ConsoliDate." The mapping extends the EPP domain name mapping to provide features that allow a protocol client to end a domain name registration period on a specific month and day.

<?xml version="1.0" encoding="UTF-8"?>
Extensible Provisioning Protocol v1.0 domain name extension schema for expiration date synchronization.

25.5.1.5 XML templates/schema for namestoreExt@1.1

Template: The templates for namestoreExt@1.1 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/namestore-extension.pdf.

Schema: This schema describes the extension mapping for the routing with an EPP intelligent gateway to a pluggable set of back-end products and services. The mapping extends the EPP domain name and host mapping to provide a sub-product identifier to identify the target sub-product that the EPP operation is intended for.

<!- General Data types. -->

<!- Child elements found in EPP commands. -->

<!- Child elements of the <update> command. -->

<!- End of schema. -->
<complexType name="extAnyType">
      <sequence>
        <any namespace="##other" maxOccurs="unbounded"/>
      </sequence>
    </complexType>

<!-- Child elements found in EPP commands and responses. -->
<element name="namestoreExt" type="namestoreExt:namestoreExtType"/>

<!-- Child elements of the <product> command. -->
<complexType name="namestoreExtType">
      <sequence>
        <element name="subProduct" type="namestoreExt:subProductType"/>
      </sequence>
    </complexType>

<!-- Child response elements. -->
<element name="nsExtErrData" type="namestoreExt:nsExtErrDataType"/>

<!-- <prdErrData> error response elements. -->
<complexType name="nsExtErrDataType">
      <sequence>
        <element name="msg" type="namestoreExt:msgType"/>
      </sequence>
    </complexType>

<!-- <prdErrData> <msg> element. -->
<complexType name="msgType">
      <simpleContent>
        <extension base="normalizedString">
          <attribute name="code" type="namestoreExt:prdErrCodeType" use="required"/>
          <attribute name="lang" type="language" default="en"/>
        </extension>
      </simpleContent>
    </complexType>

<!-- <prdErrData> error response codes. -->
<simpleType name="prdErrCodeType">
      <restriction base="unsignedShort">
        <enumeration value="1"/>
      </restriction>
    </simpleType>

<!-- End of schema. -->
</schema>

25.5.1.6 XML templates/schema for lowbalance-poll-1.0
Template: The templates for lowbalance-poll-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/low-balance-mapping.pdf.
Schema: This schema describes the extension mapping for the account low balance notification. The mapping extends the EPP base mapping so an account holder can be notified via EPP poll messages whenever the available credit for an account reaches or goes below the credit threshold.
25.6 Proprietary EPP Extension Consistency with Registration Lifecycle

Merck Registry Holdings, Inc.'s selected back-end registry services provider's (Verisign's) proprietary EPP extensions, defined in Section 5 above, are consistent with the registration lifecycle documented in the response to Question 27, Registration Lifecycle. Details of the registration lifecycle are presented in that response. As new registry features are required, Verisign develops proprietary EPP extensions to address new operational requirements. Consistent with ICANN procedures Verisign adheres to all applicable Registry Services Evaluation Process (RSEP) procedures.
26. Whois

Q.26 – WHOIS

26.1 Complete knowledge and understanding of this aspect of registry technical requirements

VeriSign, Inc. ("Verisign") Merck Registry Holdings, Inc. ("MRH")’s selected back-end registry services provider, has operated the WHOIS lookup service for the gTLDs and ccTLDs it manages since 1991, and will provide these proven services for the .MERCK gTLD registry. In addition, it continues to work with the Internet community to improve the utility of WHOIS data, while thwarting its application for abusive uses.

26.1.1 High-Level WHOIS System Description

Like all other components of MRH’s selected back-end registry services provider’s (Verisign’s) registry service, Verisign’s WHOIS system is designed and built for both reliability and performance in full compliance with applicable RFCs. Verisign’s current WHOIS implementation has answered more than five billion WHOIS queries per month for the TLDs it manages, and has experienced more than 250,000 queries per minute in peak conditions. The proposed gTLD uses a WHOIS system design and approach that is comparable to the current implementation. Independent quality control testing ensures Verisign’s WHOIS service is RFC-compliant through all phases of its lifecycle.

Verisign’s redundant WHOIS databases further contribute to overall system availability and reliability. The hardware and software for its WHOIS service is architected to scale both horizontally (by adding more servers) and vertically (by adding more CPUs and memory to existing servers) to meet future need. Verisign can fine-tune access to its WHOIS database on an individual Internet Protocol (IP) address basis, and it works with registrars to help ensure their services are not limited by any restriction placed on WHOIS. Verisign provides near real-time updates for WHOIS services for the TLDs under its management. As information is updated in the registration database, it is propagated to the WHOIS servers for quick publication. These updates align with the near real-time publication of Domain Name System (DNS) information as it is updated in the registration database. This capability is important for the .MERCK gTLD registry as it is Verisign’s experience that when DNS data is updated in near real time, so should WHOIS data be updated to reflect the registration specifics of those domain names.

Verisign’s WHOIS response time has been less than 500 milliseconds for 95 percent of all WHOIS queries in .COM, .NET, .TV, and .CC. The response time in these TLDs, combined with Verisign’s capacity, enables the WHOIS system to respond to up to 30,000 searches (or queries) per second for a total capacity of 2.6 billion queries per day.

The WHOIS software written by Verisign complies with RFC 3912. Verisign uses an advanced in-memory database technology to provide exceptional overall system performance and security. In accordance with RFC 3912, Verisign provides a website at whois.nic.MERCK that provides free public query-based access to the registration data. Verisign currently operates both thin and thick WHOIS systems.

Verisign commits to implementing a RESTful WHOIS service upon finalization of agreements with the IETF (Internet Engineering Task Force).

26.1.1a Provided Functionalities for User Interface

To use the WHOIS service via port 43, the user enters the applicable parameter on the command line as illustrated here:

-For domain name: whois EXAMPLE.TLD
-For registrar: whois "registrar Example Registrar, Inc."
-For name server: whois "NS1.EXAMPLE.TLD" or whois "name server (IP address)"

To use the WHOIS service via the Web-based directory service search interface:
-Go to http://whois.nic.MERCK
-Click on the appropriate button (Domain, Registrar, or Name Server)
-Enter the applicable parameter:
  --Domain name, including the TLD (e.g., EXAMPLE.TLD)
  --Full name of the registrar, including punctuation (e.g., Example Registrar, Inc.)
26.1.1b Provisions to Ensure That Access Is Limited to Legitimate Authorized Users and Is in Compliance with Applicable Privacy Laws or Policies

To further promote reliable and secure WHOIS operations, Verisign, MRH’s selected back-end registry services provider, has implemented rate-limiting characteristics within the WHOIS service software. For example, to prevent data mining or other abusive behavior, the service can throttle a specific requestor if the query rate exceeds a configurable threshold. In addition, QoS technology enables rate limiting of queries before they reach the servers, which helps protect against denial of service (DoS) and distributed denial of service (DDoS) attacks.

Verisign’s software also permits restrictions on search capabilities. For example, wild card searches can be disabled. If needed, it is possible to temporarily restrict and/or block requests coming from specific IP addresses for a configurable amount of time. Additional features that are configurable in the WHOIS software include help files, headers and footers for WHOIS query responses, statistics, and methods to memory map the database. Furthermore, Verisign is European Union (EU) Safe Harbor certified and has worked with European data protection authorities to address applicable privacy laws by developing a tiered WHOIS access structure that requires users who require access to more extensive data to (i) identify themselves, (ii) confirm that their use is for a specified purpose and (iii) enter into an agreement governing their use of the more extensive WHOIS data.

26.1.2 Relevant Network Diagrams

Figure 26-1 provides a summary network diagram of the WHOIS service provided by Verisign, MRH’s selected back-end registry services provider. The figure details the configuration with one resolution-WHOIS site. For the .MERCK gTLD, Verisign provides WHOIS service from six of its 17 primary sites based on the proposed gTLD’s traffic volume and patterns. A functionally equivalent resolution architecture configuration exists at each WHOIS site.

26.1.3 IT and Infrastructure Resources

Figure 26-2 summarizes the IT and infrastructure resources that Verisign, MRH’s selected back-end registry services provider, uses to provision WHOIS services from Verisign primary resolution sites. As needed, virtual machines are created based on actual and projected demand.

See Figure 26-2

26.1.4 Description of Interconnectivity with Other Registry Systems

Figure 26-3 provides a technical overview of the registry system provided by Verisign, MRH’s selected back-end registry services provider, and shows how the WHOIS service component fits into this larger system and interconnects with other system components.

26.1.5 Frequency of Synchronization Between Servers

Synchronization between the SRS and the geographically distributed WHOIS resolution sites occurs approximately every three minutes. Verisign, MRH’s selected back-end registry services provider, uses a two-part WHOIS update process to ensure WHOIS data is accurate and available. Every 12 hours an initial file is distributed to each resolution site. This file is a complete copy of all WHOIS data fields associated with each domain name under management. As interactions with the SRS cause the WHOIS data to be changed, these incremental changes are distributed to the resolution sites as an incremental file update. This incremental update occurs approximately every three minutes. When the new 12-hour full update is distributed, this file includes all past incremental updates. Verisign’s approach to frequency of synchronization between servers meets the Performance Specifications defined in Specification 10 of the Registry Agreement for new gTLDs.

26.2 Technical plan scope/scale consistent with the overall business approach and planned size of the registry

Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As
such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the "Most Likely" scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign's pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as "Total Critical Registry Function Cash Outflows" (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

26.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the "Most Likely" scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as "Total Critical Registry Function Cash Outflows" (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, of this application to support WHOIS services:
- Application Engineers: 19
- Database Engineers: 3
- Quality Assurance Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign, MRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

26.4 Compliance with Relevant RFC

MRH’s selected back-end registry services provider’s (Verisign’s) WHOIS service complies with the data formats defined in Specification 4 of the Registry Agreement. Verisign will provision WHOIS services for registered domain names and associated data in the top-level domain (TLD). Verisign’s WHOIS services are accessible over Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6), via both Transmission Control Protocol (TCP) port 43 and a Web-based directory service at whois.nic.MERCK, which, in accordance with RFC 3912, provides free public query-based access to domain name, registrar, and name server lookups. Verisign’s proposed WHOIS system meets all
requirements as defined by ICANN, for each registry under Verisign management. Evidence of this successful implementation, and thus compliance with the applicable RFCs, can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports that Verisign files with ICANN. These reports provide evidence of Verisign’s ability to meet registry operation service level agreements (SLAs) comparable to those detailed in Specification 10. The reports are accessible at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

26.5 Compliance with Specifications 4 and 10 of Registry Agreement

In accordance with Specification 4, Verisign, MRH’s selected back-end registry services provider, provides a WHOIS service that is available via both port 43 in accordance with RFC 3912, and a Web-based directory service at whois.nic.MERCK also in accordance with RFC 3912, thereby providing free public query-based access. Verisign acknowledges that ICANN reserves the right to specify alternative formats and protocols, and upon such specification, Verisign will implement such alternative specification as soon as reasonably practicable.

The format of the following data fields conforms to the mappings specified in Extensible Provisioning Protocol (EPP) RFCs 5730 – 5734 so the display of this information (or values returned in WHOIS responses) can be uniformly processed and understood: domain name status, individual and organizational names, address, street, city, state/province, postal code, country, telephone and fax numbers, email addresses, date, and times.

Specifications for data objects, bulk access, and lookups comply with Specification 4 and are detailed in the following subsections, provided in both bulk access and lookup modes.

Bulk Access Mode: This data is provided on a daily schedule to a party designated from time to time in writing by ICANN. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until revised in the ICANN Registry Agreement.

The data is provided in three files:
- Domain Name File: For each domain name, the file provides the domain name, server name for each name server, registrar ID, and updated date.
- Name Server File: For each registered name server, the file provides the server name, each IP address, registrar ID, and updated date.
- Registrar File: For each registrar, the following data elements are provided: registrar ID, registrar address, registrar telephone number, registrar email address, WHOIS server, referral URL, updated date, and the name, telephone number, and email address of all the registrar’s administrative, billing, and technical contacts.

Lookup Mode: Figures 26-4 through 26-6 provide the query and response format for domain name, registrar, and name server data objects. See Figure 26-4. See Figure 26-5. See Figure 26-6.

26.5.1 Specification 10, RDDS Registry Performance Specifications

The WHOIS service meets all registration data directory services (RDDS) registry performance specifications detailed in Specification 10, Section 2. Evidence of this performance can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports that Verisign files monthly with ICANN. These reports are accessible from the ICANN website at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

In accordance with RDDS registry performance specifications detailed in Specification 10, Verisign’s WHOIS service meets the following proven performance attributes:
- RDDS availability: GBP 864 min of downtime (greater than 98%)
- RDDS query RTT: GBP 2000 ms, for at least 95% of the queries
- RDDS update time: GBP 60 min, for at least 95% of the probes

26.6 Searchable WHOIS

Verisign, MRH’s selected back-end registry services provider, provides a searchable WHOIS service for the .MERCK gTLD. Verisign has experience in providing tiered access to WHOIS for the .NAME registry, and uses these methods and control structures to help reduce potential malicious use of the function. The searchable WHOIS system currently uses Apache’s Lucene full text search engine to index relevant WHOIS content with near-real time incremental updates from the provisioning system.

Features of the Verisign searchable WHOIS function include:
- Provision of a Web-based searchable directory service
- Ability to perform partial match, at least, for the following data fields: domain name, contacts and registrant’s name, and contact and registrant’s postal address,
including all the sub-fields described in EPP (e.g., street, city, state, or province)
- Ability to perform exact match, at least, on the following fields: registrar ID, name
  server name, and name server’s IP address (only applies to IP addresses stored by the
  registry, i.e., glue records)
- Ability to perform Boolean search supporting, at least, the following logical
  operators to join a set of search criteria: AND, OR, NOT
- Search results that include domain names that match the selected search criteria

Verisign’s implementation of searchable WHOIS is EU Safe Harbor certified and includes
appropriate access control measures that help ensure that only legitimate authorized
users can use the service. Furthermore, Verisign’s compliance office monitors current
ICANN policy and applicable privacy laws or policies to help ensure the solution is
maintained within compliance of applicable regulations. Features of these access
control measures include:
- All unauthenticated searches are returned as thin results
- Registry system authentication is used to grant access to appropriate users for thick
  WHOIS data search results.
- Account access is granted by the MRH’s defined .MERCK gTLD admin user.

Potential Forms of Abuse and Related Risk Mitigation: Leveraging its experience
providing tiered access to WHOIS for the .NAME registry and interacting with ICANN,
data protection authorities, and applicable industry groups, Verisign, MRH’s selected
back-end registry services provider, is knowledgeable of the likely data mining forms
of abuse associated with a searchable WHOIS service. Figure 26-7 summarizes these
potential forms of abuse and Verisign’s approach to mitigate the identified risk.
See Figure 26-7.

27. Registration Life Cycle

27.1 Complete Knowledge and Understanding of Registration Lifecycles and States

Starting with domain name registration and continuing through domain name delete
operations, Merck Registry Holdings, Inc.’s selected backend registry services
provider’s (Verisign’s) registry implements the full registration lifecycle for domain
names supporting the operations in the Extensible Provisioning Protocol (EPP)
specification. The registration lifecycle of the domain name starts with registration
and traverses various states as specified in the following sections. The registry
system provides options to update domain names with different server and client status
codes that block operations based on the EPP specification. The system also provides
different grace periods for different billable operations, where the price of the
billable operation is credited back to the registrar if the billable operation is
removed within the grace period. Together Figure 27 1 and Figure 27 2 define the
registration states comprising the registration lifecycle and explain the trigger
points that cause state-to-state transitions. States are represented as green
rectangles within Figure 27 1.

See: Figure 27 1: Registration Lifecycle State Diagram

See: Figure 27 2: Registration States

27.1.1 Registration Lifecycle of Create⁄Update⁄Delete

The following section details the create⁄update⁄delete processes and the related
renewal process that Verisign, Merck Registry Holdings, Inc.’s selected backend
registry services provider, follows. For each process, this response defines the
process function and its characterization, and as appropriate provides a process flow
chart.

Create Process: The domain name lifecycle begins with a registration or what is
referred to as a Domain Name Create operation in EPP. The system fully supports the EPP
Domain Name Mapping as defined by RFC 5731, where the associated objects (e.g., hosts
and contacts) are created independent of the domain name.

Process Characterization: The Domain Name Create command is received, validated, run through a set of business rules, persisted to the database, and committed in the database if all business rules pass. The domain name is included with the data flow to the DNS and WHOIS resolution services. If no name servers are supplied, the domain name is not included with the data flow to the DNS. A successfully created domain name has the created date and expiration date set in the database. Creates are subject to grace periods as described in Section 1.3 of this response, Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers.

The Domain Name Create operation is detailed in Figure 27 3 and requires the following attributes:

- A domain name that meets the string restrictions.
- A domain name that does not already exist.
- The registrar is authorized to create a domain name in .MERCK.
- The registrar has available credit.
- A valid Authorization Information (Auth-Info) value.
- Required contacts (e.g., registrant, administrative contact, technical contact, and billing contact) are specified and exist.
- The specified name servers (hosts) exist, and there is a maximum of 13 name servers.
- A period in units of years with a maximum value of 10 (default period is one year).

See: Figure 27 3: Create Process Flow Chart

Renewal Process: The domain name can be renewed unless it has any form of Pending Delete, Pending Transfer, or Renew Prohibited.

A request for renewal that sets the expiry date to more than ten years in the future is denied. The registrar must pass the current expiration date (without the timestamp) to support the idempotent features of EPP, where sending the same command a second time does not cause unexpected side effects.

Automatic renewal occurs when a domain name expires. On the expiration date, the registry extends the registration period one year and debits the registrar account balance. In the case of an auto-renewal of the domain name, a separate Auto-Renew grace period applies. Renewals are subject to grace periods as described in Section 1.3 of this response, Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers.

Process Characterization: The Domain Name Renew command is received, validated, authorized, and run through a set of business rules. The data is updated and committed in the database if it passes all business rules. The updated domain name’s expiration date is included in the flow to the WHOIS resolution service.

The Domain Name Renew operation is detailed in Figure 27 4 and requires the following attributes:

- A domain name that exists and is sponsored by the requesting registrar.
- The registrar is authorized to renew a domain name in .MERCK.
- The registrar has available credit.
- The passed current expiration date matches the domain name’s expiration date.
- A period in units of years with a maximum value of 10 (default period is one year). A domain name expiry past ten years is not allowed.

See: Figure 27 4: Renewal Process Flow Chart

Registrar Transfer Procedures. A registrant may transfer his/her domain name from his/her current registrar to another registrar. The database system allows a transfer as long as the transfer is not within the initial 60 days, per industry standard, of the original registration date.

The registrar transfer process goes through many process states, which are described in detail below, unless it has any form of Pending Delete, Pending Transfer, or Transfer
Prohibited.

A transfer can only be initiated when the appropriate Auth-Info is supplied. The Auth-Info for transfer is only available to the current registrar. Any other registrar requesting to initiate a transfer on behalf of a registrant must obtain the Auth-Info from the registrant.

The Auth-Info is made available to the registrant upon request. The registrant is the only party other than the current registrar that has access to the Auth-Info. Registrar transfer entails a specified extension of the expiry date for the object. The registrar transfer is a billable operation and is charged identically to a renewal for the same extension of the period. This period can be from one to ten years, in one-year increments.

Because registrar transfer involves an extension of the registration period, the rules and policies applying to how the resulting expiry date is set after transfer are based on the renewal policies on extension.

Per industry standard, a domain name cannot be transferred to another registrar within the first 60 days after registration. This restriction continues to apply if the domain name is renewed during the first 60 days. Transfer of the domain name changes the sponsoring registrar of the domain name, and also changes the child hosts (ns1.sample.xyz) of the domain name (sample .xyz).

The domain name transfer consists of five separate operations:

- Transfer Request (Figure 27 5): Executed by a non-sponsoring registrar with the valid Auth-Info provided by the registrant. The Transfer Request holds funds of the requesting registrar but does not bill the registrar until the transfer is completed. The sponsoring registrar receives a Transfer Request poll message.
- Transfer Cancel (Figure 27 6): Executed by the requesting registrar to cancel the pending transfer. The held funds of the requesting registrar are reversed. The sponsoring registrar receives a Transfer Cancel poll message.
- Transfer Approve (Figure 27 7): Executed by the sponsoring registrar to approve the Transfer Request. The requesting registrar is billed for the Transfer Request and the sponsoring registrar is credited for an applicable Auto-Renew grace period. The requesting registrar receives a Transfer Approve poll message.
- Transfer Reject (Figure 27 8): Executed by the sponsoring registrar to reject the pending transfer. The held funds of the requesting registrar are reversed. The requesting registrar receives a Transfer Reject poll message.
- Transfer Query (Figure 27 9): Executed by either the requesting registrar or the sponsoring registrar of the last transfer.

The registry auto-approves a transfer if the sponsoring registrar takes no action. The requesting registrar is billed for the Transfer Request and the sponsoring registrar is credited for an applicable Auto-Renew grace period. The requesting registrar and the sponsoring registrar receive a Transfer Auto-Approve poll message.

See: Figure 27 5: Transfer Request Process
See: Figure 27 6: Transfer Cancel Process
See: Figure 27 7: Transfer Approve Process
See: Figure 27 8: Transfer Reject Process
See: Figure 27 9: Transfer Query Process

Delete Process: A registrar may choose to delete the domain name at any time.

Process Characterization: The domain name can be deleted, unless it has any form of Pending Delete, Pending Transfer, or Delete Prohibited.

A domain name is also prohibited from deletion if it has any in-zone child hosts that are name servers for domain names. For example, the domain name “sample.xyz” cannot be deleted if an in-zone host “ns.sample.xyz” exists and is a name server for “sample2.xyz.”

If the Domain Name Delete occurs within the Add grace period, the domain name is
immediately deleted and the sponsoring registrar is credited for the Domain Name Create. If the Domain Name Delete occurs outside the Add grace period, it follows the Redemption grace period (RGP) lifecycle.

Update Process: The sponsoring registrar can update the following attributes of a domain name:

- Auth-Info
- Name servers
- Contacts (i.e., registrant, administrative contact, technical contact, and billing contact)
- Statuses (e.g., Client Delete Prohibited, Client Hold, Client Renew Prohibited, Client Transfer Prohibited, Client Update Prohibited)

Process Characterization: Updates are allowed provided that the update includes the removal of any Update Prohibited status. The Domain Name Update operation is detailed in Figure 27.10.

A domain name can be updated unless it has any form of Pending Delete, Pending Transfer, or Update Prohibited.

See: Figure 27.10: Update Process Flow Chart

27.1.2 Pending, Locked, Expired, and Transferred

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, handles pending, locked, expired, and transferred domain names as described here. When the domain name is deleted after the five-day Add grace period, it enters into the Pending Delete state. The registrant can return its domain name to active any time within the five-day Pending Delete grace period. After the five-day Pending Delete grace period expires, the domain name enters the Redemption Pending state and then is deleted by the system. The registrant can restore the domain name at any time during the Redemption Pending state.

When a non-sponsoring registrar initiates the domain name transfer request, the domain name enters Pending Transfer state and a notification is mailed to the sponsoring registrar for approvals. If the sponsoring registrar doesn’t respond within five days, the Pending Transfer expires and the transfer request is automatically approved.

EPP specifies both client (registrar) and server (registry) status codes that can be used to prevent registry changes that are not intended by the registrant. Currently, many registrars use the client status codes to protect against inadvertent modifications that would affect their customers’ high-profile or valuable domain names.

Verisign’s registry service supports the following client (registrar) and server (registry) status codes:

- clientHold
- clientRenewProhibited
- clientTransferProhibited
- clientUpdateProhibited
- serverHold
- serverRenewProhibited
- serverTransferProhibited
- serverUpdateProhibited
- serverDeleteProhibited

27.1.3 Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, handles Add grace periods, Redemption grace periods, and notice periods for renewals or transfers as described here.
- Add Grace Period: The Add grace period is a specified number of days following the initial registration of the domain name. The current value of the Add grace period for all registrars is five days.
- Redemption Grace Period: If the domain name is deleted after the five-day grace period expires, it enters the Redemption grace period and then is deleted by the system. The registrant has an option to use the Restore Request command to restore the domain name within the Redemption grace period. In this scenario, the domain name goes to Pending Restore state if there is a Restore Request command within 30 days of the Redemption grace period. From the Pending Restore state, it goes either to the OK state, if there is a Restore Report Submission command within seven days of the Restore Request grace period, or to the Redemption Period state if there is no Restore Report Submission command within seven days of the Restore Request grace period.
- Renew Grace Period: The Renew/Extend grace period is a specified number of days following the renewal/extension of the domain name’s registration period. The current value of the Renew/Extend grace period is five days.
- Auto-Renew Grace Period: All auto-renewed domain names have a grace period of 45 days.
- Transfer Grace Period: Domain names have a five-day Transfer grace period.

27.1.4 Aspects of the Registration Lifecycle Not Covered by Standard EPP RFCs

Merck Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registration lifecycle processes and code implementations adhere to the standard EPP RFCs related to the registration lifecycle. By adhering to the RFCs, Verisign’s registration lifecycle is complete and addresses each registration-related task comprising the lifecycle. No aspect of Verisign’s registration lifecycle is not covered by one of the standard EPP RFCs and thus no additional definitions are provided in this response.

27.2 Consistency with any specific commitments made to registrants as adapted to the overall business approach for the proposed gTLD

The registration lifecycle described above applies to the .MERCK gTLD as well as other TLDs managed by Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider; thus Verisign remains consistent with commitments made to its registrants. No unique or specific registration lifecycle modifications or adaptations are required to support the overall business approach for the .MERCK gTLD.

To accommodate a range of registries, Verisign’s registry implementation is capable of offering both a thin and thick WHOIS implementation, which is also built upon Verisign’s award-winning ATLAS infrastructure.

27.3 Compliance with relevant RFCs

Merck Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registration lifecycle complies with applicable RFCs, specifically RFCs 5730 – 5734 and 3915. The system fully supports the EPP Domain Name Mapping as defined by RFC 5731, where the associated objects (e.g., hosts and contacts) are created independent of the domain name.

In addition, in accordance with RFCs 5732 and 5733, the Verisign registration system enforces the following domain name registration constraints:

- Uniqueness/Multiplicity: A second-level domain name is unique in the .MERCK database. Two identical second-level domain names cannot simultaneously exist in .MERCK. Further, a second-level domain name cannot be created if it conflicts with a reserved domain name.
- Point of Contact Associations: The domain name is associated with the following points of contact. Contacts are created and managed independently according to RFC 5733.
  -- Registrant
  -- Administrative contact
  -- Technical contact
  -- Billing contact
- Domain Name Associations: Each domain name is associated with:
-- A maximum of 13 hosts, which are created and managed independently according to RFC 5732
-- An Auth-Info, which is used to authorize certain operations on the object
-- Status(es), which are used to describe the domain name’s status in the registry
-- A created date, updated date, and expiry date

27.4 Demonstrates that technical resources required to carry through the plans for this element are already on hand or readily available

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, is an experienced backend registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the backend registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the registration lifecycle:

- Application Engineers: 19
- Customer Support Personnel: 36
- Database Administrators: 8
- Database Engineers: 3
- Quality Assurance Engineers: 11
- SRS System Administrators: 13

To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-

28. Abuse Prevention and Mitigation
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28.1 Abuse Prevention and Mitigation Implementation Plan

Merck Registry Holdings, Inc.’s (“MRH”) primary safeguard against mitigating abusive and⁄or non@compliant registrations within the .MERCK name space is the limited universe of registrants that will be permitted to register with the .MERCK gTLD. As a dot Brand registry, registration will initially be limited to Merck Sharp and Dohme Corp (“MSD”) and its qualified subsidiaries and affiliates. This built-in validation mechanism promotes uniform compliance and increase accuracy of WHOIS data. MRH is committed to providing best in class safeguards and will be closely monitoring other .BRAND applicants for suitable safeguards.

28.1.2 Policies for Handling Complaints Regarding Abuse

As required by the ICANN template Registry Agreement, MRH will establish, publish, and maintain on its website a single point of contact for handling abuse complaints. This contact will be a role account, e.g., abuse@registry.merck. All email inquiries submitted to this email account will be responded to in a reasonably timely manner. MRH will employ an escalated complaint procedure. This procedure will place priority on complaints received from a trusted⁄verified source (e.g. law enforcement). If the complaint falls within the scope of MRH’s Abuse Policy, MRH reserves the right to suspend or cancel the non-compliant domain.

MRH has not yet finalized an Acceptable Use Policy. A draft policy has been included below but has not yet been finalized by Merck’s legal team. Such approval and posting of the policy will be done in advance of the launch of the registry.

The role email account identified above will have multiple MRH staff recipients to allow for monitoring on a 24X7 basis. In addition the phone number provided for on the Registry website will be answered by MRH staff during normal working hours.

28.1.3 Proposed Measures for Removal of Orphan Glue Records

Although orphan glue records often support correct and ordinary operation of the Domain Name System (DNS), registry operators will be required to remove orphan glue records (as defined at http://www.icann.org/en/committees/security/sac048.pdf) when provided with evidence in written form that such records are present in connection with malicious conduct. MRH’s selected back@end registry services provider’s (Verisign’s) registration system is specifically designed to not allow orphan glue records. Registrars are required to delete⁄move all dependent DNS records before they are allowed to delete the parent domain.

To prevent orphan glue records, Verisign performs the following checks before removing a domain or name server:

Checks during domain delete:
- Parent domain delete is not allowed if any other domain in the zone refers to the child name server.
- If the parent domain is the only domain using the child name server, then both the domain and the glue record are removed from the zone.

Check during explicit name server delete:
Verisign confirms that the current name server is not referenced by any domain name (in-zone) before deleting the name server.

Zone-file impact:
If the parent domain references the child name server AND if other domains in the zone also reference it AND if the parent domain name is assigned a serverHold status, then the parent domain goes out of the zone but the name server glue record does not.

If no domains reference a name server, then the zone file removes the glue record.

28.1.4 Resourcing Plans

Details related to resourcing plans for the initial implementation and ongoing maintenance of MRH’s abuse plan are provided in Section 2 of this response.

28.1.5 Measures to Promote WHOIS Accuracy
Ensuring the accuracy of WHOIS information is of paramount importance to MRH in the operation of the .MERCK gTLD. MRH will employ the following mechanism to promote WHOIS accuracy.

- Only MSD and its qualified subsidiaries and affiliates will be permitted to register in the .MERCK
- There will be a strict prohibition against the use of proxy registration services;
- MRH will maintain a web-based form for third parties to submit claims regarding false and or inaccurate WHOIS data.

28.1.5.1 Authentication of Registrant Information

Because all registrants in the .MERCK gTLD namespace will have a pre-existing relationship with MSD, this will be pre-authenticated thus promoting accurate and complete WHOIS data.

28.1.5.2 Regular Monitoring of Registration Data for Accuracy and Completeness

Verisign, MRH’s selected back-end registry services provider, has established policies and procedures to encourage registrar compliance with ICANN’s WHOIS accuracy requirements. Verisign provides the following service to MRH for incorporation into its full-service registry operations.

WHOIS data reminder process. Verisign regularly reminds registrars of their obligation to comply with ICANN’s WHOIS Data Reminder Policy, which was adopted by ICANN as a consensus policy on 27 March 2003 (http://www.icann.org/en/registrars/wdrp.htm). Verisign sends a notice to all registrars once a year reminding them of their obligation to be diligent in validating the WHOIS information provided during the registration process, to investigate claims of fraudulent WHOIS information, and to cancel domain name registrations for which WHOIS information is determined to be invalid.

28.1.5.3 Use of Registrars

MRH has not yet made any determinations regarding which registrar will be selected to provide domain name registration services in the gTLD. MSD currently uses one corporate domain name registrar. The likely registrar plan will be to use one corporate registrar. However, any final determination will depend upon MRH and the registrar of choice reaching an agreed-upon price for the specified services.

Registrar services will be provided by certain ICANN-accredited registrars that enter into a Registrar-Registry Agreement (RRA) with MRH, the Registry Operator.

28.1.6 Malicious or Abusive Behavior Definitions, Metrics, and Service Level Requirements for Resolution

MRH will have an Authorized Usage Policy that will govern how a registrant may use its registered domain name(s). A draft framework of this policy is as follows:

By registering a name in this gTLD, the registrant agrees to be bound by the terms of this Acceptable Use Policy (AUP). Registrant may not:

1. Use domain names for any purposes that are prohibited by the laws of the jurisdiction(s) in which registrant does business, or any other applicable law.
2. Use domain names for any purposes or in any manner that violates a statute, rule, or law governing use of the Internet and/or electronic commerce (specifically including “phishing,” “pharming,” distributing Internet viruses and other destructive activities).
3. Use domain names for the following types of activity:
   i. Violation of the privacy or publicity rights of any third party,
   ii. Promotion of or engagement in hate speech; hate crime; terrorism; violence against people, animals, or property; or intolerance of or against any protected class;
   iii. Promotion of or engagement in defamatory, harassing, abusive or otherwise objectionable behavior;
   iv. Promotion of or engagement in child pornography or the exploitation of children;
   v. Promotion of or engagement in any spam or other unsolicited bulk email, or computer
or network hacking or cracking;
v. Infringement on the intellectual property rights of another member of the .MERCK gTLD community, or any other person or entity;
vii. Engagement in activities designed to impersonate any third party or create a likelihood of confusion in sponsorship;
viii. Interference with the operation of the .MERCK gTLD or services offered by MRH;
ix. Installation of any viruses, worms, bugs, Trojan horses, or other code, files, or programs designed to, or capable of, disrupting, damaging, or limiting the functionality of any software or hardware; or distributing false or deceptive language, or unsubstantiated or comparative claims, regarding MRH;
x. Registration of .MERCK domain names for the purpose of reselling or transferring those domain names.

28.1.7 Controls to Ensure Proper Access to Domain Functions

MRH will primarily be relying upon the safeguards incorporated at the registrar level to ensure proper access to domain names. Because MRH envisions working with a single corporate registrar, this will provide an important gatekeeping function.

28.1.7.2 Requiring Multiple, Unique Points of Contact and Means of Notification

MRH will likely assign multiple unique points of contact. In connection with compliance, abuse, or malicious activity, an individual within MRH's legal department will be identified. In connection with technical, security, and/or stability issues, an individual in MRH's IT department will be identified. These unique POCs will have a corresponding unique email address that will auto-forward emails to these addresses to multiple individuals in each of the appropriate departments to ensure that there is no single point of failure in the communication chain.

28.2 Technical plan that is adequately resourced in the planned costs detailed in the financial section

28.2.1 Resource Planning

MRH is committed to operating the .MERCK gTLD in a manner that protects the core brand of MRH. MRH has projected that a staff level 0.25 Resource Year ("RY") (0.5 RY per gTLD for both legal and IT staff) for legal compliance and oversight for the gTLD. In addition, MRH can rely upon existing in-house legal and other support staff should the need arise. MRH has strategically chosen Verisign as its registry services provider because of their excellent track record in operating some of the world's most complex and critical top-level domains. Verisign's support for the .MERCK gTLD will help ensure its success.

28.2.2 Resource Planning Specific to Back-end Registry Activities

Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD's initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign's quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in
Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support abuse prevention and mitigation:

Application Engineers: 19
Business Continuity Personnel: 3
Customer Affairs Organization: 9
Customer Support Personnel: 36
Information Security Engineers: 11
Network Administrators: 11
Network Architects: 4
Network Operations Center (NOC) Engineers: 33
Project Managers: 25
Quality Assurance Engineers: 11
Systems Architects: 9

To implement and manage the .MERCK gTLD as described in this application, Verisign, MRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area. When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

28.3.2 Ongoing Anti-Abuse Policies and Procedures

28.3.2.1 Policies and Procedures that Identify Malicious or Abusive Behavior

Verisign, MRH’s selected back-end registry services provider, provides the following service to MRH for incorporation into its full-service registry operations.

Malware scanning service. Registrants are often unknowing victims of malware exploits. Verisign has developed proprietary code to help identify malware in the zones it manages, which in turn helps registrars by identifying malicious code hidden in their domain names.

Verisign’s malware scanning service helps prevent websites from infecting other websites by scanning web pages for embedded malicious content that will infect visitors’ websites. Verisign’s malware scanning technology uses a combination of in-depth malware behavioral analysis, anti-virus results, detailed malware patterns, and network analysis to discover known exploits for the particular scanned zone. If malware is detected, the service sends the registrar a report that contains the number of malicious domains found and details about malicious content within its TLD zones. Reports with remediation instructions are provided to help registrars and registrants eliminate the identified malware from the registrant’s website.

28.3.2.2 Policies and Procedures that Address the Abusive Use of Registered Names

Suspension processes: Any registrant which ceases to have a qualified ongoing legal relationship with MRH will immediately have their domain name suspended and/or cancelled. In addition, any registrant that fails to timely respond to a WHOIS accuracy complaint is subject to having their domain name suspended and/or cancelled. Prior to taking any affirmation action in connection with an WHOIS accuracy compliant, MRH will attempt to contact registrant through various electronic means (email, telephone and fax).

Suspension processes conducted by back-end registry services provider: In the case of domain name abuse, MRH will determine whether to take down the subject domain name. Verisign, MRH’s selected back-end registry services provider, will follow the following
auditable processes to comply with the suspension request.

Verisign Suspension Notification: MRH submits the suspension request to Verisign for processing, documented by:

- Threat domain name
- Registry incident number
- Incident narrative, threat analytics, screen shots to depict abuse, and/or other evidence
- Threat classification
- Threat urgency description
- Recommended timeframe for suspension/takedown
- Technical details (e.g., WHOIS records, IP addresses, hash values, anti-virus detection results-nomenclature, name servers, domain name statuses that are relevant to the suspension)
- Incident response, including surge capacity

Verisign Notification Verification: When Verisign receives a suspension request from MRH, it performs the following verification procedures:

- Validate that all the required data appears in the notification.
- Validate that the request for suspension is for a registered domain name.
- Return a case number for tracking purposes.

Suspension Rejection: If required data is missing from the suspension request, or the domain name is not registered, the request will be rejected and returned to MRH with the following information:

- Threat domain name
- Registry incident number
- Verisign case number
- Error reason

Upon MRH request, Verisign can provide a process for registrants to protest the suspension.

Domain Suspension: Verisign places the domain to be suspended on the following statuses:

- serverUpdateProhibited
- serverDeleteProhibited
- serverTransferProhibited
- serverHold

Suspension Acknowledgement: Verisign notifies MRH that the suspension has been completed. Acknowledgement of the suspension includes the following information:

- Threat domain name
- Registry incident number
- Verisign case number
- Case number
- Domain name
- MRH abuse contact name and number, or registrar abuse contact name and number
- Suspension status

28.4 When executed in accordance with the Registry Agreement, plans will result in compliance with contractual requirements

As noted in the Question 18 business plan, the purpose of this gTLD registry is to provide MRH with a secure and trusted namespace that is the representation of its brand online. MRH intends to fully comply with the contractual requirements of the Registrant Agreement. Moreover, MRH has a vested interest to ensure that all qualified subsidiaries, affiliates, and potentially partners, licensees and other related third parties adhere to these legal requirements.

As noted, in the above referenced compliance section, failure for registrants to timely remedy any non-compliant activity will result in the suspension and/or deletion of the domain in question.

28.5 Technical plan scope-scale that is consistent with the overall business approach and planned size of the registry

28.5.1 Scope-Scale Consistency
As a branded gTLD Registry, the allocated registry staff will ensure that all registrations are in compliance with the requirements set forth in the Registrant Agreement. As this staff member(s) is proposed to be sourced from MRH’s legal department, this will facilitate compliance of affiliates, subsidiaries, licensees, Merck foundations and related parties with whom Merck has a pre-existing legal relationship. Unlike other registries that must oversee numerous registrars and untold number of registrants, the .MERCK gTLD will be a limited-universe of known entities with a pre-existing relationship with the Merck that will likely be registered through one registrar.

28.5.2 Scope/Scale Consistency Specific to Back-End Registry Activities

Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as “Other Operating Cost” (Template 1, Line I.1) within the Question 46 financial projections response.

29. Rights Protection Mechanisms

VeriSign, Inc. Response to Question 29 Rights Protection Mechanisms

29.1 Mechanisms Designed to Prevent Abusive Registrations

Rights protection is a core objective of Merck Registry Holdings, Inc. ("MRH"). MRH will implement and adhere to any rights protection mechanisms (RPMs) that may be mandated from time to time by ICANN, including each mandatory RPM set forth in the Trademark Clearinghouse model contained in the Registry Agreement, specifically Specification 7. MRH acknowledges that, at a minimum, ICANN requires a Sunrise period, a Trademark Claims period, and interaction with the Trademark Clearinghouse with respect to the registration of domain names for the .MERCK gTLD. It should be noted that because ICANN, as of the time of this application submission, has not issued final guidance with respect to the Trademark Clearinghouse, MRH cannot fully detail the specific implementation of the Trademark Clearinghouse within this application. MRH will adhere to all processes and procedures to comply with ICANN guidance once this guidance is finalized.

As described in this response, MRH will implement a Sunrise period and Trademark Claims service with respect to the registration of domain names within the .MERCK gTLD. Certain aspects of the Sunrise period and Trademark Claims service may be administered on behalf of MRH by MRH-approved registrars or by subcontractors of MRH, such as its selected back-end registry services provider, Verisign.

At the time of filing, ICANN has not yet released final details on the Trademark Clearinghouse service. However, the protection of intellectual property is of paramount importance to MRH. Given this and the fact that the initial proposed use of the registry is for the exclusive use of Merck Sharp and Dohme Corp ("MSD"), all initial domain name registrations in the .MERCK namespace will be made by MSD. Therefore, while MRH will implement a Sunrise period and Trademark Claims process, depending upon the cost to access the Trademark Clearinghouse, MRH may elect to forego the minimum
one-month Sunrise period and register names in the gTLD following this mandatory period.

Sunrise Period: As provided by the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook, the Sunrise service pre-registration procedure for domain names continues for at least 30 days prior to the launch of the general registration of domain names in the gTLD (unless MRH decides to offer a longer Sunrise period).

During the Sunrise period, holders of marks that have been previously validated by the Trademark Clearinghouse receive notice of domain names that are an identical match (as defined in the ICANN Applicant Guidebook) to their mark(s). Such notice is in accordance with ICANN’s requirements and is provided by MRH either directly or through MRH-approved registrars.

MRH requires all registrants, either directly or through MRH-approved registrars, to i) affirm that said registrants meet the Sunrise Eligibility Requirements (SER), and ii) submit to the Sunrise Dispute Resolution Policy (SDRP) consistent with Section 6 of the Trademark Clearinghouse model. At a minimum MRH recognizes and honors all word marks for which a proof of use was submitted and validated by the Trademark Clearinghouse as well as any additional eligibility requirements as specified in Question 18.

During the Sunrise period, MRH and/or MRH-approved registrars, as applicable, are responsible for determining whether each domain name is eligible to be registered (including in accordance with the SERs).

Trademark Claims Service: As provided by the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook, all new gTLDs will have to provide a Trademark Claims service for a minimum of 60 days after the launch of the general registration of domain names in the gTLD (Trademark Claims period).

During the Trademark Claims period, in accordance with ICANN’s requirements, MRH or the MRH-approved registrar will send a Trademark Claims Notice to any prospective registrant of a domain name that is an identical match (as defined in the ICANN Applicant Guidebook) to any mark that is validated in the Trademark Clearinghouse. The Trademark Claims Notice will include links to the Trademark Claims as listed in the Trademark Clearinghouse and will be provided at no cost.

Prior to registration of said domain name, MRH or the MRH-approved registrar will require each prospective registrant to provide the warranties dictated in the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook. Those warranties will include receipt and understanding of the Trademark Claims Notice and confirmation that registration and use of said domain name will not infringe on the trademark rights of the mark holders listed. Without receipt of said warranties, the MRH or the MRH-approved registrar will not process the domain name registration.

Following the registration of a domain name, the MRH-approved registrar will provide a notice of domain name registration to the holders of marks that have been previously validated by the Trademark Clearinghouse and are an identical match. This notice will be as dictated by ICANN. At a minimum MRH will recognize and honor all word marks validated by the Trademark Clearinghouse.

29.2 Mechanisms Designed to Identify and address the abusive use of registered names on an ongoing basis

In addition to the Sunrise and Trademark Claims services described in Section 1 of this response, MRH implements and adheres to RPMs post-launch as mandated by ICANN, and confirms that registrars accredited for the .MERCK gTLD are in compliance with these mechanisms. Certain aspects of these post-launch RPMs may be administered on behalf of MRH by MRH-approved registrars or by subcontractors of MRH, such as its selected back-end registry services provider, Verisign.

These post-launch RPMs include the established Uniform Domain-Name Dispute-Resolution Policy (UDRP), as well as the newer Uniform Rapid Suspension System (URS) and Trademark Post-Delegation Dispute Resolution Procedure (PDDRP). Where applicable, MRH will
implement all determinations and decisions issued under the corresponding RPM.

After a domain name is registered, trademark holders can object to the registration through the UDRP or URS. Objections to the operation of the gTLD can be made through the PDDRP.

The following descriptions provide implementation details of each post-launch RPM for the .MERCK gTLD:

- **UDRP**: The UDRP provides a mechanism for complainants to object to domain name registrations. The complainant files its objection with a UDRP provider and the domain name registrant has an opportunity to respond. The UDRP provider makes a decision based on the papers filed. If the complainant is successful, ownership of the domain name registration is transferred to the complainant. If the complainant is not successful, ownership of the domain name remains with the domain name registrant. MRH and entities operating on its behalf adhere to all decisions rendered by UDRP providers.

- **URS**: As provided in the Applicant Guidebook, all registries are required to implement the URS. Similar to the UDRP, a complainant files its objection with a URS provider. The URS provider conducts an administrative review for compliance with filing requirements. If the complaint passes review, the URS provider notifies the registry operator and locks the domain. A lock means that the registry restricts all changes to the registration data, but the name will continue to resolve. After the domain is locked, the complaint is served to the domain name registrant, who has an opportunity to respond. If the complainant is successful, the registry operator is informed and the domain name is suspended for the balance of the registration period; the domain name will not resolve to the original website, but to an informational web page provided by the URS provider. If the complainant is not successful, the URS is terminated and full control of the domain name registration is returned to the domain name registrant. Similar to the existing UDRP, MRH and entities operating on its behalf adhere to decisions rendered by the URS providers.

- **PDDRP**: As provided in the Applicant Guidebook, all registries are required to implement the PDDRP. The PDDRP provides a mechanism for a complainant to object to the registry operator’s manner of operation or use of the gTLD. The complainant files its objection with a PDDRP provider, who performs a threshold review. The registry operator has the opportunity to respond and the provider issues its determination based on the papers filed, although there may be opportunity for further discovery and a hearing. MRH participates in the PDDRP process as specified in the Applicant Guidebook.

**Additional Measures Specific to Rights Protection**: MRH provides additional measures against potentially abusive registrations. These measures help mitigate phishing, pharming, and other Internet security threats. The measures exceed the minimum requirements for RPMs defined by Specification 7 of the Registry Agreement and are available at the time of registration. These measures include:

- **Rapid Takedown or Suspension Based on Court Orders**: MRH complies promptly with any order from a court of competent jurisdiction that directs it to take any action on a domain name that is within its technical capabilities as a gTLD registry. These orders may be issued when abusive content, such as child pornography, counterfeit goods, or illegal pharmaceuticals, is associated with the domain name.

- **Anti-Abuse Process**: MRH implements an anti-abuse process that is executed based on the type of domain name takedown requested. The anti-abuse process is for malicious exploitation of the DNS infrastructure, such as phishing, botnets, and malware.

- **Authentication Procedures**: Verisign, MRH’s selected back-end registry services provider, uses two-factor authentication to augment security protocols for telephone, email, and chat communications.

- **Eligibility Requirements**: As discussed above, the initial proposed use of the registry is for the exclusive use of MSD. Thus, all initial domain name registrations in the .MERCK namespace will be made by MSD. This is expected to significantly reduce and/or eliminate the chance of any abusive registrations.

**29.3 Resourcing Plans**

**29.3.1 Resource Planning**
MRH has included in its business plan staffing sufficient to implement and oversee the
described Rights Protection Mechanism procedures. As previously noted in the
application, this staffing resource will most likely be sourced from within MRH’s legal
department. Should additional subject matter expertise be required, MRH may engage the
services of outside specialists on an as-needed basis.

29.3.2 Resource Planning Specific to Back-End Registry Activities

Verisign, MRH’s selected back-end registry services provider, is an experienced
back-end registry provider that has developed a set of proprietary resourcing models to
project the number and type of personnel resources necessary to operate a gTLD.
Verisign routinely adjusts these staffing models to account for new tools and process
innovations. These models enable Verisign to continually right-size its staff to
accommodate projected demand and meet service level agreements as well as Internet
security and stability requirements. Using the projected usage volume for the most
likely scenario (defined in Question 46, Template 1 – Financial Projections: Most
Likely) as an input to its staffing models, Verisign derived the necessary personnel
levels required for the .MERCK gTLD’s initial implementation and ongoing maintenance.
Verisign’s pricing for the back-end registry services it provides to MRH fully accounts
for cost related to this infrastructure, which is provided as Line IIb.G, Total
Critical Registry Function Cash Outflows, within the Question 46 financial projections
response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its
technical work force. (Current statistics are publicly available in Verisign’s
quarterly filings.) Drawing from this pool of on-hand and fully committed technical
resources, Verisign has maintained DNS operational accuracy and stability 100 percent
of the time for more than 13 years for .COM, proving Verisign’s ability to align
cost personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in
Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to
support the implementation of RPMs:
- Customer Affairs Organization: 9
- Customer Support Personnel: 36
- Information Security Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign,
MRH’s selected back-end registry services provider, scales, as needed, the size of each
technical area now supporting its portfolio of TLDs. Consistent with its resource
modeling, Verisign periodically reviews the level of work to be performed and adjusts
staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal
staffing group uses an in-place staffing process to identify qualified candidates. These
candidates are then interviewed by the lead of the relevant technical area. By
scaling one common team across all its TLDs instead of creating a new entity to manage
only this proposed .MERCK gTLD, Verisign realizes significant economies of scale and
ensures its TLD best practices are followed consistently. This consistent application
of best practices helps ensure the security and stability of both the Internet and this
proposed gTLD, as Verisign holds all contributing staff members accountable to the same
procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and
.NET). Moreover, by augmenting existing teams, Verisign affords new employees the
opportunity to be mentored by existing senior staff. This mentoring minimizes start-up
learning curves and helps ensure that new staff members properly execute their duties.

30(a). Security Policy: Summary of the security policy for the proposed registry

Q.30A – Security Policy
30A.1 Detailed description of processes and solutions deployed to manage logical
security across infrastructure and systems, monitoring and detecting threats and
security vulnerabilities and taking appropriate steps to resolve them

Merck Registry Holdings, Inc.’s selected back-end registry services provider’s
Verisign, Inc. (“Verisign”)’s comprehensive security policy has evolved over the years
as part of managing some of the world’s most critical TLDs. Verisign’s Information
Security Policy is the primary guideline that sets the baseline for all other policies,
procedures, and standards that Verisign follows. This security policy addresses all of
the critical components for the management of back-end registry services, including
architecture, engineering, and operations.

Verisign’s general security policies and standards with respect to these areas are
provided as follows:

**Architecture**
- Information Security Architecture Standard: This standard establishes the Verisign
  standard for application and network architecture. The document explains the methods
  for segmenting application tiers, using authentication mechanisms, and implementing
  application functions.
- Information Security Secure Linux Standard: This standard establishes the information
  security requirements for all systems that run Linux throughout the Verisign
  organization.
- Information Security Secure Oracle Standard: This standard establishes the
  information security requirements for all systems that run Oracle throughout the
  Verisign organization.
- Information Security Remote Access Standard: This standard establishes the
  information security requirements for remote access to terminal services throughout the
  Verisign organization.
- Information Security SSH Standard: This standard establishes the information security
  requirements for the application of Secure Shell (SSH) on all systems throughout the
  Verisign organization.

**Engineering**
- Secure SSL/TLS Configuration Standard: This standard establishes the information
  security requirements for the configuration of Secure Sockets Layer/Transport Layer
  Security (SSL/TLS) for all systems throughout the Verisign organization.
- Information Security C++ Standards: These standards explain how to use and implement
  the functions and application programming interfaces (APIs) within C++. The document
  also describes how to perform logging, authentication, and database connectivity.
- Information Security Java Standards: These standards explain how to use and implement
  the functions and APIs within Java. The document also describes how to perform logging,
  authentication, and database connectivity.

**Operations**
- Information Security DNS Standard: This standard establishes the information security
  requirements for all systems that run DNS systems throughout the Verisign organization.
- Information Security Cryptographic Key Management Standard: This standard provides
  detailed information on both technology and processes for the use of encryption on
  Verisign information security systems.
- Secure Apache Standard: Verisign has a multitude of Apache web servers, which are
  used in both production and development environments on the Verisign intranet and on
  the Internet. They provide a centralized, dynamic, and extensible interface to various
  other systems that deliver information to the end user. Because of their exposure and
  the confidential nature of the data that these systems host, adequate security measures
  must be in place. The Secure Apache Standard establishes the information security
  requirements for all systems that run Apache web servers throughout the Verisign
  organization.
- Secure Sendmail Standard: Verisign uses sendmail servers in both the production and
development environments on the Verisign intranet and on the Internet. Sendmail allows
users to communicate with one another via email. The Secure Sendmail Standard
  establishes the information security requirements for all systems that run sendmail
  servers throughout the Verisign organization.
- Secure Logging Standard: This standard establishes the information security logging
  requirements for all systems and applications throughout the Verisign organization.
Where specific standards documents have been created for operating systems or applications, the logging standards have been detailed. This document covers all technologies.

- **Patch Management Standard**: This standard establishes the information security patch and upgrade management requirements for all systems and applications throughout Verisign.

**General**

- **Secure Password Standard**: Because passwords are the most popular and, in many cases, the sole mechanism for authenticating a user to a system, great care must be taken to help ensure that passwords are "strong" and secure. The Secure Password Standard details requirements for the use and implementation of passwords.
- **Secure Anti-Virus Standard**: Verisign must be protected continuously from computer viruses and other forms of malicious code. These threats can cause significant damage to the overall operation and security of the Verisign network. The Secure Anti-Virus Standard describes the requirements for minimizing the occurrence and impact of these incidents.

Security processes and solutions for the .MERCK gTLD are based on the standards defined above, each of which is derived from Verisign’s experience and industry best practice. These standards comprise the framework for the overall security solution and applicable processes implemented across all products under Verisign’s management. The security solution and applicable processes include, but are not limited to:

- System and network access control (e.g., monitoring, logging, and backup)
- Independent assessment and periodic independent assessment reports
- Denial of service (DoS) and distributed denial of service (DDoS) attack mitigation
- Computer and network incident response policies, plans, and processes
- Minimization of risk of unauthorized access to systems or tampering with registry data
- Intrusion detection mechanisms, threat analysis, defenses, and updates
- Auditing of network access
- Physical security

Further details of these processes and solutions are provided in Part B of this response.

**30A.1.1 Security Policy and Procedures for the Proposed Registry**

Specific security policy related details, requested as the bulleted items of Question 30 - Part A, are provided here.

**Independent Assessment and Periodic Independent Assessment Reports.**

To help ensure effective security controls are in place, Merck Registry Holdings, Inc., through its selected back-end registry services provider, Verisign, conducts a yearly American Institute of Certified Public Accountants (AICPA) and Canadian Institute of Chartered Accountants (CICA) SAS 70 audit on all of its data centers, hosted systems, and applications. During these SAS 70 audits, security controls at the operational, technical, and human level are rigorously tested. These audits are conducted by a certified and accredited third party and help ensure that Verisign’s in-place environments meet the security criteria specified in Verisign’s customer contractual agreements and are in accordance with commercially accepted security controls and practices. Verisign also performs numerous audits throughout the year to verify its security processes and activities. These audits cover many different environments and technologies and validate Verisign’s capability to protect its registry and DNS resolution environments. Figure 30A-1 lists a subset of the audits that Verisign conducts. For each audit program or certification listed in Figure 30A-1, Verisign has included, as attachments to the Part B component of this response, copies of the assessment reports conducted by the listed third-party auditor. From Verisign’s experience operating registries, it has determined that together these audit programs and certifications provide a reliable means to ensure effective security controls are in place and that these controls are sufficient to meet ICANN security requirements and therefore are commensurate with the guidelines defined by ISO 27001.

(See: Figure 30A-1: Verisign Independent Assessment Activities)

Augmented Security Levels or Capabilities: See Section 5 of this response.
Commitments Made to Registrants Concerning Security Levels: See Section 4 of this response.

30A.2 Security capabilities are consistent with the overall business approach and planned size of the registry

Merck Registry Holdings, Inc. does not foresee the need for any enhanced security mechanisms beyond those currently provided by Verisign based upon the following factors; existing Merck Registry Holdings, Inc. IT security protocols; the restrictive nature of the .MERCK registrant universe; validation procedures that Merck Registry Holdings, Inc. will be undertaking prior to allocating names in the gTLD; security features imposed at the registrar level; and, the limited number of registrars (likely a single registrar) that will be connecting to the registry.

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

30A.3 Technical plan adequately resourced in the planned costs detailed in the financial section

30A.3.1 Resource Planning

It is anticipated that Merck Registry Holdings, Inc.’s existing IT personnel will provide security support services, as necessary, to operate the .MERCK registry. In addition, Merck Registry Holdings, Inc. will engage the services of subject matter experts to provide consulting services on any DNS-specific matters that may be outside the skill set of its internal IT staff.

30A.3.2 Resource Planning Specific to Back-End Registry Activities

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s
quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel role, which is described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support its security policy:

Information Security Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e.,.COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

30A.4 Security measures are consistent with any commitments made to registrants regarding security levels

Verisign is Merck Registry Holdings, Inc.’s selected back-end registry services provider. For the .MERCK gTLD, no unique security measures or commitments must be made by Verisign or Merck Registry Holdings, Inc. to any registrant.

30A.5 Security measures are appropriate for the applied-for gTLD string

No unique security measures are necessary to implement the .MERCK gTLD. As defined in Section 1 of this response, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, commits to providing back-end registry services in accordance with the following international and relevant security standards:

- American Institute of Certified Public Accountants (AICPA) and Canadian Institute of Chartered Accountants (CICA) SAS 70
- WebTrust⁄SysTrust for Certification Authorities (CA)

Merck Registry Holdings, Inc. does not foresee the need for any enhanced security mechanisms beyond those currently provided by Verisign based upon the following factors; existing Merck Registry Holdings, Inc. IT security protocols; the restrictive nature of the .MERCK registrant universe; validation procedures that Merck Registry Holdings, Inc. will be undertaking prior to allocating names in the gTLD; security features imposed at the registrar level; and, the limited number of registrars (likely a single registrar) that will be connecting to the registry.

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ANNEX 13
New gTLD Application Submitted to ICANN by: Merck Registry Holdings, Inc.

String: MERCK

Originally Posted: 13 June 2012

Application ID: 1-1702-73085

Applicant Information

1. Full legal name

Merck Registry Holdings, Inc.

2. Address of the principal place of business

One Merck Drive
Whitehouse Station 08889
US

3. Phone number

+1 908 423 1000

4. Fax number

+1 908 423 1487
Primary Contact

6(a). Name
Mr. Joshua Bourne

6(b). Title
Managing Partner

6(c). Address

6(d). Phone Number
+1 202 223 9252

6(e). Fax Number

6(f). Email Address
bourne.mk@fairwindspartners.com

Secondary Contact

7(a). Name
Ms. Rashi Rai
7(b). Title
Manager - Strategic Architecture

7(c). Address

7(d). Phone Number
+1 908 423 2831

7(e). Fax Number

7(f). Email Address
rashi_rai@merck.com

Proof of Legal Establishment

8(a). Legal form of the Applicant
Corporation

8(b). State the specific national or other jurisdiction that defines the type of entity identified in 8(a).
New Jersey

8(c). Attach evidence of the applicant’s establishment.
Attachments are not displayed on this form.

9(a). If applying company is publicly traded, provide the exchange and symbol.
9(b). If the applying entity is a subsidiary, provide the parent company.

Merck Sharp & Dohme Corp.

9(c). If the applying entity is a joint venture, list all joint venture partners.

Applicant Background

11(a). Name(s) and position(s) of all directors

John C. Filderman Director
Joseph Brian Promo Director
Stephen C. Propper Director

11(b). Name(s) and position(s) of all officers and partners

James N. Ciriello President

11(c). Name(s) and position(s) of all shareholders holding at least 15% of shares

Merck Sharp & Dohme Corp. Not Applicable

11(d). For an applying entity that does not have directors, officers, partners, or shareholders: Name(s) and position(s) of all individuals having legal or executive responsibility

Applied-for gTLD string

13. Provide the applied-for gTLD string. If an IDN, provide the U-label.
14(a). If an IDN, provide the A-label (beginning with "xn--").

14(b). If an IDN, provide the meaning or restatement of the string in English, that is, a description of the literal meaning of the string in the opinion of the applicant.

14(c). If an IDN, provide the language of the label (in English).

14(c). If an IDN, provide the language of the label (as referenced by ISO-639-1).

14(d). If an IDN, provide the script of the label (in English).

14(d). If an IDN, provide the script of the label (as referenced by ISO 15924).

14(e). If an IDN, list all code points contained in the U-label according to Unicode form.

15(a). If an IDN, Attach IDN Tables for the proposed registry.

Attachments are not displayed on this form.

15(b). Describe the process used for development of the IDN tables submitted, including consultations and sources used.

15(c). List any variant strings to the applied-for gTLD string according to the relevant IDN tables.
16. Describe the applicant’s efforts to ensure that there are no known operational or rendering problems concerning the applied-for gTLD string. If such issues are known, describe steps that will be taken to mitigate these issues in software and other applications.

Merck Registry Holdings, Inc. (“MRH”) foresees no known rendering issues in connection with the proposed .MERCK gTLD for which it is applying. This answer is based upon consultation with MRH’s selected back-end provider, VeriSign, Inc., which has successfully launched a number of new gTLDs over the last decade. In reaching this determination, the following data points were analyzed:

- ICANN’s Security Stability Advisory Committee (SSAC) entitled Alternative TLD Name Systems and Roots: Conflict, Control and Consequences (SAC009);
- IAB - RFC3696 “Application Techniques for Checking and Transformation of Names”
- Known software issues which Verisign has encountered during the last decade launching new gTLDs;
- Character type and length;
- ICANN supplemental notes to Question 16; and
- ICANN’s presentation during its Costa Rica regional meeting on TLD Universal Acceptance.

17. (OPTIONAL) Provide a representation of the label according to the International Phonetic Alphabet (http://www.langsci.ucl.ac.uk/ipa/).

Mission/Purpose

18(a). Describe the mission/purpose of your proposed gTLD.

18.1 Mission and Purpose of .MERCK

Merck & Co. Inc., parent of Merck Sharp and Dohme Corp., Whitehouse Station, New Jersey, USA (collectively “Merck”), is a Fortune 100 company and one of the largest healthcare companies in the world. Merck has operated under the Merck name and trademark in the United States and Canada since as early as 1920. During this time, Merck has established a family of Merck marks that cover a range of goods and services. The family of subsidiaries, affiliates, foundations, licensees, and related parties that are authorized by Merck, to use the Merck marks in a range of economic and philanthropic activities, collectively act as a community. Merck has created a new, wholly-owned subsidiary, Merck Registry Holdings, Inc. (“MRH”), to apply for and bring the .MERCK gTLD to market. The gTLD string for which MRH is applying reflects this community: .MERCK.

The Merck community includes, but is not limited to, the following:

1. Merck Core Businesses: Pharmaceutical, Animal Health, and Consumer Care

2. Philanthropic and Corporate Responsibility Programs, such as: Merck for Mothers, The Merck MECTIZAN Donation Program, Merck Company Foundation, and Merck Helps (The ACT Program; SUPPORT Program; Merck Patient Assistance Program; Merck Vaccine Patient
3. Medical and Scientific Publications and Websites, such as: The Merck Manual, The Merck Index, MerckResearch.net, Merck Medicus, Merck Academy, The Merck Institute for Science Education (MISE), UNCF/Merck Science Initiative, Merck Engage, and Merck Services

The Merck community coalesces around the Merck family of marks and the community of interests that relate to those marks. The Merck community is based on Merck’s widely recognized, registered family of Merck marks, and on the community’s internal union around the values, purposes, and common aims developed through decades of development. The community to be served by the .MERCK gTLD is therefore defined and readily identifiable, with its members at all levels sharing interests, aims, and commitments to service.

Registrations within the community may be made by the following for-profit and not-for-profit businesses, or organizations:

(a) Qualified subsidiaries and affiliates
(b) Merck foundations and related parties
(c) Approved licensees

The primary mission and purpose of the .MERCK gTLD is to provide a trusted, hierarchical, and intuitive online marketplace for Internet users seeking the services of, or information about, Merck community members. As such, the .MERCK gTLD will be reserved for the exclusive use of members of the clearly defined Merck community.

18(b). How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

18.2 How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

MRH believes that the proposed .MERCK community-based gTLD has the potential to offer a variety of benefits to Internet end-users, such as establishing a trusted source of information and an online marketplace for the millions of end-users searching for related information through Merck’s online resources as well as the resources of the identified community members.

In addition, MRH anticipates that .MERCK gTLD can provide Merck, its qualified subsidiaries and affiliates, Merck foundations and related parties, and approved licensees with short and memorable Internet addresses, as well as provide increased navigation to products, services, advertising campaigns, public interest content, and public awareness initiatives. A .MERCK gTLD can also minimize the cost and need for defensive registrations because domain names within the .MERCK gTLD will only be allocated by MRH to eligible community members.

Also, end-users may benefit from lower incidents of phishing and malware often associated with mistypes of domain names in the .COM space that are owned by cybersquatters since they will be navigating to domain names in the .MERCK gTLD.

18.2.1 What is the goal of your proposed gTLD in terms of areas of specialty, service levels, or reputation?

The primary mission and purpose of the .MERCK gTLD is to provide a trusted, hierarchical, and intuitive online marketplace for Internet users seeking the services of, or information about, Merck community members. As such, the .MERCK gTLD will be reserved for the exclusive use of members of the clearly defined Merck community.

Given that end-users are increasingly demanding access to information related to the Merck family of marks through a variety of channels, which include domain names, MRH
believes that the .MERCK gTLD has the potential to provide an innovative, virtual avenue to this content that will deepen and broaden its relationship with these end-users.

The continued success of .MERCK is centered on its role as a more trusted and safer environment. Internet users increasingly find themselves challenged by opportunists and charlatans online who present themselves as legitimate businesses. This is a particular challenge in the healthcare industry, where consumers are entrusting sensitive information – and, ultimately, their health – to uncertified parties.

These rogue online operators register domain names in a variety of top-level domains that look similar to the names of legitimate members of the healthcare community, who also register second-level names within the same generally-available extension. Consumers are lured into "phishing" attacks by emails that either promise them unrealistic deals or pose as healthcare providers.

The .MERCK gTLD would allow community members to reach end-users through the newest available medium and to help improve healthcare.

Because of the strict vetting that will occur before a second-level .MERCK domain will be awarded, phishing attacks will be minimized within the .MERCK gTLD. The Merck community, operating through the .MERCK gTLD, could minimize many Internet risks for millions of consumers.

18.2.2 What do you anticipate your proposed gTLD will add to the current space, in terms of competition, differentiation, or innovation?

As a branded gTLD, the primary driving factors of the .MERCK gTLD are differentiation and innovation. The success of the gTLD will not be measured by the number of domain names registered. Instead, it will be measured by the levels of consumer recognition and trust that are placed in the .MERCK gTLD. Using this benchmark, MRH will strive to build consumer recognition and trust that rise to the levels of those found in the .EDU and .GOV gTLDs.

As a leading healthcare company, Merck leverages emerging technologies to deliver healthcare information, products and services internationally. The .MERCK gTLD has the potential to aid this online strategy for Merck and the eligible community members, if potential consumer benefits that ICANN experts have anticipated become a reality.

18.2.3 What goals does your proposed gTLD have in terms of user experience?

MRH believes that the .MERCK gTLD will provide a single, trusted ecosystem experience for the millions of end-users seeking information about Merck’s products and services as well as the defined community members that use the Merck family of marks. In addition to providing end-users with short, memorable, and intuitive domain names, MRH will have best-in-class safeguards to minimize any potential infringing or pirated content within the .MERCK gTLD.

Merck’s continued provision of relevant health and medical information to both providers and patients through dedicated websites illustrates the company’s longstanding commitment to improve healthcare. Websites that are based on the Merck family of marks draw over 4 million visitors per year from the United States and Canada.

MRH will also continue to stay abreast of changes in the new gTLD space following commencement of operations and will adjust its strategy as needed to ensure it is providing the most valuable and relevant experience for end-users.

18.2.4 Provide a complete description of the applicant’s intended registration policies in support of the goals listed above.

Registrations within the community may be made by the following businesses, institutions, or organizations:

(a) Qualified subsidiaries and affiliates
(b) Merck foundations and related parties
As the operator of the .MERCK gTLD, MRH will take its responsibilities to the community extremely seriously. Due to the nature of the activities that will be conducted using the .MERCK gTLD, it is essential that registrations only be permitted by verified members of the community, namely qualified subsidiaries and affiliates of Merck, Merck foundations and related parties, as well as approved licensees. In addition to validating the eligibility of the registrant, a further requirement will be that all registered domain names comply with appropriate name selection and use measures.

MRH and Merck will incorporate all required ICANN consensus policies and other legal/policy requirements imposed on new gTLD applicants into the appropriate subsidiary, affiliate, licensee, and Merck foundation, or other agreements.

18.2.5 Will your proposed gTLD impose any measures for protecting the privacy or confidential information of registrants or users? If so, please describe any such measures.

Merck recognizes first hand that this is an evolving area of law in which there is no uniform international standard. As a global healthcare company, Merck respects the privacy of its end-users. The company employs a variety of physical, electronic, contractual, and managerial safeguards to protect personal and confidential information on its websites. Merck will take similar precautions to protect registrant and user data associated with the .MERCK gTLD. Furthermore, given the identified .MERCK community, MRH has a vested interest in ensuring that accurate and current registrant information is readily available in connection with each .MERCK domain name.

MRH will ensure that the operation of the .MERCK gTLD will be consistent with Merck’s Statement of Privacy Principles, available on its website at http://www.merck.com/privacy/.

In addition, MRH intends to incorporate contractual language in its Registry-Registrar Agreement (RRA) modeled after language which has been included in the template Registry Agreement and which has been successfully utilized by existing ICANN gTLD Registry Operators.

The template Registry Agreement states “Registry Operator shall (i) notify each ICANN-accredited registrar that is a party to the registry-registrar agreement for the TLD of the purposes for which data about any identified or identifiable natural person (“Personal Data”) submitted to Registry Operator by such registrar is collected and used under this Agreement or otherwise and the intended recipients (or categories of recipients) of such Personal Data, and (ii) require such registrar to obtain the consent of each registrant in the TLD for such collection and use of Personal Data. Registry Operator shall take reasonable steps to protect Personal Data collected from such registrar from loss, misuse, unauthorized disclosure, alteration or destruction. Registry Operator shall not use or authorize the use of Personal Data in a way that is incompatible with the notice provided to registrars.”

18.2.6 Describe whether and in what ways outreach and communications will help to achieve your projected benefits.

Merck has a legacy of liaising with industry counterparts for the promotion of products and industry initiatives. This dedication to relationship management will likely be carried over into Merck’s operation of the .MERCK community.

MRH also plans to carefully review the response from search engines to gTLDs, and the perception of end-users. As the marketplace evolves, MRH will invest in outreach and communication as needed to ensure that its end-users continue to interact with the Merck family of marks’ content, services, and products in a simplified, efficient, and productive manner.

18(c). What operating rules will you adopt to eliminate or minimize social
costs?

18.3.1 What operating rules will you adopt to eliminate or minimize social costs (e.g., time or financial resource costs, as well as various types of consumer vulnerabilities)?

MRH has proposed operating rules to limit registration to members of the .MERCK gTLD community and will provide a trusted online environment for end-users.

Therefore, one way in which social costs will be eliminated is that there will be no defensive need for other trademark and brand owners to register second-level domains in the .MERCK gTLD. In addition, the .MERCK gTLD will provide end-users with a trusted source for information, goods, and services related to the Merck family of marks.

18.3.2 What other steps will you take to minimize negative consequences/costs imposed upon consumers?

MRH believes that the proposed operation of the .MERCK gTLD as set forth in this application has no known negative consequences or cost implications to end-users. On the contrary, the proposed operation of this registry will likely lead to direct and quantifiable benefits to end-users.

18.3.3 How will multiple applications for a particular domain name be resolved, for example, by auction or on a first-come/first-serve basis?

MRH does not envision multiple applicants for the same second-level domain name, as domain names will only be allocated to the identified .MERCK gTLD community members.

18.3.4 Explain any cost benefits for registrants you intend to implement (e.g., advantageous pricing, introductory discounts, bulk registration discounts).

MRH does not envision any advantageous pricing, introductory discounts, or bulk registration discounts at this time because these marketing/commercial initiatives are inconsistent with the mission and purpose of the .MERCK gTLD as a trusted online source identifier for qualified subsidiaries and affiliates of Merck, Merck foundations and related parties, as well as approved licensees.

Moreover, it is the current intention of MRH to provide domain name registrations initially at no cost. However, the company reserves the right to reevaluate this decision and may choose to impose a fee in the future.

18.3.5 Note that the Registry Agreement requires that registrars be offered the option to obtain initial domain name registrations for periods of one to ten years at the discretion of the registrar, but no greater than ten years. Additionally, the Registry Agreement requires advance written notice of price increases. Do you intend to make contractual commitments to registrants regarding the magnitude of price escalation? If so, please describe your plans.

MRH is committed to providing the domain name registration periods set forth in the Registry Agreement. Moreover, it is the current intention of MRH to provide domain name registrations initially at no cost. Therefore, providing contractual commitments in a domain name Registrant Agreement regarding the magnitude of price escalations does not seem relevant or appropriate.

MRH acknowledges that the current template Registry Agreement requires that the Registry Operator “shall offer registrars the option to obtain registration periods for one to ten years at the discretion of the registrar.” However, members of the .MERCK gTLD community, as the sole registrants within the .MERCK gTLD, will only be registering domain names on an annual basis. This is done to better account for costs on an annual basis as well as to provide for more concise financial statements in Question 46 of this application, e.g., no multi-year registration or deferred revenue.
Community-based Designation

19. Is the application for a community-based TLD?
Yes

20(a). Provide the name and full description of the community that the applicant is committing to serve.

Merck & Co. Inc., parent of Merck Sharp and Dohme Corp., Whitehouse Station, New Jersey, USA (collectively “Merck”), is a Fortune 100 company and one of the largest healthcare companies in the world. Merck has operated under the Merck name and trademark in the United States and Canada since as early as 1920. During this time, Merck has established a family of Merck marks that cover a range of goods and services. The family of subsidiaries, affiliates, foundations, licensees, and related parties that are authorized by Merck, to use the Merck marks in a range of economic and philanthropic activities, collectively act as a community. The gTLD string for which Merck is applying reflects this community: .MERCK. Merck has created a new wholly owned subsidiary, Merck Registry Holdings (“MRH”), to apply for and bring the .MERCK gTLD to market.

The Merck community includes, but is not limited to, the following:

1. Merck Core Businesses: Pharmaceutical, Animal Health, and Consumer Care

2. Philanthropic and Corporate Responsibility Programs, such as: Merck for Mothers, The Merck MECTIZAN Donation Program, Merck Company Foundation, and Merck Helps (The ACT Program; SUPPORT Program; Merck Patient Assistance Program; Merck Vaccine Patient Assistance Program)

3. Medical and Scientific Publications and Websites, such as: The Merck Manual, The Merck Index, MerckResearch.net, Merck Medicus, Merck Academy, The Merck Institute for Science Education (MISE), UNCF/Merck Science Initiative, Merck Engage, and Merck Services

The Merck community coalesces around the Merck family of marks and the community of interests that relate to those marks. The Merck community is based on Merck’s widely recognized, registered family of Merck marks, and in the community’s internal union around the values, purposes, and common aims developed through decades of development. The community to be served by the .MERCK gTLD is therefore defined and readily identifiable, with members at all levels sharing interests, aims, and commitments to service.

As a community that exists only by virtue of its authorized use of the Merck family of marks, the use of which is restricted, its members are precisely known. As a result of a history of common economic, educational, and philanthropic activities, at a variety of levels, members of the Merck community have common objectives and operational aims.

The Merck community represents a highly organized network of businesses and organizations. These organizations represent a facet of the Merck community’s response to serving their larger communities and their client base. Merck has also been at the forefront of the use of innovative technologies in its research methods, as well as its development and production of new medications in the healthcare industry. Beyond the business world, the Merck community has pioneered the development and adoption of new services and Internet tools to support stakeholders including government health ministries, healthcare and insurance providers, and patients.
MRH, on behalf of Merck, is taking the lead on behalf of the Merck community to initiate the creation of the .MERCK gTLD. The Merck community has the hallmarks of identification and commonality that set it apart from other Internet users. These hallmarks include:

Membership Identification
Operational Accountability
Common Objectives
Well-established Members

1. Membership Identification
The Merck community is easily defined by its authorized use of the Merck family of marks. A member of the Merck community must be authorized to use one or more marks controlled by Merck.

As a community-based gTLD, the .MERCK gTLD faces very few hurdles or obstacles in readily and speedily identifying its qualified registrants. MRH is capable of readily implementing polices, rules, and technical methods for validating community members.

2. Operational Accountability
A community is also defined by its ability to exclude those who do not meet its requirements. Along with authorized use of a mark comes accountability. A Merck licensee or authorized user continues its use of the mark on the condition of meeting Merck’s requirements. Entities that may no longer be part of the Merck community will lose their rights to be part of the .MERCK gTLD namespace.

The .MERCK registry will implement compliance and eligibility monitoring, domain name revocation procedures, and recurring consultation with its registrant organizations in the Merck community, to ensure that it is able to maintain accountability to the community for its eligibility compliance.

3. Common Objectives
As an almost century-old business and community grouping, Merck is experienced in developing and working to meet common objectives.

The .MERCK gTLD will be at the forefront of the Merck community’s objectives for the Internet, which may be expressed as:

Identification and reduction of risk;
Timely provision of accurate and innovative healthcare-related information;
Development of best practices and standards; and
Advocacy of Internet policies that are in the broad interest of community members and their clients.

4. Well-Established Representative Organizations
The Merck community has an active membership made up of organizations that range over the full panoply of services, including medical research and development, education, policy development and advocacy, member support, business development, and philanthropy.

Merck has a legacy of liaising with industry counterparts for the promotion of products and industry initiatives. This dedication to relationship management will likely be carried over into MRH’s operation of the .MERCK community.

The structure of the Merck community is crucial in identifying eligible registrants and eligible partners who may assist in registrant outreach in their country or region. Merck’s central role in licensing its marks allows it to maintain direct and certain control over identification of its members and partners. The Merck community has a great deal of experience in identifying members. MRH, the applicant for the .MERCK gTLD, is in the best position to identify and manage the requirements of the .MERCK gTLD.

Merck has continued to lead its industry peers in researching and developing new medicines, creating purchasing assistance programs for patients, and offering thought leadership across its industry through a variety of initiatives, organizations, and
Merck features an extensive network of partners and licensees. Merck continues to foster expanding partnerships with other business and non-profit entities and has numerous years of experience with managing and negotiating these relationships.

Programs such as Merck’s “Merck for Mothers” offer leadership on issues such as maternal mortality and family planning. In addition, the Merck Foundation has allocated more than $600 million to educational and non-profit organizations. Since 2008, Merck has ranked among the top three pharmaceutical companies in the Access to Medicine Index (ATMI) and number one among corporate philanthropy donors in the ATMI.

Merck publishes a wide variety of publications on various medical-related topics, which include the Merck Manuals and Merck Medicus. These publications are used as authoritative sources of information by physicians, veterinarians, and patients. Merck remains committed to continuing to offer these vital resources so that the most up-to-date, relevant information is available to healthcare professionals.

20(b). Explain the applicant’s relationship to the community identified in 20(a).

I. Relations to Community and its Constituents/Groups

The primary mission and purpose of the .MERCK gTLD is to provide a trusted, hierarchical, and intuitive online marketplace for Internet users seeking the services of, or information about, Merck community members. As such, the .MERCK gTLD will be reserved for the exclusive use of members of the clearly defined Merck community. The .MERCK gTLD is not designed for widespread registration by the public. Instead, registrants and registrations will be restricted by guidelines included in 20(e), below. Uniting the recognized members of this regulated community under one gTLD will provide Internet users with a safe and easy way to seek healthcare information and services.

The .MERCK gTLD will be operated by MRH for the benefit of the Merck community. Merck’s century-old tradition of prioritizing research in its development of new medications is exemplified in the company’s investment in 2011 of $7.7 billion to research and development. This significant allocation of funding both helps to ensure a future pipeline of products and shareholder value, and also displays a firm commitment to advancing the industry as a whole through extensive research.

As noted above, programs such as Merck’s “Merck for Mothers” offer leadership on issues such as preventing maternal mortality during birth and family planning. In addition, the Merck Foundation has allocated more than $600 million to educational and non-profit organizations. Since 2008, Merck has ranked among the top three pharmaceutical companies in the ATMI and number one among corporate philanthropy donors in the ATMI.

The Merck Manuals and Merck Medicus offer comprehensive medical reference points for physicians and nurses, in conjunction with the Merck Index, which provides a record of chemical compounds critical for medications.

As previously stated, Merck’s extensive network of partners and licensees is a cornerstone of the company’s strategy, and Merck has numerous years of experience with managing and negotiating these relationships.

All of the above indicate that Merck is fully capable of, and qualified to, manage the .MERCK community space. Merck’s commitment to operating the gTLD is evidenced in both its prior experience as well as in its answers to all of the questions in this application for the .MERCK gTLD.

II. Accountability Mechanisms of the Applicant to the Community

The Internet community and the .MERCK gTLD will exist in a synergistic relationship. A healthy .MERCK gTLD—one in which consumers learn to trust the gTLD as a symbol of legitimate and trustworthy content—will benefit the Merck community members who use a .MERCK second-level domain. Consumer trust, in turn, will drive best-practices by Merck
community members. This synergy ensures strong accountability of each party to the other.

20(c). Provide a description of the community-based purpose of the applied-for gTLD.

I. Intended Registrants in the gTLD
As stated above and in the response to Question 18 of this application, the .MERCK gTLD community will be clearly defined. Registrations within the community may be made by the following for-profit and not-for-profit businesses or organizations:

(a) Qualified subsidiaries and affiliates
(b) Merck foundations and related parties
(c) Approved licensees

II. Intended End-Users of the gTLD
End-users will not only include the registrants of domain names within the gTLD but also potentially millions of consumers who may visit the .MERCK gTLD’s websites. Once the .MERCK gTLD is established as a trusted gTLD for all matters related to the Merck community, consumers will know and trust websites in the gTLD as being more secure and stable than any other similar, but generic, websites. See the response to Question 18 of this application for more details.

III. Related Activities the Applicant has Carried Out or Intends to Carry Out in Service of this Purpose
MRH is submitting this application on behalf of the Merck community to ensure that the .MERCK gTLD shall serve as a trusted, hierarchical, and intuitive namespace for this community and the consumers that they serve. All registrants within this gTLD will be vetted prior to registration to ensure their identity and their contractual commitment to industry best-practice standards developed by Merck and MRH, before being able to register in the .MERCK namespace (see 20(e), below). In addition, the registry will employ a network of both active and passive safeguards in the operation of the registry to ensure that these registrants continue to abide by the terms and conditions set forth in their registration agreements.

Promotion of the .MERCK gTLD will be conducted on an ongoing basis to ensure acceptance, familiarity, and trust among members of the community. Consumers quickly will become familiar with .MERCK and will see that its use is limited to trusted, regulated organizations. This dedication to relationship management will be carried over into MRH’s operation of the .MERCK gTLD.

IV. Explanation of How the Purpose is of a Lasting Nature
Merck is one of the largest healthcare companies in the world. Merck has been in operation since as early as 1920 and is a Fortune 100 company.

The .MERCK gTLD will ensure that Internet users know that a .MERCK site is one of the few locations on the Internet providing trustworthy and authoritative information about Merck’s goods and services. A simple search limited to .MERCK second-level registrants will provide the Internet user with results completely culled of the undesirable and unscrupulous. The beauty of the .MERCK gTLD is that it shifts the burden of confirming authenticity from the consumer to the registry, or the registry’s designated third-party service provider. Registrant and site authenticity ensure value.

Merck’s continued provision of relevant health and medical information to both providers and patients through dedicated websites illustrates the company’s long-standing commitment to improve healthcare. Websites that are based on the Merck family of marks draw over four million visitors per year from the United States and Canada.

As stated in 20(b), above, the continued success of .MERCK is centered on its role as a trusted and safe environment. Internet users increasingly find themselves challenged by
opportunists and charlatans online who present themselves as legitimate businesses. This is a particular challenge in the healthcare industry, where consumers are entrusting sensitive information – and, ultimately, their health – to uncertified parties.

These rogue online operators register domain names in a variety of top-level domains that look similar to the names of legitimate members of the healthcare community, who also register second-level names within the same generally-available extension. Consumers are lured into “phishing” attacks by emails that either promise them unrealistic deals or pose as healthcare providers.

The proliferation of healthcare-related information on the Internet in the form of home health websites, patient blogs, and social media communities has created a need for companies in the industry to be innovative in their information distribution strategies. Several key industry trends have been observed:

According to Compete.com, online healthcare information networks have seen a ten percent growth thus far in 2012, largely driven by increased traffic to sites such as WebMD.com.

According to a 2011 joint effort from the Pew Internet Project and California Healthcare Foundation:
- One in four Internet users has watched an online video about health.
- One in four Internet users has tracked their weight, diet, exercise routine, or other health indicator online.
- One in four Internet users has consulted online reviews of drugs or medical treatments (but very few post such reviews).

The .MERCK gTLD would allow community members to reach end-users through the newest available medium and to help improve healthcare.

Because of the strict vetting that will occur before a second-level .MERCK domain will be awarded, phishing attacks will be minimized within the .MERCK gTLD. The Merck community, operating through the .MERCK gTLD, could minimize many Internet risks for millions of consumers.

20(d). Explain the relationship between the applied-for gTLD string and the community identified in 20(a).

I. Relationship to the Established Name, if any, of the Community

The .MERCK string is a perfect pairing with the community as defined in 20(a). Only qualified subsidiaries and affiliates of Merck, approved licensees, and Merck foundations and related parties will be eligible for inclusion in this community. Internet users familiar with Merck and its offerings will understand the connection between the gTLD and the Merck community. As already established in 20(c), all second-level domain name registrants in the .MERCK space will have been vetted to ensure that they are identifiable members of the community.

II. Relationship to the Identification of Community Members.

Members of the community are identified as Merck licensees, qualified subsidiaries and affiliates, and Merck foundations and related parties. In all cases and in all situations, they identify themselves as part of the Merck community. As such, registrations within the community may be made by the following for-profit and not-for-profit businesses or organizations:

(a) Qualified subsidiaries and affiliates
(b) Merck foundations and related parties
(c) Approved licensees

Merck defines and authorizes community members and thus has a direct stake in ensuring the trustworthiness and reliability of the .MERCK gTLD and its governance. The broad
membership of the Merck community is an advantage in the operation of the .MERCK gTLD, providing a range of contact points in the Internet. Meanwhile, Merck is at the apex of this broad community and understands its span and activities. This strong governance protocol carries through to the operation of the .MERCK gTLD.

20(e). Provide a description of the applicant's intended registration policies in support of the community-based purpose of the applied-for gTLD.

I. Registrant Eligibility
Registrations within the community may be made by the following businesses, institutions, or organizations:

(a) Qualified subsidiaries and affiliates
(b) Merck foundations and related parties
(c) Approved licensees

As the operator of the .MERCK gTLD, MRH will take its responsibilities to the community extremely seriously. Due to the nature of the activities that will be conducted using the .MERCK gTLD, it is essential that registrations only be permitted by verified members of the community, namely qualified subsidiaries and affiliates of Merck, Merck foundations and related parties, as well as approved licensees. In addition to validating the eligibility of the registrant, a further requirement will be that all registered domain names comply with appropriate name selection and use measures.

To ensure strict compliance with these policies, the .MERCK gTLD will develop and implement a Registrant Eligibility Criteria Process. This process will require registrars qualified to distribute .MERCK domain names to gather materials from proposed registrants that will be used by the registry to authenticate the registrants’ eligibility as part of the community.

Furthermore, MRH will develop and implement a Registrant Eligibility Evaluation Process. This process will require registrars qualified to distribute .MERCK domain names to collect registrant information that will be used by MRH to authenticate that the registrant is a member of the Merck community. These requirements will be hard coded into the .MERCK Registry-Registrar Agreement (RRA).

As part of the registration process of a .MERCK domain name, potential applicants must provide the registrar with the following information:
Registrant Name
Registrant Organization
Registrant Address
Registrant Phone
Registrant Email

Applicants who pass these eligibility tests will then be able to register their applied-for names. These names will then undergo a test to ensure compliance with the .MERCK content and use policy.

Domain Names that pass the pre-check will enter Pending Create status, and the .MERCK Registry Operator will validate each domain name and either approve or reject the create. Any registrant whose domain name fails the pre-check will be notified with reasons. Any registrant that is either denied initial registration of a domain or has their domain name suspended or canceled has the opportunity to appeal such action by MRH through an administrative procedure. In resolving this dispute, the administrative procedure will ensure that MRH has properly applied the terms and conditions of the .MERCK registrant agreement. Additionally, this administrative procedure shall be binding and non-appealable.

MRH will randomly audit all approved registrants and their second-level domains to ensure compliance with all applicable eligibility and use requirements.
II. Name Selection: What Types of Second-Level Names may be Registered in the gTLD.
At the time of filing this application, MRH has not yet finalized the specific name selection criteria. When this criteria is finalize it will be publicly posted on the MRH website.

III. Content Use
MRH has not yet finalized an Acceptable Use Policy (AUP). A draft policy has been included in response to Question 28 of this application, but has not yet been finalized by Merck’s legal team. Such approval and posting of the policy will be done in advance of the launch of the registry.

IV. Enforcement
MRH will enforce the AUP (which is still subject to legal review) during the term of the .MERCK Registry Agreement.
MRH will have complete enforcement rights over registrants’ use of their .MERCK domain names. If a registrant violates the then in effect AUP, the registrant will be in material breach of the Agreement, and along with all other rights and remedies that MRH has under this Agreement with respect to such a breach, MRH reserves the right to revoke, suspend, terminate, cancel, or otherwise modify the registrant’s rights to the domain name.
On a regular basis, MRH will randomly audit domain names registered in the .MERCK gTLD to ensure compliance with all eligibility and use criteria. If a violation is discovered, an investigation will immediately begin to rectify the violation.

If an applicant chooses to appeal, MRH will review the appeal to determine if there are any material changes to the action or activity. MRH will retain the right to assign the dispute to an ombudsman if necessary.

20(f). Attach any written endorsements from institutions/groups representative of the community identified in 20(a).
Attachments are not displayed on this form.

Geographic Names

21(a). Is the application for a geographic name?
No

Protection of Geographic Names

22. Describe proposed measures for protection of geographic names at the second and other levels in the applied-for gTLD.

Merck Registry Holdings, Incorporated ("MRH"), a subsidiary of Merck, is keenly aware of the sensitivity of national governments in connection with protecting country and
territory identifiers in the DNS. In preparation for answering this question, MRH reviewed relevant background material regarding the protection of geographic names in the DNS including:

- ICANN Board Resolution 01-92 regarding the methodology developed for the reservation and release of country names in the .INFO top-level domain (see http://www.icann.org/en/minutes/minutes-10sep01.htm);
- ICANN's Proposed Action Plan on .INFO Country Names (see http://www.icann.org/en/meetings/montevideo/action-plan-country-names-09oct01.htm);
- ICANN’s Governmental Advisory Committee (GAC) Principles Regarding New gTLDs, (see https://gacweb.icann.org/download/attachments/1540128/gTLD_principles_0.pdf?version=1&modificationDate=1312358178000); and

MRH is committed to initially reserving the country and territory names contained in the internationally-recognized lists described in Article 5 of Specification 5 attached to the New gTLD Applicant Guidebook at the second level and at all other levels within the .MERCK gTLD at which MRH will provide for registrations. Specifically, MRH will reserve:

- The short form (in English) of all country and territory names contained on the ISO 3166-1 list, as updated from time to time, including the European Union, which is exceptionally reserved on the ISO 3166-1 list, and its scope extended in August 1999 to any application needing to represent the name European Union (see http://www.iso.org/iso/support/country_codes/iso_3166_code_lists/iso_3166_1_decoding_table.html#EU);
- The United Nations Group of Experts on Geographical Names, Technical Reference Manual for the Standardization of Geographical Names, Part III Names of Countries of the World; and

MRH’s parent company, Merck & Co. Inc., parent of Merck Sharp and Dohme Corp., Whitehouse Station, New Jersey, USA (MSD) (collectively “Merck”), is a leading healthcare company serving the wide-ranging needs of patients and providers around the world, with more than 86,000 employees in upwards of 140 countries. Given this geographic approach to finding localized MSD content, MRH intends to explore the option of providing a hierarchical and intuitive framework for the .MERCK namespace by using geographical identifiers as second-level domain names.

MRH, either directly or through its designated representatives, will monitor efforts by other new gTLD Registry Operators in potentially working with ICANN’s GAC to explore potential processes that could permit the release of initially-reserved country names (including ISO-3166 two characters). Specifically, MRH is interested in exploring Registry Service Evaluation Processes (RSEP) requests that have been filed by other gTLD Registry Operators in releasing reserved domain names.

Registry Services

23. Provide name and full description of all the Registry Services to be provided.

Q.23 - Registry Services
23.1 Customary Registry Services

As Merck Registry Holdings, Inc.'s selected provider of backend registry services, Verisign provides a comprehensive system and physical security solution that is designed to ensure a TLD is protected from unauthorized disclosure, alteration, insertion, or destruction of registry data. Verisign’s system addresses all areas of security, including information and policies, security procedures, the systems development lifecycle, physical security, system hacks, break-ins, data tampering, and other disruptions to operations. Verisign’s operational environments not only meet the security criteria specified in its customer contractual agreements, thereby preventing unauthorized access to or disclosure of information or resources on the Internet by systems operating in accordance with applicable standards, but also are subject to multiple independent assessments as detailed in the response to Question 30, Security Policy. Verisign’s physical and system security methodology follows a mature, ongoing lifecycle that was developed and implemented many years before the development of the industry standards with which Verisign currently complies. Please see the response to Question 30, Security Policy, for details of the security features of Verisign’s registry services.

Verisign’s registry services fully comply with relevant standards and best current practice RFCs published by the Internet Engineering Task Force (IETF), including all successor standards, modifications, or additions relating to the DNS and name server operations including without limitation RFCs 1034, 1035, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 3901, 4343, and 4472. Moreover, Verisign’s Shared Registration System (SRS) supports the following IETF Extensible Provisioning Protocol (EPP) specifications, where the Extensible Markup Language (XML) templates and XML schemas are defined in RFC 3915, 5730, 5731, 5732, 5733, and 5734. By strictly adhering to these RFCs, Verisign helps to ensure its registry services do not create a condition that adversely affects the throughput, response time, consistency, or coherence of responses to Internet servers or end systems. Besides its leadership in authoring RFCs for EPP, Domain Name System Security Extensions (DNSSEC), and other DNS services, Verisign has created and contributed to several now well-established IETF standards and is a regular and long-standing participant in key Internet standards forums.

Figure 23.1 summarizes the technical and business components of those registry services, customarily offered by a registry operator (i.e., Verisign), that support this application. These services are currently operational and support both large and small Verisign-managed registries. Customary registry services are provided in the same manner as Verisign provides these services for its existing gTLDs.

Through these established registry services, Verisign has proven its ability to operate a reliable and low-risk registry that supports millions of transactions per day. Verisign is unaware of any potential security or stability concern related to any of these services.

Registry services defined by this application are not intended to be offered in a manner unique to the new generic top-level domain (gTLD) nor are any proposed services unique to this application’s registry.

See Figure 0.1: Registry Services. Each proposed service has been previously approved by ICANN to ensure registry security and stability.

In addition the registry services found in Table 23-1, Merck Registry Holdings, Inc. is evaluating offering the following registry services:

1. Imposition of an annual cost recovery based fee to validate registrars that will be providing domain name registration services in the .MERCK gTLD.

2. The use of RFPs (Request for Proposals) and Auctions to determine string allocation in appropriate circumstances.

As further evidence of Verisign’s compliance with ICANN mandated security and stability requirements, Verisign allocates the applicable RFCs to each of the five customary registry services (items A – E above). For each registry service, Verisign also
provides evidence in Figure 23 2 of Verisign’s RFC compliance and includes relevant ICANN prior-service approval actions.

See: Figure 23 2: ICANN RFC Compliance. Verisign currently operates TLDs in full compliance with each registry service’s applicable RFC(s). Each listed Verisign service has been previously approved by ICANN and is now operational on registries under Verisign management.

23.1.1 Critical Operations of the Registry

i. Receipt of Data from Registrars Concerning Registration of Domain Names and Name Servers

See Item A in Figure 23 1 and Figure 23 2.

ii. Provision to Registrars Status Information Relating to the Zone Servers

Verisign is Merck Registry Holdings, Inc.’s selected provider of backend registry services. Verisign registry services provisions to registrars status information relating to zone servers for the TLD. The services also allow a domain name to be updated with clientHold, serverHold status, which removes the domain name server details from zone files. This ensures that DNS queries of the domain name are not resolved temporarily. When these hold statuses are removed, the name server details are written back to zone files and DNS queries are again resolved. Figure 23 3 describes the domain name status information and zone insertion indicator provided to registrars. The zone insertion indicator determines whether the name server details of the domain name exist in the zone file for a given domain name status. Verisign also has the capability to withdraw domain names from the zone file in near-real time by changing the domain name statuses upon request by customers, courts, or legal authorities as required.

See: Figure 23 3: Zone Server Status Information. Verisign provisions to registrars status information related to the TLD.

iii. Dissemination of TLD Zone Files

See Item B in Figure 23 1 and Figure 23 2.

iv. Operation of the Registry Zone Servers

Verisign is Merck Registry Holdings, Inc.’s selected provider of backend registry services. Verisign, as a company, operates zone servers and serves DNS resolution from 76 geographically distributed resolution sites located in North America, South America, Africa, Europe, Asia, and Australia. Currently, 17 DNS locations are designated primary sites, offering greater capacity than smaller sites comprising the remainder of the Verisign constellation. Verisign also uses Anycast techniques and regional Internet resolution sites to expand coverage, accommodate emergency or surge capacity, and support system availability during maintenance procedures. Verisign operates Merck Registry Holdings, Inc.’s gTLD from a minimum of eight of its primary sites (two on the East Coast of the United States, two on the West Coast of the United States, two in Europe, and two in Asia) and expands resolution sites based on traffic volume and patterns. Further details of the geographic diversity of Verisign’s zone servers are provided in the response to Question 34, Geographic Diversity. Moreover, additional details of Verisign’s zone servers are provided in the response to Question 32, Architecture and the response to Question 35, DNS Service.

v. Dissemination of Contact and Other Information Concerning Domain Name Server Registrations

See Item C in Figure 23 1 and Figure 23 2.

23.2 Other Products or Services the Registry Operator Is Required to Provide Because of the Establishment of a Consensus Policy

Verisign, Merck Registry Holdings, Inc.’s selected provider of backend registry services, is a proven supporter of ICANN’s consensus-driven, bottom-up policy development process whereby community members identify a problem, initiate policy discussions, and generate a solution that produces effective and sustained results. Verisign currently provides all of the products or services (collectively referred to as services) that the registry operator is required to provide because of the establishment of a Consensus Policy. For the .MERCK gTLD, Verisign implements these services using the same proven processes and procedures currently in-place for all
registries under Verisign’s management. Furthermore, Verisign executes these services on computing platforms comparable to those of other registries under Verisign’s management. Verisign’s extensive experience with consensus policy required services and its proven processes to implement these services greatly minimize any potential risk to Internet security or stability. Details of these services are provided in the following subsections. It shall be noted that consensus policy services required of registrars (e.g., WHOIS Reminder, Expired Domain) are not included in this response. This exclusion is in accordance with the direction provided in the question’s Notes column to address registry operator services.

23.2.1 Inter-Registrar Transfer Policy (IRTP)
Technical Component: In compliance with the IRTP consensus policy, Verisign, Merck Registry Holdings, Inc.’s selected provider of backend registry services, has designed its registration systems to systematically restrict the transfer of domain names within 60 days of the initial create date. In addition, Verisign has implemented EPP and “AuthInfo” code functionality, which is used to further authenticate transfer requests. The registration system has been designed to enable compliance with the five-day Transfer grace period and includes the following functionality:
- Allows the losing registrar to proactively ‘ACK’ or acknowledge a transfer prior to the expiration of the five-day Transfer grace period
- Allows the losing registrar to proactively ‘NACK’ or not acknowledge a transfer prior to the expiration of the five-day Transfer grace period
- Allows the system to automatically ACK the transfer request once the five-day Transfer grace period has passed if the losing registrar has not proactively ACK’d or NACK’d the transfer request.

Business Component: All requests to transfer a domain name to a new registrar are handled according to the procedures detailed in the IRTP. Dispute proceedings arising from a registrar’s alleged failure to abide by this policy may be initiated by any ICANN-accredited registrar under the Transfer Dispute Resolution Policy. Merck Registry Holdings, Inc.’s compliance office serves as the first-level dispute resolution provider pursuant to the associated Transfer Dispute Resolution Policy. As needed, Verisign is available to offer policy guidance as issues arise.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the service, on throughput, response time, consistency, or coherence of the responses to Internet servers or end-user systems. By implementing the IRTP in accordance with ICANN policy, security is enhanced as all transfer commands are authenticated using the AuthInfo code prior to processing.

ICANN Prior Approval: Verisign has been in compliance with the IRTP since November 2004 and is available to support Merck Registry Holdings, Inc. in a consulting capacity as needed.

Unique to the TLD: This service is not provided in a manner unique to the .MERCK gTLD.

23.2.2 Add Grace Period (AGP) Limits Policy
Technical Component: Verisign’s registry system monitors registrars’ Add grace period deletion activity and provides reporting that permits Merck Registry Holdings, Inc. to assess registration fees upon registrars that have exceeded the AGP thresholds stipulated in the AGP Limits Policy. Further, Merck Registry Holdings, Inc. accepts and evaluates all exemption requests received from registrars and determines whether the exemption request meets the exemption criteria. Merck Registry Holdings, Inc. maintains all AGP Limits Policy exemption request activity so that this material may be included within Merck Registry Holdings, Inc.’s Monthly Registry Operator Report to ICANN.

Registrars that exceed the limits established by the policy may submit exemption requests to Merck Registry Holdings, Inc. for consideration. Merck Registry Holdings, Inc.’s compliance office reviews these exemption requests in accordance with the AGP Limits Policy and renders a decision. Upon request, Merck Registry Holdings, Inc. submits associated reporting on exemption request activity to support reporting in accordance with established ICANN requirements.

Business Component: The Add grace period (AGP) is restricted for any gTLD operator that has implemented an AGP. Specifically, for each operator:
- During any given month, an operator may not offer any refund to an ICANN-accredited
registrar for any domain names deleted during the AGP that exceed (i) 10 percent of
that registrar’s net new registrations (calculated as the total number of net adds of
one-year through ten-year registrations as defined in the monthly reporting requirement
of Operator Agreements) in that month, or (ii) fifty (50) domain names, whichever is
greater, unless an exemption has been granted by an operator.
- Upon the documented demonstration of extraordinary circumstances, a registrar may
seek from an operator an exemption from such restrictions in a specific month. The
registrar must confirm in writing to the operator how, at the time the names were
deleted, these extraordinary circumstances were not known, reasonably could not have
been known, and were outside the registrar’s control. Acceptance of any exemption will
be at the sole and reasonable discretion of the operator; however “extraordinary
circumstances” that reoccur regularly for the same registrar will not be deemed
extraordinary.

In addition to all other reporting requirements to ICANN, Merck Registry Holdings, Inc.
identifies each registrar that has sought an exemption, along with a brief description
of the type of extraordinary circumstance and the action, approval, or denial that the
operator took.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the
policy, on throughput, response time, consistency, or coherence of the responses to
Internet servers or end-user systems.
ICANN Prior Approval: Verisign, Merck Registry Holdings, Inc.’s backend registry
services provider, has had experience with this policy since its implementation in
April 2009 and is available to support Merck Registry Holdings, Inc. in a consulting
capacity as needed.
Unique to the TLD: This service is not provided in a manner unique to the .MERCK gTLD.

23.2.3 Registry Services Evaluation Policy (RSEP)
Technical Component: Verisign, Merck Registry Holdings, Inc.’s selected provider of
backend registry services, adheres to all RSEP submission requirements. Verisign has
followed the process many times and is fully aware of the submission procedures, the
type of documentation required, and the evaluation process that ICANN adheres to.
Business Component: In accordance with ICANN procedures detailed on the ICANN RSEP
website (http://www.icann.org/en/registries/rsep/), all gTLD registry operators are
required to follow this policy when submitting a request for new registry services.
Security and Stability Concerns: As part of the RSEP submission process, Verisign,
Merck Registry Holdings, Inc.’s backend registry services provider, identifies any
potential security and stability concerns in accordance with RSEP stability and
security requirements. Verisign never launches services without satisfactory
completion of the RSEP process and resulting approval.
ICANN Prior Approval: Not applicable.
Unique to the TLD: gTLD RSEP procedures are not implemented in a manner unique to the
.MERCK gTLD.

23.3 Products or Services Only a Registry Operator Is Capable of Providing by Reason of
Its Designation As the Registry Operator

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider,
developed a Registry-Registrar Two-Factor Authentication Service that complements
traditional registration and resolution registry services. In accordance with direction
provided in Question 23, Verisign details below the technical and business components
of the service, identifies any potential threat to registry security or stability, and
lists previous interactions with ICANN to approve the operation of the service. The
Two-Factor Authentication Service is currently operational, supporting multiple
registries under ICANN’s purview.

Merck Registry Holdings, Inc. is unaware of any competition issue that may require the
registry service(s) listed in this response to be referred to the appropriate
governmental competition authority or authorities with applicable jurisdiction. ICANN
previously approved the service(s), at which time it was determined that either the
service(s) raised no competitive concerns or any applicable concerns related to
competition were satisfactorily addressed.
23.3.1 Two-Factor Authentication Service

Technical Component: The Registry-Registrar Two-Factor Authentication Service is designed to improve domain name security and assist registrars in protecting the accounts they manage. As part of the service, dynamic one-time passwords augment the user names and passwords currently used to process update, transfer, and/or deletion requests. These one-time passwords enable transaction processing to be based on requests that are validated both by “what users know” (i.e., their user name and password) and “what users have” (i.e., a two-factor authentication credential with a one-time-password).

Demonstration of Technical & Operational Capability

24. Shared Registration System (SRS) Performance

Q.24 - Shared Registration System (SRS) Performance

24.1 Robust Plan for Operating a Reliable SRS

24.1.1 High-Level Shared Registration System (SRS) System Description

VeriSign, Inc. (“Verisign”), Merck Registry Holdings, Inc.’s selected provider of back-end registry services, provides and operates a robust and reliable SRS that enables multiple registrars to provide domain name registration services in the top-level domain (TLD). Verisign’s proven reliable SRS serves approximately 915 registrars, and Verisign, as a company, has averaged more than 140 million registration transactions per day. The SRS provides a scalable, fault-tolerant platform for the delivery of gTLDs through the use of a central customer database, a Web interface, a standard provisioning protocol (i.e., Extensible Provisioning Protocol, “EPP”), and a transport protocol (i.e., Secure Sockets Layer, “SSL”).

The SRS components include:

-Web Interface: Allows customers to access the authoritative database for accounts, contacts, users, authorization groups, product catalog, product subscriptions, and customer notification messages.

-EPP Interface: Provides an interface to the SRS that enables registrars to use EPP to register and manage domains, hosts, and contacts.

-Authentication Provider: A Verisign-developed application, specific to the SRS, that authenticates a user based on a login name, password, and the SSL certificate common name and client IP address.

The SRS is designed to be scalable and fault tolerant by incorporating clustering in multiple tiers of the platform. New nodes can be added to a cluster within a single tier to scale a specific tier, and if one node fails within a single tier, the services will still be available. The SRS allows registrars to manage the .MERCK gTLD domain names in a single architecture.

To flexibly accommodate the scale of its transaction volumes, as well as new technologies, Verisign employs the following design practices:

-Scale for Growth: Scale to handle current volumes and projected growth.

-Scale for Peaks: Scale to twice base capacity to withstand “registration add attacks” from a compromised registrar system.
-Limit Database CPU Utilization: Limit utilization to no more than 50 percent during peak loads.

-Limit Database Memory Utilization: Each user’s login process that connects to the database allocates a small segment of memory to perform connection overhead, sorting, and data caching. Verisign’s standards mandate that no more than 40 percent of the total available physical memory on the database server will be allocated for these functions.

Verisign’s SRS is built upon a three-tier architecture as illustrated in Figure 24-1 and detailed here.

(See Figure 24-1, SRS Architecture: Verisign’s SRS is hierarchically designed to meet the forecasted registration volume of the .MERCK gTLD, and it can be scaled to meet future registration volume increases.)

-Gateway Layer: The first tier, the gateway servers, uses EPP to communicate with registrars. These gateway servers then interact with application servers, which comprise the second tier.

-Application Layer: The application servers contain business logic for managing and maintaining the registry business. The business logic is particular to each TLD’s business rules and requirements. The flexible internal design of the application servers allows Verisign to easily leverage existing business rules to apply to the .MERCK gTLD. The application servers store Merck Registry Holdings, Inc.’s data in the registry database, which comprises the third and final tier. This simple, industry-standard design has been highly effective with other customers for whom Verisign provides backend registry services.

-Database Layer: The database is the heart of this architecture. It stores all the essential information provisioned from registrars through the gateway servers. Separate servers query the database, extract updated zone and WHOIS information, validate that information, and distribute it around the clock to Verisign’s worldwide domain name resolution sites.

-Scalability and Performance: Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, implements its scalable SRS on a supportable infrastructure that achieves the availability requirements in Specification 10. Verisign employs the design patterns of simplicity and parallelism in both its software and systems, based on its experience that these factors contribute most significantly to scalability and reliable performance. Going counter to feature-rich development patterns, Verisign intentionally minimizes the number of lines of code between the end-user and the data delivered. The result is a network of restorable components that provide rapid, accurate updates. Figure 24-2 depicts EPP traffic flows and local redundancy in Verisign’s SRS provisioning architecture. As detailed in the figure, local redundancy is maintained for each layer as well as each piece of equipment. This built-in redundancy enhances operational performance while enabling the future system scaling necessary to meet additional demand created by this or future registry applications.

(See Figure 24-2, Built-in SRS Redundancy: Verisign’s SRS system is built upon multiple layers of redundancy to ensure the system remains highly available.)

Besides improving scalability and reliability, local SRS redundancy enables Verisign to take down individual system components for maintenance and upgrades, with little to no performance impact. With Verisign’s redundant design, Verisign can perform routine maintenance while the remainder of the system remains online and unaffected. For the .MERCK gTLD registry, this flexibility minimizes unplanned downtime and provides a more consistent end-user experience.

24.1.2 Representative Network Diagrams

Figure 24-3 provides a summary network diagram of Merck Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) SRS. This configuration at both the primary and alternate-primary Verisign data centers provides a highly reliable
backup capability. Data is continuously replicated between both sites to ensure failover to the alternate-primary site can be implemented expeditiously to support both planned and unplanned outages.

(See Figure 24-3, SRS Network Diagram: Verisign’s fully redundant SRS design and geographically separated data centers help ensure service level availability requirements are met.)

24.1.3 Number of Servers

As Merck Registry Holdings, Inc.’s selected provider of back-end registry services, Verisign continually reviews its server deployments for all aspects of its registry service. Verisign evaluates usage based on peak performance objectives as well as current transaction volumes, which drive the quantity of servers in its implementations. Verisign’s scaling is based on the following factors:

- Server configuration is based on CPU, memory, disk I/O, total disk, and network throughput projections.
- Server quantity is determined through statistical modeling to fulfill overall performance objectives as defined by both the service availability and the server configuration.

To ensure continuity of operations for the .MERCK gTLD, Verisign uses a minimum of 100 dedicated servers per SRS site. These servers are virtualized to meet demand.

24.1.4 Description of Interconnectivity with Other Registry Systems

Figure 24-4 provides a technical overview of the Merck Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) SRS, showing how the SRS component fits into this larger system and interconnects with other system components.

(See Figure 24-4, Technical Overview: Verisign’s SRS provides the registrar-facing component of the system establishing the zone file needed to enable DNS and WHOIS services.)

24.1.5 Frequency of Synchronization Between Servers

As Merck Registry Holdings, Inc.’s selected provider of back-end registry services, Verisign uses synchronous replication to keep the Verisign SRS continuously in sync between the two data centers. This synchronization is performed in near-real time, thereby supporting rapid failover should a failure occur or a planned maintenance outage be required.

24.1.6 Synchronization Scheme

Verisign uses synchronous replication to keep the Verisign SRS continuously in sync between the two data centers. Because the alternate-primary site is continuously up, and built using an identical design to the primary data center, it is classified as a “hot standby.”

24.2 Scalability and Performance Are Consistent with the overall business approach and planned size of the registry

Verisign is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustenance cost. Using the projected usage volume for the "Most Likely" scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the
necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

24.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, the Merck Registry Holdings, Inc.’s selected provider of back-end registry services, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services provided to Merck Registry Holdings, Inc. fully accounts for this personnel-related cost, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31 of this application, Technical Overview of Proposed Registry, to support SRS performance:

- Application Engineers: 19
- Database Administrators: 8
- Database Engineers: 3
- Network Administrators: 11
- Network Architects: 4
- Project Managers: 25
- Quality Assurance Engineers: 11
- SRS System Administrators: 13
- Storage Administrators: 4
- Systems Architects: 9

To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.
24.4 Evidence of Compliance with Specification 6 and 10 to the Registry Agreement

24.4.1 Section 1.2 (EPP) of Specification 6, Registry Interoperability and Continuity Specifications

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, provides these services using its SRS, which complies fully with Specification 6, Section 1.2 of the Registry Agreement. In using its SRS to provide back-end registry services, Verisign implements and complies with relevant existing RFCs (i.e., 5730, 5731, 5732, 5733, 5734, and 5910) and intends to comply with RFCs that may be published in the future by the Internet Engineering Task Force (IETF), including successor standards, modifications, or additions thereto relating to the provisioning and management of domain names that use EPP. In addition, Verisign’s SRS includes a Registry Grace Period (RGP) and thus complies with RFC 3915 and its successors. Details of the Verisign SRS’ compliance with RFC SRS/EPP are provided in the response to Question 25, Extensible Provisioning Protocol, of this application. Verisign does not use functionality outside the base EPP RFCs, although proprietary EPP extensions are documented in Internet-Draft format following the guidelines described in RFC 3735 within the response to Question 25 of this application. Moreover, prior to deployment, Merck Registry Holdings, Inc. will provide to ICANN updated documentation of all the EPP objects and extensions supported in accordance with Specification 6, Section 1.2.

24.4.2 Specification 10, EPP Registry Performance Specifications

Verisign’s SRS meets all EPP Registry Performance Specifications detailed in Specification 10, Section 2. Evidence of this performance can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports, which Verisign files with ICANN. These reports detail Verisign’s operational status of the .COM and .NET registries, which use an SRS design and approach comparable to the one proposed for the .MERCK gTLD. These reports provide evidence of Verisign’s ability to meet registry operation service level agreements (SLAs) comparable to those detailed in Specification 10. The reports are accessible at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

In accordance with EPP Registry Performance Specifications detailed in Specification 10, Verisign’s SRS meets the following performance attributes:

- EPP service availability: ≤ 864 minutes of downtime (≈98%)
- EPP session-command round trip time (RTT): ≤4000 milliseconds (ms), for at least 90 percent of the commands
- EPP query-command RTT: ≤2000 ms, for at least 90 percent of the commands
- EPP transform-command RTT: ≤4000 ms, for at least 90 percent of the commands

Registrars can use the one-time-password when communicating directly with Verisign’s Customer Service department as well as when using the registrar portal to make manual updates, transfers, and/or deletion transactions. The Two-Factor Authentication Service is an optional service offered to registrars that execute the Registry-Registrar Two-Factor Authentication Service Agreement.

Business Component: There is no charge for the Registry-Registrar Two-Factor Authentication Service. It is enabled only for registrars that wish to take advantage of the added security provided by the service.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the service, on throughput, response time, consistency, or coherence of the responses to Internet servers or end-user systems. The service is intended to enhance domain name security, resulting in increased confidence and trust by registrants.

ICANN Prior Approval: ICANN approved the same Two-Factor Authentication Service for Verisign’s use on .COM and .NET on 10 July 2009 (RSEP Proposal 2009004) and for .NAME on 16 February 2011 (RSEP Proposal 2011001).

Unique to the TLD: This service is not provided in a manner unique to the .MERCK gTLD.
25. Extensible Provisioning Protocol (EPP)

Q.25 – Extensible Provisioning Protocol (EPP)

25.1 Complete knowledge and understanding of this aspect of registry technical requirements

VeriSign, Inc. ("Verisign’), Merck Registry Holdings, Inc.’s selected back-end registry services provider, has used Extensible Provisioning Protocol (EPP) since its inception and possesses complete knowledge and understanding of EPP registry systems. Its first EPP implementation – for a thick registry for the .NAME generic top-level domain (gTLD) – was in 2002. Since then Verisign has continued its RFC-compliant use of EPP in multiple TLDs. as detailed in Figure 25-1.

(See: Figure 25 1: EPP Implementations. Verisign has repeatedly proven its ability to successfully implement EPP for both small and large registries.)

Verisign’s understanding of EPP and its ability to implement code that complies with the applicable RFCs is unparalleled. Mr. Scott Hollenbeck, Verisign’s director of software development, authored the Extensible Provisioning Protocol and continues to be fully engaged in its refinement and enhancement (U.S. Patent Number 7299299 – Shared registration system for registering domain names). Verisign has also developed numerous new object mappings and object extensions following the guidelines in RFC 3735 (Guidelines for Extending the Extensible Provisioning Protocol). Mr. James Gould, a principal engineer at Verisign, led and co-authored the most recent EPP Domain Name System Security Extensions (DNSSEC) RFC effort (RFC 5910).

All registry systems for which Verisign is the registry operator or provides back-end registry services use EPP. Upon approval of this application, Verisign will use EPP to provide the back-end registry services for this gTLD. The .COM, .NET, and .NAME registries for which Verisign is the registry operator use an SRS design and approach comparable to the one proposed for this gTLD. Approximately 915 registrars use the Verisign EPP service, and the registry system performs more than 140 million EPP transactions daily without performance issues or restrictive maintenance windows. The processing time service level agreement (SLA) requirements for the Verisign-operated .NET gTLD are the strictest of the current Verisign managed gTLDs. All processing times for Verisign-operated gTLDs can be found in ICANN’s Registry Operator’s Monthly Reports at http://www.icann.org/en/tlds-monthly-reports/.

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Verisign has also been active on the Internet Engineering Task Force (IETF) Provisioning Registry Protocol (provreg) working group and mailing list since work started on the EPP protocol in 2000. This working group provided a forum for members of the Internet community to comment on Mr. Scott Hollenbeck’s initial EPP drafts, which Mr. Hollenbeck refined based on input and discussions with representatives from registries, registrars, and other interested parties. The working group has since concluded, but the mailing list is still active to enable discussion of different aspects of EPP.

25.1.1 EPP Interface with Registrars

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, fully supports the features defined in the EPP specifications and provides a set of software development kits (SDK) and tools to help registrars build secure and stable interfaces. Verisign’s SDKs give registrars the option of either fully writing their own EPP client software to integrate with the Shared Registration System (SRS), or using the Verisign-provided SDKs to aid them in the integration effort. Registrars can download the Verisign EPP SDKs and tools from the registrar website (http://www.Verisign.com/domain-name-services/current-registrars/epp-sdk/index.html).

The EPP SDKs provide a host of features including connection pooling, Secure Sockets Layer (SSL), and a test server (stub server) to run EPP tests against. One tool—the EPP tool—provides a web interface for creating EPP Extensible Markup Language (XML) commands and sending them to a configurable set of target servers. This helps registrars in creating the template XML and testing a variety of test cases against the EPP servers. An Operational Test and Evaluation (OT&E) environment, which runs the same software as the production system so approved registrars can integrate and test their software before moving into a live production environment, is also available.

25.2 Technical plan scope/scale consistent with the overall business approach and planned size of the registry

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

25.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance.
Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response. Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .com, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the provisioning of EPP services:
- Application Engineers: 19
- Database Engineers: 3
- Quality Assurance Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

25.4 Ability to comply with Relevant RFCs

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, incorporates design reviews, code reviews, and peer reviews into its software development lifecycle (SDLC) to ensure compliance with the relevant RFCs. Verisign’s dedicated QA team creates extensive test plans and issues internal certifications when it has confirmed the accuracy of the code in relation to the RFC requirements. Verisign’s QA organization is independent from the development team within engineering. This separation helps Verisign ensure adopted processes and procedures are followed, further ensuring that all software releases fully consider the security and stability of the TLD.

For the .MERCK gTLD, the Shared Registration System (SRS) complies with the following IETF EPP specifications, where the XML templates and XML schemas are defined in the following specifications:
- EPP 5730 (http://tools.ietf.org/html/rfc5730): Base EPP specification (authored by Verisign’s Scott Hollenbeck)
- EPP Domain 5731 (http://tools.ietf.org/html/rfc5731): EPP Domain Name Mapping specification (authored by Verisign’s Scott Hollenbeck)
- EPP Contact 5733 (http://tools.ietf.org/html/rfc5733): EPP Contact Mapping specification (authored by Verisign’s Scott Hollenbeck)
25.5 Proprietary EPP Extensions

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, uses its SRS to provide registry services. The SRS supports the following EPP specifications, which Verisign developed following the guidelines in RFC 3735, where the XML templates and XML schemas are defined in the specifications:

- IDN Language Tag (http://www.verisigninc.com/assets/idn-language-tag.pdf): EPP internationalized domain names (IDN) language tag extension used for IDN domain name registrations
- WHOIS Info Extension (http://www.verisigninc.com/assets/whois-info-extension.pdf): EPP extension for returning additional information needed for transfers
- EPP Consolidate Mapping (http://www.verisigninc.com/assets/consolidate-mapping.txt): EPP mapping to support a Domain Sync operation for synchronizing domain name expiration dates
- NameStore Extension (http://www.verisigninc.com/assets/namestore-extension.pdf): EPP extension for routing with an EPP intelligent gateway to a pluggable set of back-end products and services
- Low Balance Mapping (http://www.verisigninc.com/assets/low-balance-mapping.pdf): EPP mapping to support low balance poll messages that proactively notify registrars of a low balance (available credit) condition

As part of the 2006 implementation report to bring the EPP RFC documents from Proposed Standard status to Draft Standard status, an implementation test matrix was completed. Two independently developed EPP client implementations based on the RFCs were tested against the Verisign EPP server for the domain, host, and contact transactions. No compliance-related issues were identified during this test, providing evidence that these extensions comply with RFC 3735 guidelines and further demonstrating Verisign’s ability to design, test, and deploy an RFC-compliant EPP implementation.

25.5.1 EPP Templates and Schemas

The EPP XML schemas are formal descriptions of the EPP XML templates. They are used to express the set of rules to which the EPP templates must conform in order to be considered valid by the schema. The EPP schemas define the building blocks of the EPP templates, describing the format of the data and the different EPP commands’ request and response formats. The current EPP implementations managed by Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, use these EPP templates and schemas, as will the proposed TLD. For each proprietary XML template/schema Verisign provides a reference to the applicable template and includes the schema.

25.5.1.1 XML templates/schemas for idnLang-1.0


Schema: This schema describes the extension mapping for the IDN language tag. The mapping extends the EPP domain name mapping to provide additional features required for the provisioning of IDN domain name registrations.

```xml
<?xml version="1.0" encoding="UTF-8"?>

<schema targetNamespace="http://www.Verisign.com/epp/idnLang-1.0"
    xmlns:idnLang="http://www.Verisign.com/epp/idnLang-1.0"
    xmlns="http://www.w3.org/2001/XMLSchema"
    elementFormDefault="qualified"/>

<annotation>
    <documentation>
        Extensible Provisioning Protocol v1.0 domain name
    </documentation>
</schema>
```
extension schema for IDN Lang Tag.

<!--documentation-->

<!--annotation-->

!--
Child elements found in EPP commands.
-->
  (element name="tag" type="language")

<!--
End of schema.
-->
</schema>

25.5.1.2 XML templates/schema for rgp@poll@1.0
Template: The templates for rgp@poll@1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/rgp@poll-mapping.pdf.
Schema: This schema describes the extension mapping for poll notifications. The mapping extends the EPP base mapping to provide additional features for registry grace period (RGP) poll notifications.

<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.Verisign.com/epp/rgp@poll@1.0"
  xmlns:rgp-poll="http://www.Verisign.com/epp/rgp@poll@1.0"
  xmlns:eppcom="urn:ietf:params:xml:ns:eppcom@1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp@1.0"
  xmlns="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified">
<!--
Import common element types.
-->
<import namespace="urn:ietf:params:xml:ns:eppcom@1.0"
  schemaLocation="eppcom-1.0.xsd"/>
<import namespace="urn:ietf:params:xml:ns:rgp@1.0"
  schemaLocation="rgp-1.0.xsd"/>

<annotation>
  <documentation>
    Extensible Provisioning Protocol v1.0
    Verisign poll notification specification for registry grace period poll notifications.
  </documentation>
</annotation>

<!--
Child elements found in EPP commands.
-->
<element name="pollData" type="rgp-poll:pollDataType"/>

<!--
Child elements of the <notifyData> element for the redemption grace period.
-->
<complexType name="pollDataType">
  <sequence>
    <element name="name" type="eppcom:labelType"/>
    <element name="rgpStatus" type="rgp:statusType"/>
    <element name="reqDate" type="dateTime"/>
    <element name="reportDueDate" type="dateTime"/>
  </sequence>
</complexType>
25.5.1.3 XML templates: schema for whoisInf@1.0

Template: The templates for whoisInf@1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/whois-info-extension.pdf.

Schema: This schema describes the extension mapping for the Whois Info extension. The mapping extends the EPP domain name mapping to provide additional features for returning additional information needed for transfers.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.Verisign.com/epp/whoisInf@1.0"
xmlns:whoisInf="http://www.Verisign.com/epp/whoisInf@1.0"
xmlns:eppcom="urn:ietf:params:xml:ns:eppcom@1.0"
xmlns="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified">
<import namespace="urn:ietf:params:xml:ns:eppcom@1.0"
schemaLocation="eppcom-1.0.xsd"/>
<annotation>
<documentation>
Extensible Provisioning Protocol v1.0
extension schema for Whois Info
</documentation>
</annotation>
<!-- Possible Whois Info extension root elements. -->
<element name="whoisInf" type="whoisInf:whoisInfType"/>
<element name="whoisInfData" type="whoisInf:whoisInfDataType"/>
<!-- Child elements for the <whoisInf> extension which is used as an extension to an info command. -->
<complexType name="whoisInfType">
<sequence>
<element name="flag" type="boolean"/>
</sequence>
</complexType>
<!-- Child elements for the <whoisInfData> extension which is used as an extension to the info response. -->
<complexType name="whoisInfDataType">
<sequence>
<element name="registrar" type="string"/>
<element name="whoisServer" type="eppcom:labelType" minOccurs="0"/>
<element name="url" type="token" minOccurs="0"/>
<element name="irisServer" type="eppcom:labelType" minOccurs="0"/>
</sequence>
</complexType>
</schema>
```
25.5.1.4 XML templates/schema for sync@1.0 (ConsolDate)
Template: The templates for sync@1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/consolidate-mapping.txt.
Schema: This schema describes the extension mapping for the synchronization of domain name registration period expiration dates. This service is known as "ConsolDate." The mapping extends the EPP domain name mapping to provide features that allow a protocol client to end a domain name registration period on a specific month and day.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.Verisign.com/epp/sync@1.0"
    xmlns:sync="http://www.Verisign.com/epp/sync@1.0"
    xmlns="http://www.w3.org/2001/XMLSchema"
    elementFormDefault="qualified">

<annotation>
    <documentation>
        Extensible Provisioning Protocol v1.0 domain name extension schema for expiration date synchronization.
    </documentation>
</annotation>

<!--
Child elements found in EPP commands.
-->
<element name="update" type="sync:updateType"/>

<!--
Child elements of the <update> command.
-->
<complexType name="updateType">
    <sequence>
        <element name="expMonthDay" type="gMonthDay"/>
    </sequence>
</complexType>

<!--
End of schema.
-->
</schema>
```

25.5.1.5 XML templates/schema for namestoreExt@1.1
Template: The templates for namestoreExt@1.1 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/namestore-extension.pdf.
Schema: This schema describes the extension mapping for the routing with an EPP intelligent gateway to a pluggable set of back-end products and services. The mapping extends the EPP domain name and host mapping to provide a sub-product identifier to identify the target sub-product that the EPP operation is intended for.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.Verisign-grs.com/epp/namestoreExt@1.1"
    xmlns="http://www.w3.org/2001/XMLSchema"
    xmlns:namestoreExt="http://www.Verisign-grs.com/epp/namestoreExt@1.1"
    elementFormDefault="qualified">
```
Extensible Provisioning Protocol v1.0 Namestore extension schema for destination registry routing.

<?xml version="1.0" encoding="UTF-8"?>
<annotation>
  <documentation>
    Extensible Provisioning Protocol v1.0 Namestore extension schema for destination registry routing.
  </documentation>
</annotation>

<!-- General Data types. -->
<complexType name="subProductType">
  <restriction base="token">
    <minLength value="1"/>
    <maxLength value="64"/>
  </restriction>
</complexType>

<complexType name="extAnyType">
  <sequence>
    <any namespace="#other" maxOccurs="unbounded"/>
  </sequence>
</complexType>

<!-- Child elements found in EPP commands and responses. -->
<element name="namestoreExt Type="namestoreExt:namestoreExtType"/>

<!-- Child elements of the (product) command. -->
<complexType name="namestoreExtType">
  <sequence>
    <element name="subProduct" type="namestoreExt:subProductType"/>
  </sequence>
</complexType>

<!-- Child response elements. -->
<element name="nsExtErrData" type="namestoreExt:nsExtErrDataType"/>

<!-- (prdErrData) error response elements. -->
<complexType name="nsExtErrDataType">
  <sequence>
    <element name="msg" type="namestoreExt:msgType"/>
  </sequence>
</complexType>

<!-- (prdErrData) (msg) element. -->
<complexType name="msgType">
  <simpleContent>
    <extension base="normalizedString">
      <attribute name="code" type="namestoreExt:prdErrCodeType" use="required"/>
      <attribute name="lang" type="language" default="en"/>
    </extension>
  </simpleContent>
</complexType>

<!-- (prdErrData) error response codes. -->
<simpleType name="prdErrCodeType">
  <restriction base="unsignedShort">
    <enumeration value="1"/>
  </restriction>
</simpleType>
25.5.1.6 XML templates/schema for lowbalance-poll-1.0

Template: The templates for lowbalance-poll-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/low-balance-mapping.pdf.

Schema: This schema describes the extension mapping for the account low balance notification. The mapping extends the EPP base mapping so an account holder can be notified via EPP poll messages whenever the available credit for an account reaches or goes below the credit threshold.

<?xml version="1.0" encoding="UTF-8"?>

<!-- Import common element types.-->
<import namespace="urn:ietf:params:xml:ns:eppcom-1.0"
    schemaLocation="eppcom-1.0.xsd"/>

<!-- Child elements found in EPP commands.-->
<element name="pollData" type="lowbalance-poll:pollDataType"/>

<!-- Child elements of the <notifyData> element for the low balance.-->
<complexType name="pollDataType">
    <sequence>
        <element name="registrarName" type="eppcom:labelType"/>
        <element name="creditLimit" type="normalizedString"/>
        <element name="creditThreshold" type="lowbalance-poll:thresholdType"/>
        <element name="availableCredit" type="normalizedString"/>
    </sequence>
</complexType>

<complexType name="thresholdType">
    <simpleContent>
        <extension base="normalizedString">
            <attribute name="type" type="lowbalance-poll:thresholdValueType" use="required"/>
        </extension>
    </simpleContent>
</complexType>

<complexType name="thresholdValueType">
    <restriction base="token">
        <enumeration value="FIXED"/>
        <enumeration value="PERCENT"/>
    </restriction>
</complexType>
25.6 Proprietary EPP Extension Consistency with Registration Lifecycle

Merck Registry Holdings, Inc.'s selected back-end registry services provider’s (Verisign's) proprietary EPP extensions, defined in Section 5 above, are consistent with the registration lifecycle documented in the response to Question 27, Registration Lifecycle. Details of the registration lifecycle are presented in that response. As new registry features are required, Verisign develops proprietary EPP extensions to address new operational requirements. Consistent with ICANN procedures Verisign adheres to all applicable Registry Services Evaluation Process (RSEP) procedures.

26. Whois

Q.26 – WHOIS

26.1 Complete knowledge and understanding of this aspect of registry technical requirements

VeriSign, Inc. ("Verisign") Merck Registry Holdings, Inc. ("MRH")’s selected back-end registry services provider, has operated the WHOIS lookup service for the gTLDs and ccTLDs it manages since 1991, and will provide these proven services for the .MERCK gTLD registry. In addition, it continues to work with the Internet community to improve the utility of WHOIS data, while thwarting its application for abusive uses.

26.1.1 High-Level WHOIS System Description

Like all other components of MRH’s selected back-end registry services provider’s (Verisign's) registry service, Verisign’s WHOIS system is designed and built for both reliability and performance in full compliance with applicable RFCs. Verisign’s current WHOIS implementation has answered more than five billion WHOIS queries per month for the TLDs it manages, and has experienced more than 250,000 queries per minute in peak conditions. The proposed gTLD uses a WHOIS system design and approach that is comparable to the current implementation. Independent quality control testing ensures Verisign’s WHOIS service is RFC-compliant through all phases of its lifecycle.
Verisign's redundant WHOIS databases further contribute to overall system availability and reliability. The hardware and software for its WHOIS service is architected to scale both horizontally (by adding more servers) and vertically (by adding more CPUs and memory to existing servers) to meet future need. Verisign can fine-tune access to its WHOIS database on an individual Internet Protocol (IP) address basis, and it works with registrars to help ensure their services are not limited by any restriction placed on WHOIS. Verisign provides near real-time updates for WHOIS services for the TLDs under its management. As information is updated in the registration database, it is propagated to the WHOIS servers for quick publication. These updates align with the near real-time publication of Domain Name System (DNS) information as it is updated in the registration database. This capability is important for the .MERCK gTLD registry as it is Verisign's experience that when DNS data is updated in near real time, so should WHOIS data be updated to reflect the registration specifics of those domain names.

Verisign’s WHOIS response time has been less than 500 milliseconds for 95 percent of all WHOIS queries in .COM, .NET, .TV, and .CC. The response time in these TLDs, combined with Verisign’s capacity, enables the WHOIS system to respond to up to 30,000 searches (or queries) per second for a total capacity of 2.6 billion queries per day.

The WHOIS software written by Verisign complies with RFC 3912. Verisign uses an advanced in-memory database technology to provide exceptional overall system performance and security. In accordance with RFC 3912, Verisign provides a website at whois.nic.MERCK that provides free public query-based access to the registration data. Verisign currently operates both thin and thick WHOIS systems.

Verisign commits to implementing a RESTful WHOIS service upon finalization of agreements with the IETF (Internet Engineering Task Force).

To use the WHOIS service via port 43, the user enters the applicable parameter on the command line as illustrated here:

- For domain name: whois EXAMPLE.TLD
- For registrar: whois "registrar Example Registrar, Inc."
- For name server: whois "NS1.EXAMPLE.TLD" or whois "name server (IP address)"

To use the WHOIS service via the Web-based directory service search interface:
- Go to http://whois.nic.MERCK
- Click on the appropriate button (Domain, Registrar, or Name Server)
- Enter the applicable parameter:
  -- Domain name, including the TLD (e.g., EXAMPLE.TLD)
  -- Full name of the registrar, including punctuation (e.g., Example Registrar, Inc.)
  -- Full host name or the IP address (e.g., NS1.EXAMPLE.TLD or 198.41.3.39)
- Click on the Submit button.

To further promote reliable and secure WHOIS operations, Verisign, MRH’s selected back-end registry services provider, has implemented rate-limiting characteristics within the WHOIS service software. For example, to prevent data mining or other abusive behavior, the service can throttle a specific requestor if the query rate exceeds a configurable threshold. In addition, QoS technology enables rate limiting of queries before they reach the servers, which helps protect against denial of service (DoS) and distributed denial of service (DDoS) attacks.

Verisign’s software also permits restrictions on search capabilities. For example, wildcard searches can be disabled. If needed, it is possible to temporarily restrict and/or block requests coming from specific IP addresses for a configurable amount of time. Additional features that are configurable in the WHOIS software include help files, headers and footers for WHOIS query responses, statistics, and methods to memory map the database. Furthermore, Verisign is European Union (EU) Safe Harbor certified and has worked with European data protection authorities to address applicable privacy laws by developing a tiered WHOIS access structure that requires users who require access to more extensive data to (i) identify themselves, (ii) confirm that their use is for a specified purpose and (iii) enter into an agreement governing their use of the more
extensive WHOIS data.

26.1.2 Relevant Network Diagrams
Figure 26.1 provides a summary network diagram of the WHOIS service provided by Verisign, MRH’s selected back-end registry services provider. The figure details the configuration with one resolution-WHOIS site. For the .MERCK gTLD, Verisign provides WHOIS service from six of its 17 primary sites based on the proposed gTLD’s traffic volume and patterns. A functionally equivalent resolution architecture configuration exists at each WHOIS site.

26.1.3 IT and Infrastructure Resources
Figure 26.2 summarizes the IT and infrastructure resources that Verisign, MRH’s selected back-end registry services provider, uses to provision WHOIS services from Verisign primary resolution sites. As needed, virtual machines are created based on actual and projected demand. See Figure 26.2

26.1.4 Description of Interconnectivity with Other Registry Systems
Figure 26.3 provides a technical overview of the registry system provided by Verisign, MRH’s selected back-end registry services provider, and shows how the WHOIS service component fits into this larger system and interconnects with other system components.

26.1.5 Frequency of Synchronization Between Servers
Synchronization between the SRS and the geographically distributed WHOIS resolution sites occurs approximately every three minutes. Verisign, MRH’s selected back-end registry services provider, uses a two-part WHOIS update process to ensure WHOIS data is accurate and available. Every 12 hours an initial file is distributed to each resolution site. This file is a complete copy of all WHOIS data fields associated with each domain name under management. As interactions with the SRS cause the WHOIS data to be changed, these incremental changes are distributed to the resolution sites as an incremental file update. This incremental update occurs approximately every three minutes. When the new 12-hour full update is distributed, this file includes all past incremental updates. Verisign’s approach to frequency of synchronization between servers meets the Performance Specifications defined in Specification 10 of the Registry Agreement for new gTLDs.

26.2 Technical plan scope/scale consistent with the overall business approach and planned size of the registry
Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies. Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

26.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section
Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the "Most Likely" scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel
levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application. Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, of this application to support WHOIS services:
- Application Engineers: 19
- Database Engineers: 3
- Quality Assurance Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign, MRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area. When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

26.4 Compliance with Relevant RFC MRH’s selected back-end registry services provider’s (Verisign’s) WHOIS service complies with the data formats defined in Specification 4 of the Registry Agreement. Verisign will provision WHOIS services for registered domain names and associated data in the top-level domain (TLD). Verisign’s WHOIS services are accessible over Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6), via both Transmission Control Protocol (TCP) port 43 and a Web-based directory service at whois.nic.MERCK, which, in accordance with RFC 3912, provides free public query-based access to domain name, registrar, and name server lookups. Verisign’s proposed WHOIS system meets all requirements as defined by ICANN for each registry under Verisign management. Evidence of this successful implementation, and thus compliance with the applicable RFCs, can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports that Verisign files with ICANN. These reports provide evidence of Verisign’s ability to meet registry operation service level agreements (SLAs) comparable to those detailed in Specification 10. The reports are accessible at the following URL: http://www.icann.org/en/tlds-monthly-reports/.

26.5 Compliance with Specifications 4 and 10 of Registry Agreement In accordance with Specification 4, Verisign, MRH’s selected back-end registry services provider, provides a WHOIS service that is available via both port 43 in accordance with RFC 3912, and a Web-based directory service at whois.nic.MERCK also in accordance with RFC 3912, thereby providing free public query-based access. Verisign acknowledges that ICANN reserves the right to specify alternative formats and protocols, and upon such specification, Verisign will implement such alternative specification as soon as reasonably practicable. The format of the following data fields conforms to the mappings specified in Extensible Provisioning Protocol (EPP) RFCs 5730 – 5734 so the display of this information (or values returned in WHOIS responses) can be uniformly processed and understood: domain name status, individual and organizational names, address, street, city, state-province, postal code, country, telephone and fax numbers, email addresses, date, and times. Specifications for data objects, bulk access, and lookups comply with Specification 4
and are detailed in the following subsections, provided in both bulk access and lookup modes.

**Bulk Access Mode:** This data is provided on a daily schedule to a party designated from time to time in writing by ICANN. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until revised in the ICANN Registry Agreement.

The data is provided in three files:

- **Domain Name File:** For each domain name, the file provides the domain name, server name for each name server, registrar ID, and updated date.
- **Name Server File:** For each registered name server, the file provides the server name, each IP address, registrar ID, and updated date.
- **Registrar File:** For each registrar, the following data elements are provided: registrar ID, registrar address, registrar telephone number, registrar email address, WHOIS server, referral URL, updated date, and the name, telephone number, and email address of all the registrar’s administrative, billing, and technical contacts.

**Lookup Mode:** Figures 26.4 through 26.6 provide the query and response format for domain name, registrar, and name server data objects.

See Figure 26-4
See Figure 26-5
See Figure 26-6

### 26.5.1 Specification 10, RDDS Registry Performance Specifications

The WHOIS service meets all registration data directory services (RDDS) registry performance specifications detailed in Specification 10, Section 2. Evidence of this performance can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports that Verisign files monthly with ICANN. These reports are accessible from the ICANN website at the following URL: [http://www.icann.org/en/tlds/monthly-reports/](http://www.icann.org/en/tlds/monthly-reports/).

In accordance with RDDS registry performance specifications detailed in Specification 10, Verisign’s WHOIS service meets the following proven performance attributes:

- **RDDS availability:** GBP 864 min of downtime (greater than 98%)
- **RDDS query RTT:** GBP 2000 ms, for at least 95% of the queries
- **RDDS update time:** GBP 60 min, for at least 95% of the probes

### 26.6 Searchable WHOIS

Verisign, MRH’s selected back-end registry services provider, provides a searchable WHOIS service for the .MERCK gTLD. Verisign has experience in providing tiered access to WHOIS for the .NAME registry, and uses these methods and control structures to help reduce potential malicious use of the function. The searchable WHOIS system currently uses Apache’s Lucene full text search engine to index relevant WHOIS content with near-real time incremental updates from the provisioning system.

Features of the Verisign searchable WHOIS function include:

- **Provision of a Web-based searchable directory service**
- **Ability to perform partial match, at least, for the following data fields:** domain name, contacts and registrant’s name, and contact and registrant’s postal address, including all the sub-fields described in EPP (e.g., street, city, state, or province)
- **Ability to perform exact match, at least, on the following fields:** registrar ID, name server name, and name server’s IP address (only applies to IP addresses stored by the registry, i.e., glue records)
- **Ability to perform Boolean search supporting, at least, the following logical operators to join a set of search criteria:** AND, OR, NOT

Verisign’s implementation of searchable WHOIS is EU Safe Harbor certified and includes appropriate access control measures that help ensure that only legitimate authorized users can use the service. Furthermore, Verisign’s compliance office monitors current ICANN policy and applicable privacy laws or policies to help ensure the solution is maintained within compliance of applicable regulations. Features of these access control measures include:

- All unauthenticated searches are returned as thin results
- Registry system authentication is used to grant access to appropriate users for thick WHOIS data search results

Verisign’s implementation of searchable WHOIS is granted by the MRH’s defined .MERCK gTLD admin user.

### Potential Forms of Abuse and Related Risk Mitigation

Leveraging its experience providing tiered access to WHOIS for the .NAME registry and interacting with ICANN, data protection authorities, and applicable industry groups, Verisign, MRH’s selected
back-end registry services provider, is knowledgeable of the likely data mining forms of abuse associated with a searchable WHOIS service. Figure 26-7 summarizes these potential forms of abuse and Verisign’s approach to mitigate the identified risk. See Figure 26-7.

27. Registration Life Cycle

Q.27 – Registration Lifecycle

27.1 Complete Knowledge and Understanding of Registration Lifecycles and States

Starting with domain name registration and continuing through domain name delete operations, Merck Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registry implements the full registration lifecycle for domain names supporting the operations in the Extensible Provisioning Protocol (EPP) specification. The registration lifecycle of the domain name starts with registration and traverses various states as specified in the following sections. The registry system provides options to update domain names with different server and client status codes that block operations based on the EPP specification. The system also provides different grace periods for different billable operations, where the price of the billable operation is credited back to the registrar if the billable operation is removed within the grace period. Together Figure 27 1 and Figure 27 2 define the registration states comprising the registration lifecycle and explain the trigger points that cause state-to-state transitions. States are represented as green rectangles within Figure 27 1.

See: Figure 27 1: Registration Lifecycle State Diagram

See: Figure 27 2: Registration States

27.1.1 Registration Lifecycle of Create⁄Update⁄Delete

The following section details the create⁄update⁄delete processes and the related renewal process that Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, follows. For each process, this response defines the process function and its characterization, and as appropriate provides a process flow chart.

Create Process: The domain name lifecycle begins with a registration or what is referred to as a Domain Name Create operation in EPP. The system fully supports the EPP Domain Name Mapping as defined by RFC 5731, where the associated objects (e.g., hosts and contacts) are created independent of the domain name.

Process Characterization: The Domain Name Create command is received, validated, run through a set of business rules, persisted to the database, and committed in the database if all business rules pass. The domain name is included with the data flow to the DNS and WHOIS resolution services. If no name servers are supplied, the domain name is not included with the data flow to the DNS. A successfully created domain name has the created date and expiration date set in the database. Creates are subject to grace periods as described in Section 1.3 of this response, Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers.

The Domain Name Create operation is detailed in Figure 27 3 and requires the following attributes:

- A domain name that meets the string restrictions.
- A domain name that does not already exist.
- The registrar is authorized to create a domain name in .MERCK.
- The registrar has available credit.
- A valid Authorization Information (Auth-Info) value.
- Required contacts (e.g., registrant, administrative contact, technical contact, and billing contact) are specified and exist.
- The specified name servers (hosts) exist, and there is a maximum of 13 name servers.  
- A period in units of years with a maximum value of 10 (default period is one year).

See: Figure 27 3: Create Process Flow Chart

Renewal Process: The domain name can be renewed unless it has any form of Pending Delete, Pending Transfer, or Renew Prohibited.

A request for renewal that sets the expiry date to more than ten years in the future is denied. The registrar must pass the current expiration date (without the timestamp) to support the idempotent features of EPP, where sending the same command a second time does not cause unexpected side effects.

Automatic renewal occurs when a domain name expires. On the expiration date, the registry extends the registration period one year and debits the registrar account balance. In the case of an auto-renewal of the domain name, a separate Auto-Renew grace period applies. Renewals are subject to grace periods as described in Section 1.3 of this response, Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers.

Process Characterization: The Domain Name Renew command is received, validated, authorized, and run through a set of business rules. The data is updated and committed in the database if it passes all business rules. The updated domain name’s expiration date is included in the flow to the WHOIS resolution service.

The Domain Name Renew operation is detailed in Figure 27 4 and requires the following attributes:

- A domain name that exists and is sponsored by the requesting registrar.
- The registrar is authorized to renew a domain name in .MERCK.
- The registrar has available credit.
- The passed current expiration date matches the domain name’s expiration date.
- A period in units of years with a maximum value of 10 (default period is one year). A domain name expiry past ten years is not allowed.

See: Figure 27 4: Renewal Process Flow Chart

Registrar Transfer Procedures. A registrant may transfer his/her domain name from his/her current registrar to another registrar. The database system allows a transfer as long as the transfer is not within the initial 60 days, per industry standard, of the original registration date.

The registrar transfer process goes through many process states, which are described in detail below, unless it has any form of Pending Delete, Pending Transfer, or Transfer Prohibited.

A transfer can only be initiated when the appropriate Auth-Info is supplied. The Auth-Info for transfer is only available to the current registrar. Any other registrar requesting to initiate a transfer on behalf of a registrant must obtain the Auth-Info from the registrant.

The Auth-Info is made available to the registrant upon request. The registrant is the only party other than the current registrar that has access to the Auth-Info. Registrar transfer entails a specified extension of the expiry date for the object. The registrar transfer is a billable operation and is charged identically to a renewal for the same extension of the period. This period can be from one to ten years, in one-year increments.

Because registrar transfer involves an extension of the registration period, the rules and policies applying to how the resulting expiry date is set after transfer are based on the renewal policies on extension.

Per industry standard, a domain name cannot be transferred to another registrar within the first 60 days after registration. This restriction continues to apply if the domain name is renewed during the first 60 days. Transfer of the domain name changes the
sponsoring registrar of the domain name, and also changes the child hosts (ns1.sample.xyz) of the domain name (sample .xyz).

The domain name transfer consists of five separate operations:

- Transfer Request (Figure 27 5): Executed by a non-sponsoring registrar with the valid Auth-Info provided by the registrant. The Transfer Request holds funds of the requesting registrar but does not bill the registrar until the transfer is completed. The sponsoring registrar receives a Transfer Request poll message.
- Transfer Cancel (Figure 27 6): Executed by the requesting registrar to cancel the pending transfer. The held funds of the requesting registrar are reversed. The sponsoring registrar receives a Transfer Cancel poll message.
- Transfer Approve (Figure 27 7): Executed by the sponsoring registrar to approve the Transfer Request. The requesting registrar is billed for the Transfer Request and the sponsoring registrar is credited for an applicable Auto-Renew grace period. The requesting registrar receives a Transfer Approve poll message.
- Transfer Reject (Figure 27 8): Executed by the sponsoring registrar to reject the pending transfer. The held funds of the requesting registrar are reversed. The requesting registrar receives a Transfer Reject poll message.
- Transfer Query (Figure 27 9): Executed by either the requesting registrar or the sponsoring registrar of the last transfer.

The registry auto-approves a transfer if the sponsoring registrar takes no action. The requesting registrar is billed for the Transfer Request and the sponsoring registrar is credited for an applicable Auto-Renew grace period. The requesting registrar and the sponsoring registrar receive a Transfer Auto-Approve poll message.

See: Figure 27 5: Transfer Request Process
See: Figure 27 6: Transfer Cancel Process
See: Figure 27 7: Transfer Approve Process
See: Figure 27 8: Transfer Reject Process
See: Figure 27 9: Transfer Query Process

Delete Process: A registrar may choose to delete the domain name at any time.

Process Characterization: The domain name can be deleted, unless it has any form of Pending Delete, Pending Transfer, or Delete Prohibited.

A domain name is also prohibited from deletion if it has any in-zone child hosts that are name servers for domain names. For example, the domain name “sample.xyz” cannot be deleted if an in-zone host “ns.sample.xyz” exists and is a name server for “sample2.xyz.”

If the Domain Name Delete occurs within the Add grace period, the domain name is immediately deleted and the sponsoring registrar is credited for the Domain Name Create. If the Domain Name Delete occurs outside the Add grace period, it follows the Redemption grace period (RGP) lifecycle.

Update Process: The sponsoring registrar can update the following attributes of a domain name:

- Auth-Info
- Name servers
- Contacts (i.e., registrant, administrative contact, technical contact, and billing contact)
- Statuses (e.g., Client Delete Prohibited, Client Hold, Client Renew Prohibited, Client Transfer Prohibited, Client Update Prohibited)

Process Characterization: Updates are allowed provided that the update includes the removal of any Update Prohibited status. The Domain Name Update operation is detailed in Figure 27 10.

A domain name can be updated unless it has any form of Pending Delete, Pending Transfer, or Update Prohibited.
Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, handles pending, locked, expired, and transferred domain names as described here. When the domain name is deleted after the five-day Add grace period, it enters into the Pending Delete state. The registrant can return its domain name to active any time within the five-day Pending Delete grace period. After the five-day Pending Delete grace period expires, the domain name enters the Redemption Pending state and then is deleted by the system. The registrant can restore the domain name at any time during the Redemption Pending state.

When a non-sponsoring registrar initiates the domain name transfer request, the domain name enters Pending Transfer state and a notification is mailed to the sponsoring registrar for approvals. If the sponsoring registrar doesn’t respond within five days, the Pending Transfer expires and the transfer request is automatically approved.

EPP specifies both client (registrar) and server (registry) status codes that can be used to prevent registry changes that are not intended by the registrant. Currently, many registrars use the client status codes to protect against inadvertent modifications that would affect their customers’ high-profile or valuable domain names.

Verisign’s registry service supports the following client (registrar) and server (registry) status codes:

- clientHold
- clientRenewProhibited
- clientTransferProhibited
- clientUpdateProhibited
- clientDeleteProhibited
- serverHold
- serverRenewProhibited
- serverTransferProhibited
- serverUpdateProhibited
- serverDeleteProhibited

27.1.3 Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, handles Add grace periods, Redemption grace periods, and notice periods for renewals or transfers as described here.

- Add Grace Period: The Add grace period is a specified number of days following the initial registration of the domain name. The current value of the Add grace period for all registrars is five days.
- Redemption Grace Period: If the domain name is deleted after the five-day grace period expires, it enters the Redemption grace period and then is deleted by the system. The registrant has an option to use the Restore Request command to restore the domain name within the Redemption grace period. In this scenario, the domain name goes to Pending Restore state if there is a Restore Request command within 30 days of the Redemption grace period. From the Pending Restore state, it goes either to the OK state, if there is a Restore Report Submission command within seven days of the Restore Request grace period, or a Redemption Period state if there is no Restore Report Submission command within seven days of the Restore Request grace period.
- Renew grace Period: The Renew-Extend grace period is a specified number of days following the renewal-extension of the domain name’s registration period. The current value of the Renew-Extend grace period is five days.
- Auto-Renew Grace Period: All auto-renewed domain names have a grace period of 45 days.
- Transfer Grace Period: Domain names have a five-day Transfer grace period.

27.1.4 Aspects of the Registration Lifecycle Not Covered by Standard EPP RFCs
Merck Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registration lifecycle processes and code implementations adhere to the standard EPP RFCs related to the registration lifecycle. By adhering to the RFCs, Verisign’s registration lifecycle is complete and addresses each registration-related task comprising the lifecycle. No aspect of Verisign’s registration lifecycle is not covered by one of the standard EPP RFCs and thus no additional definitions are provided in this response.

27.2 Consistency with any specific commitments made to registrants as adapted to the overall business approach for the proposed gTLD

The registration lifecycle described above applies to the .MERCK gTLD as well as other TLDs managed by Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider; thus Verisign remains consistent with commitments made to its registrants. No unique or specific registration lifecycle modifications or adaptations are required to support the overall business approach for the .MERCK gTLD.

To accommodate a range of registries, Verisign’s registry implementation is capable of offering both a thin and thick WHOIS implementation, which is also built upon Verisign’s award-winning ATLAS infrastructure.

27.3 Compliance with relevant RFCs

Merck Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registration lifecycle complies with applicable RFCs, specifically RFCs 5730 – 5734 and 3915. The system fully supports the EPP Domain Name Mapping as defined by RFC 5731, where the associated objects (e.g., hosts and contacts) are created independent of the domain name.

In addition, in accordance with RFCs 5732 and 5733, the Verisign registration system enforces the following domain name registration constraints:

- Uniqueness-Multiplicity: A second-level domain name is unique in the .MERCK database. Two identical second-level domain names cannot simultaneously exist in .MERCK. Further, a second-level domain name cannot be created if it conflicts with a reserved domain name.
- Point of Contact Associations: The domain name is associated with the following points of contact. Contacts are created and managed independently according to RFC 5733.
  -- Registrant
  -- Administrative contact
  -- Technical contact
  -- Billing contact
- Domain Name Associations: Each domain name is associated with:
  -- A maximum of 13 hosts, which are created and managed independently according to RFC 5732
  -- An Auth-Info, which is used to authorize certain operations on the object
  -- Status(es), which are used to describe the domain name’s status in the registry
  -- A created date, updated date, and expiry date

27.4 Demonstrates that technical resources required to carry through the plans for this element are already on hand or readily available

Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, is an experienced backend registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the backend registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is
provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the registration lifecycle:

- Application Engineers: 19
- Customer Support Personnel: 36
- Database Administrators: 8
- Database Engineers: 3
- Quality Assurance Engineers: 11
- SRS System Administrators: 13

To implement and manage the .MERCK gTLD as described in this application, Verisign, Merck Registry Holdings, Inc.’s selected backend registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs.

Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-

28. Abuse Prevention and Mitigation

Q.28 – Abuse Prevention and Mitigation

28.1 Abuse Prevention and Mitigation Implementation Plan

Merck Registry Holdings, Inc.’s ("MRH") primary safeguard against mitigating abusive and/or non-compliant registrations within the .MERCK name space is the limited universe of registrants that will be permitted to register with the .MERCK gTLD. As a branded gTLD, registration will be limited to qualified subsidiaries and affiliates of Merck, Merck foundations and related parties, and approved licensees. This built-in validation mechanism promotes uniform compliance and increase accuracy of WHOIS data. MRH is committed to providing best in class safeguards and will be closely monitoring other .BRAND applicants for suitable safeguards.

28.1.2 Policies for Handling Complaints Regarding Abuse

As required by the ICANN template Registry Agreement, MRH will establish, publish, and maintain on its website a single point of contact for handling abuse complaints. This contact will be a role account, e.g., abuse@registry.merck. All email inquiries submitted to this email account will be responded to in a reasonably timely manner. MRH will employ an escalated complaint procedure. This procedure will place priority on complaints received from a trusted-verified source (e.g. law enforcement). If the
complaint falls within the scope of MRH’s Abuse Policy Listed below, MRH reserves the right to suspend or cancel the non-compliant domain.

The role email account identified above will have multiple MRH staff recipients to allow for monitoring on a 24X7 basis. In addition the phone number provided for on the Registry website will be answered by MRH staff during normal working hours.

MRH has not yet finalized an Acceptable Use Policy. A draft policy has been included below but has not yet been finalized by Merck’s legal team. Such approval and posting of the policy will be done in advance of the launch of the registry.

28.1.3 Proposed Measures for Removal of Orphan Glue Records

Although orphan glue records often support correct and ordinary operation of the Domain Name System (DNS), registry operators will be required to remove orphan glue records (as defined at http://www.icann.org/en-committees-security-sac048.pdf) when provided with evidence in written form that such records are present in connection with malicious conduct. MRH’s selected back-end registry services provider’s (Verisign’s) registration system is specifically designed to not allow orphan glue records. Registrars are required to delete-move all dependent DNS records before they are allowed to delete the parent domain.

To prevent orphan glue records, Verisign performs the following checks before removing a domain or name server:

Checks during domain delete:
- Parent domain delete is not allowed if any other domain in the zone refers to the child name server.
- If the parent domain is the only domain using the child name server, then both the domain and the glue record are removed from the zone.

Check during explicit name server delete:
Verisign confirms that the current name server is not referenced by any domain name (in-zone) before deleting the name server.

Zone-file impact:
If the parent domain references the child name server AND if other domains in the zone also reference it AND if the parent domain name is assigned a serverHold status, then the parent domain goes out of the zone but the name server glue record does not. If no domains reference a name server, then the zone file removes the glue record.

28.1.4 Resourcing Plans

Details related to resourcing plans for the initial implementation and ongoing maintenance of MRH’s abuse plan are provided in Section 2 of this response.

28.1.5 Measures to Promote WHOIS Accuracy

Ensuring the accuracy of WHOIS information is of paramount importance to MRH in the operation of the .MERCK gTLD. MRH will employ the following mechanism to promote WHOIS accuracy.

- Registration will be limited to:
  (a) Qualified subsidiaries and affiliates
  (b) Merck foundations and related parties
  (c) Approved licensees
- There will be a strict prohibition against the use of proxy registration services;
- MRH will maintain a web-based form for third parties to submit claims regarding false and or inaccurate WHOIS data.

28.1.5.1 Authentication of Registrant Information

Because all registrants in the .MERCK gTLD namespace will have a pre-existing relationship with Merck & Co. Inc., parent of Merck Sharp and Dohme Corp, Whitehouse Station, New Jersey, USA (collectively “Merck”), this will be pre-authenticated thus promoting accurate and complete WHOIS data.
28.1.5.2 Regular Monitoring of Registration Data for Accuracy and Completeness

Verisign, MRH’s selected back-end registry services provider, has established policies and procedures to encourage registrar compliance with ICANN’s WHOIS accuracy requirements. Verisign provides the following service to MRH for incorporation into its full-service registry operations.

WHOIS data reminder process. Verisign regularly reminds registrars of their obligation to comply with ICANN’s WHOIS Data Reminder Policy, which was adopted by ICANN as a consensus policy on 27 March 2003 (http://www.icann.org/en/registrars/wdrp.htm). Verisign sends a notice to all registrars once a year reminding them of their obligation to be diligent in validating the WHOIS information provided during the registration process, to investigate claims of fraudulent WHOIS information, and to cancel domain name registrations for which WHOIS information is determined to be invalid.

28.1.5.3 Use of Registrars

MRH has not yet made any determinations regarding which registrar will be selected to provide domain name registration services in the gTLD. Merck currently uses one corporate domain name registrar. The likely registrar plan will be to use one corporate registrar. However, any final determination will depend upon MRH and the registrar of choice reaching an agreed-upon price for the specified services.

Registrar services will be provided by certain ICANN-accredited registrars that enter into a Registrar-Registry Agreement (RRA) with MRH, the Registry Operator.

28.1.6 Malicious or Abusive Behavior Definitions, Metrics, and Service Level Requirements for Resolution

MRH will have an Authorized Usage Policy that will govern how a registrant may use its registered domain name(s). A draft framework of this policy is as follows:

By registering a name in this gTLD, the registrant agrees to be bound by the terms of this Acceptable Use Policy (AUP). Registrant may not:
1. Use domain names for any purposes that are prohibited by the laws of the jurisdiction(s) in which registrant does business, or any other applicable law.
2. Use domain names for any purposes or in any manner that violates a statute, rule, or law governing use of the Internet and/or electronic commerce (specifically including “phishing,” “pharming,” distributing Internet viruses and other destructive activities).
3. Use domain names for the following types of activity:
   i. Violation of the privacy or publicity rights of any third party,
   ii. Promotion of or engagement in hate speech; hate crime; terrorism; violence against people, animals, or property; or intolerance of or against any protected class;
   iii. Promotion of or engagement in defamatory, harassing, abusive or otherwise objectionable behavior;
   iv. Promotion of or engagement in child pornography or the exploitation of children;
   v. Promotion of or engagement in any spam or other unsolicited bulk email, or computer or network hacking or cracking;
   vi. Infringement on the intellectual property rights of another member of the .MERCK gTLD community, or any other person or entity;
   vii. Engagement in activities designed to impersonate any third party or create a likelihood of confusion in sponsorship;
   viii. Interference with the operation of the .MERCK gTLD or services offered by MRH;
   ix. Installation of any viruses, worms, bugs, Trojan horses, or other code, files, or programs designed to, or capable of, disrupting, damaging, or limiting the functionality of any software or hardware; or distributing false or deceptive language, or unsubstantiated or comparative claims, regarding MRH;
   x. Registration of .MERCK domain names for the purpose of reselling or transferring those domain names.

28.1.7 Controls to Ensure Proper Access to Domain Functions

MRH will primarily be relying upon the safeguards incorporated at the registrar level to ensure proper access to domain names. Because MRH envisions working with a single
corporate registrar, this will provide an important gate keeping functions. Furthermore, Only qualified subsidiaries and affiliates of Merck, approved licensees, and Merck foundations and related parties will be eligible for inclusion and registration in the community based .MERCK gTLD.

28.1.7.2 Requiring Multiple, Unique Points of Contact and Means of Notification

MRH will likely assigned multiple unique point of contact. In connection with compliance, abuse, or malicious activity, an individual within MRH’s legal department will be identified. In connection with technical, security, and/or stability issues, an individual in MRH’s IT department will be identified. These unique POCs will have a corresponding unique email address that will auto-forward emails to these addresses to multiple individuals in each of the appropriate departments to ensure that there is no single point of failure in the communication chain.

28.2 Technical plan that is adequately resourced in the planned costs detailed in the financial section

28.2.1 Resource Planning

MRH is committed to operating the .MERCK gTLD in a manner that protects the core brand of MRH. MRH has projected that a staff level 0.25 Resource Year ("RY") (0.5 RY total per GTLD for both legal and IT staff) for legal compliance and oversight for the gTLD. In addition, MRH can rely upon existing in-house legal and other support staff should the need arise. MRH has strategically chosen Verisign as its registry services provider because of their excellent track record in operating some of the world’s most complex and critical top level domains. Verisign’s support for the .MERCK gTLD will help ensure its success.

28.2.2 Resource Planning Specific to Back-end Registry Activities

Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support abuse prevention and mitigation:

- Application Engineers: 19
- Business Continuity Personnel: 3
- Customer Affairs Organization: 9
- Customer Support Personnel: 36
- Information Security Engineers: 11
- Network Administrators: 11
- Network Architects: 4
- Network Operations Center (NOC) Engineers: 33
- Project Managers: 25
- Quality Assurance Engineers: 11
- Systems Architects: 9
To implement and manage the .MERCK gTLD as described in this application, Verisign, MRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

28.3.2 Ongoing Anti-Abuse Policies and Procedures

28.3.2.1 Policies and Procedures that Identify Malicious or Abusive Behavior

Verisign, MRH’s selected back-end registry services provider, provides the following service to MRH for incorporation into its full-service registry operations.

Malware scanning service. Registrants are often unknowing victims of malware exploits. Verisign has developed proprietary code to help identify malware in the zones it manages, which in turn helps registrars by identifying malicious code hidden in their domain names.

Verisign’s malware scanning service helps prevent websites from infecting other websites by scanning web pages for embedded malicious content that will infect visitors’ websites. Verisign’s malware scanning technology uses a combination of in-depth malware behavioral analysis, anti-virus results, detailed malware patterns, and network analysis to discover known exploits for the particular scanned zone. If malware is detected, the service sends the registrar a report that contains the number of malicious domains found and details about malicious content within its TLD zones. Reports with remediation instructions are provided to help registrars and registrants eliminate the identified malware from the registrant’s website.

28.3.2.2 Policies and Procedures that Address the Abusive Use of Registered Names

Suspension processes: Any registrant which ceases to have a qualified ongoing legal relationship with MRH will immediately have their domain name suspended and/or cancelled. In addition, any registrant that fails to timely respond to a WHOIS accuracy complaint is subject to having their domain name suspended and/or cancelled. Prior to taking any affirmation action in connection with a WHOIS accuracy compliant, MRH will attempt to contact registrant through various electronic means (email, telephone and fax).

Suspension processes conducted by back-end registry services provider: In the case of domain name abuse, MRH will determine whether to take down the subject domain name. Verisign, MRH’s selected back-end registry services provider, will follow the following auditable processes to comply with the suspension request.

Verisign Suspension Notification: MRH submits the suspension request to Verisign for processing, documented by:

- Threat domain name
- Registry incident number
- Incident narrative, threat analytics, screen shots to depict abuse, and/or other evidence
- Threat classification
- Threat urgency description
- Recommended timeframe for suspension-takedown
- Technical details (e.g., WHOIS records, IP addresses, hash values, anti-virus detection results/nomenclature, name servers, domain name statuses that are relevant to the suspension)
Incident response, including surge capacity

Verisign Notification Verification: When Verisign receives a suspension request from MRH, it performs the following verification procedures:
Validate that all the required data appears in the notification.
Validate that the request for suspension is for a registered domain name.
Return a case number for tracking purposes.

Suspension Rejection: If required data is missing from the suspension request, or the domain name is not registered, the request will be rejected and returned to MRH with the following information:
Threat domain name
Registry incident number
Verisign case number
Error reason

Upon MRH request, Verisign can provide a process for registrants to protest the suspension.
Domain Suspension: Verisign places the domain to be suspended on the following statuses:
serverUpdateProhibited
serverDeleteProhibited
serverTransferProhibited
serverHold

Suspension Acknowledgement: Verisign notifies MRH that the suspension has been completed. Acknowledgement of the suspension includes the following information:
Threat domain name
Registry incident number
Verisign case number
Case number
Domain name
MRH abuse contact name and number, or registrar abuse contact name and number
Suspension status

28.4 When executed in accordance with the Registry Agreement, plans will result in compliance with contractual requirements

As noted in the Question 18 business plan, the purpose of this gTLD registry is to provide MRH with a secure and trusted namespace that is the representation of its brand online. MRH intends to fully comply with the contractual requirements of the Registrant Agreement. Moreover, MRH has a vested interest to ensure that all qualified subsidiaries, affiliates, approved licensees, Merck foundations and other related parties adhere to these legal requirements.

As noted, in the above referenced compliance section, failure for registrants to timely remedy any non-compliant activity will result in the suspension and/or deletion of the domain in question.

28.5 Technical plan scope-scale that is consistent with the overall business approach and planned size of the registry

28.5.1 Scope-Scale Consistency

As a branded gTLD Registry, the allocated registry staff will ensure that all registrations are in compliance with the requirements set forth in the Registrant Agreement. As this staff member(s) is proposed to be sourced from MRH’s legal department, this will facilitate compliance of affiliates, subsidiaries, licensees, Merck foundations and related parties with whom Merck has a pre-existing legal relationship. Unlike other registries that must oversee numerous registrars and untold number of registrants, the .MERCK gTLD will be a limited-universe of known entities with a pre-existing relationship with the Merck that will likely be registered through one registrar.

28.5.2 Scope-Scale Consistency Specific to Back-End Registry Activities
Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as “Other Operating Cost” (Template 1, Line I.1) within the Question 46 financial projections response.

### 29. Rights Protection Mechanisms

#### 29.1 Mechanisms Designed to Prevent Abusive Registrations

Rights protection is a core objective of Merck Registry Holdings, Inc. ("MRH"). MRH will implement and adhere to any rights protection mechanisms (RPMs) that may be mandated from time to time by ICANN, including each mandatory RPM set forth in the Trademark Clearinghouse model contained in the Registry Agreement, specifically Specification 7. MRH acknowledges that, at a minimum, ICANN requires a Sunrise period, a Trademark Claims period, and interaction with the Trademark Clearinghouse with respect to the registration of domain names for the .MERCK gTLD. It should be noted that because ICANN, as of the time of this application submission, has not issued final guidance with respect to the Trademark Clearinghouse, MRH cannot fully detail the specific implementation of the Trademark Clearinghouse within this application. MRH will adhere to all processes and procedures to comply with ICANN guidance once this guidance is finalized.

As described in this response, MRH will implement a Sunrise period and Trademark Claims service with respect to the registration of domain names within the .MERCK gTLD. Certain aspects of the Sunrise period and/or Trademark Claims service may be administered on behalf of MRH by MRH-approved registrars or by subcontractors of MRH, such as its selected back-end registry services provider, Verisign.

At the time of filing, ICANN has not yet released final details on the Trademark Clearinghouse service. However, the protection of intellectual property is of paramount importance to MRH. Given this and the fact that the initial proposed use of the registry is for the exclusive use of qualified subsidiaries and affiliates of Merck, Merck foundations and related parties, and approved licensees, all initial domain name registrations in the .MERCK namespace will be made by Merck and the aforementioned parties. Therefore, while MRH will implement a Sunrise period and Trademark Claims process, depending upon the cost to access the Trademark Clearinghouse, MRH may elect to forego the minimum one-month Sunrise period and register names in the gTLD following this mandatory period.

Sunrise Period: As provided by the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook, the Sunrise service pre-registration procedure for domain names continues for at least 30 days prior to the launch of the general registration of domain names in the gTLD (unless MRH decides to offer a longer Sunrise period).

During the Sunrise period, holders of marks that have been previously validated by the Trademark Clearinghouse receive notice of domain names that are an identical match (as defined in the ICANN Applicant Guidebook) to their mark(s). Such notice is in accordance with ICANN’s requirements and is provided by MRH either directly or through
MRH requires all registrants, either directly or through MRH-approved registrars, to i) affirm that said registrants meet the Sunrise Eligibility Requirements (SER), and ii) submit to the Sunrise Dispute Resolution Policy (SDRP) consistent with Section 6 of the Trademark Clearinghouse model. At a minimum MRH recognizes and honors all word marks for which a proof of use was submitted and validated by the Trademark Clearinghouse as well as any additional eligibility requirements as specified in Question 18.

During the Sunrise period, MRH and/or MRH-approved registrars, as applicable, are responsible for determining whether each domain name is eligible to be registered (including in accordance with the SERs).

Trademark Claims Service: As provided by the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook, all new gTLDs will have to provide a Trademark Claims service for a minimum of 60 days after the launch of the general registration of domain names in the gTLD (Trademark Claims period).

During the Trademark Claims period, in accordance with ICANN’s requirements, MRH or the MRH-approved registrar will send a Trademark Claims Notice to any prospective registrant of a domain name that is an identical match (as defined in the ICANN Applicant Guidebook) to any mark that is validated in the Trademark Clearinghouse. The Trademark Claims Notice will include links to the Trademark Claims as listed in the Trademark Clearinghouse and will be provided at no cost.

Prior to registration of said domain name, MRH or the MRH-approved registrar will require each prospective registrant to provide the warranties dictated in the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook. Those warranties will include receipt and understanding of the Trademark Claims Notice and confirmation that registration and use of said domain name will not infringe on the trademark rights of the mark holders listed. Without receipt of said warranties, the MRH or the MRH-approved registrar will not process the domain name registration.

Following the registration of a domain name, the MRH-approved registrar will provide a notice of domain name registration to the holders of marks that have been previously validated by the Trademark Clearinghouse and are an identical match. This notice will be as dictated by ICANN. At a minimum MRH will recognize and honor all word marks validated by the Trademark Clearinghouse.

29.2 Mechanisms Designed to Identify and address the abusive use of registered names on an ongoing basis

In addition to the Sunrise and Trademark Claims services described in Section 1 of this response, MRH implements and adheres to RPMs post-launch as mandated by ICANN, and confirms that registrars accredited for the .MERCK gTLD are in compliance with these mechanisms. Certain aspects of these post-launch RPMs may be administered on behalf of MRH by MRH-approved registrars or by subcontractors of MRH, such as its selected back-end registry services provider, Verisign.

These post-launch RPMs include the established Uniform Domain-Name Dispute-Resolution Policy (UDRP), as well as the newer Uniform Rapid Suspension System (URS) and Trademark Post-Delegation Dispute Resolution Procedure (PDDRP). Where applicable, MRH will implement all determinations and decisions issued under the corresponding RPM.

After a domain name is registered, trademark holders can object to the registration through the UDRP or URS. Objections to the operation of the gTLD can be made through the PDDRP.

The following descriptions provide implementation details of each post-launch RPM for the .MERCK gTLD:

- UDRP: The UDRP provides a mechanism for complainants to object to domain name registrations. The complainant files its objection with a UDRP provider and the domain name registrant has an opportunity to respond. The UDRP provider makes a decision based
on the papers filed. If the complainant is successful, ownership of the domain name registration is transferred to the complainant. If the complainant is not successful, ownership of the domain name remains with the domain name registrant. MRH and entities operating on its behalf adhere to all decisions rendered by UDRP providers.

- URS: As provided in the Applicant Guidebook, all registries are required to implement the URS. Similar to the UDRP, a complainant files its objection with a URS provider. The URS provider conducts an administrative review for compliance with filing requirements. If the complaint passes review, the URS provider notifies the registry operator and locks the domain. A lock means that the registry restricts all changes to the registration data, but the name will continue to resolve. After the domain is locked, the complaint is served to the domain name registrant, who has an opportunity to respond. If the complainant is successful, the registry operator is informed and the domain name is suspended for the balance of the registration period; the domain name will not resolve to the original website, but to an informational web page provided by the URS provider. If the complainant is not successful, the URS is terminated and full control of the domain name registration is returned to the domain name registrant. Similar to the existing UDRP, MRH and entities operating on its behalf adhere to decisions rendered by the URS providers.

- PDDRP: As provided in the Applicant Guidebook, all registries are required to implement the PDDRP. The PDDRP provides a mechanism for a complainant to object to the registry operator’s manner of operation or use of the gTLD. The complainant files its objection with a PDDRP provider, who performs a threshold review. The registry operator has the opportunity to respond and the provider issues its determination based on the papers filed, although there may be opportunity for further discovery and a hearing. MRH participates in the PDDRP process as specified in the Applicant Guidebook.

Additional Measures Specific to Rights Protection: MRH provides additional measures against potentially abusive registrations. These measures help mitigate phishing, pharming, and other Internet security threats. The measures exceed the minimum requirements for RPMs defined by Specification 7 of the Registry Agreement and are available at the time of registration. These measures include:

- Rapid Takedown or Suspension Based on Court Orders: MRH complies promptly with any order from a court of competent jurisdiction that directs it to take any action on a domain name that is within its technical capabilities as a gTLD registry. These orders may be issued when abusive content, such as child pornography, counterfeit goods, or illegal pharmaceuticals, is associated with the domain name.
- Anti-Abuse Process: MRH implements an anti-abuse process that is executed based on the type of domain name takedown requested. The anti-abuse process is for malicious exploitation of the DNS infrastructure, such as phishing, botnets, and malware.
- Authentication Procedures: Verisign, MRH’s selected back-end registry services provider, uses two-factor authentication to augment security protocols for telephone, email, and chat communications.
- Eligibility Requirements: As discussed above, the proposed use of the registry is for the exclusive use of qualified subsidiaries and affiliates of Merck, Merck foundations and related parties, and approved licensees. Thus, all domain name registrations in the .MERCK namespace will be made by these aforementioned parties. This is expected to significantly reduce and/or eliminate the chance of any abusive registrations.

29.3 Resourcing Plans

29.3.1 Resource Planning

MRH has included in its business plan staffing sufficient to implement and oversee the aforementioned Rights Protection Mechanism procedures. As previously noted in the application, this staffing resource will most likely be sourced from within MRH’s legal department. Should additional subject matter expertise be required, MRH may engage the services of outside specialists on an as-needed basis.

29.3.2 Resource Planning Specific to Back-End Registry Activities

Verisign, MRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD.
Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for the .MERCK gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MRH fully accounts for cost related to this infrastructure, which is provided as Line IIb.G, Total Critical Registry Function Cash Outflows, within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the implementation of RPMS:
- Customer Affairs Organization: 9
- Customer Support Personnel: 36
- Information Security Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign, MRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed .MERCK gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

**30(a). Security Policy: Summary of the security policy for the proposed registry**

**Q.30A - Security Policy**

30A.1 Detailed description of processes and solutions deployed to manage logical security across infrastructure and systems, monitoring and detecting threats and security vulnerabilities and taking appropriate steps to resolve them

Merck Registry Holdings, Inc.’s selected back-end registry services provider’s Verisign, Inc. (“Verisign”)’s comprehensive security policy has evolved over the years as part of managing some of the world’s most critical TLDs. Verisign’s Information Security Policy is the primary guideline that sets the baseline for all other policies, procedures, and standards that Verisign follows. This security policy addresses all of the critical components for the management of back-end registry services, including architecture, engineering, and operations.
Verisign’s general security policies and standards with respect to these areas are provided as follows:

Architecture
- Information Security Architecture Standard: This standard establishes the Verisign standard for application and network architecture. The document explains the methods for segmenting application tiers, using authentication mechanisms, and implementing application functions.
- Information Security Secure Linux Standard: This standard establishes the information security requirements for all systems that run Linux throughout the Verisign organization.
- Information Security Secure Oracle Standard: This standard establishes the information security requirements for all systems that run Oracle throughout the Verisign organization.
- Information Security Remote Access Standard: This standard establishes the information security requirements for remote access to terminal services throughout the Verisign organization.
- Information Security SSH Standard: This standard establishes the information security requirements for the application of Secure Shell (SSH) on all systems throughout the Verisign organization.

Engineering
- Secure SSL/TLS Configuration Standard: This standard establishes the information security requirements for the configuration of Secure Sockets Layer/Transport Layer Security (SSL/TLS) for all systems throughout the Verisign organization.
- Information Security C++ Standards: These standards explain how to use and implement the functions and application programming interfaces (APIs) within C++. The document also describes how to perform logging, authentication, and database connectivity.
- Information Security Java Standards: These standards explain how to use and implement the functions and APIs within Java. The document also describes how to perform logging, authentication, and database connectivity.

Operations
- Information Security DNS Standard: This standard establishes the information security requirements for all systems that run DNS systems throughout the Verisign organization.
- Information Security Cryptographic Key Management Standard: This standard provides detailed information on both technology and processes for the use of encryption on Verisign information security systems.
- Secure Apache Standard: Verisign has a multitude of Apache web servers, which are used in both production and development environments on the Verisign intranet and on the Internet. They provide a centralized, dynamic, and extensible interface to various other systems that deliver information to the end user. Because of their exposure and the confidential nature of the data that these systems host, adequate security measures must be in place. The Secure Apache Standard establishes the information security requirements for all systems that run Apache web servers throughout the Verisign organization.
- Secure Sendmail Standard: Verisign uses sendmail servers in both the production and development environments on the Verisign intranet and on the Internet. Sendmail allows users to communicate with one another via email. The Secure Sendmail Standard establishes the information security requirements for all systems that run sendmail servers throughout the Verisign organization.
- Secure Logging Standard: This standard establishes the information security logging requirements for all systems and applications throughout the Verisign organization. Where specific standards documents have been created for operating systems or applications, the logging standards have been detailed. This document covers all technologies.
- Patch Management Standard: This standard establishes the information security patch and upgrade management requirements for all systems and applications throughout Verisign.

General
- Secure Password Standard: Because passwords are the most popular and, in many cases, the sole mechanism for authenticating a user to a system, great care must be taken to help ensure that passwords are “strong” and secure. The Secure Password Standard
details requirements for the use and implementation of passwords.

- Secure Anti-Virus Standard: Verisign must be protected continuously from computer viruses and other forms of malicious code. These threats can cause significant damage to the overall operation and security of the Verisign network. The Secure Anti-Virus Standard describes the requirements for minimizing the occurrence and impact of these incidents.

Security processes and solutions for the .MERCK gTLD are based on the standards defined above, each of which is derived from Verisign’s experience and industry best practice. These standards comprise the framework for the overall security solution and applicable processes implemented across all products under Verisign’s management. The security solution and applicable processes include, but are not limited to:

- System and network access control (e.g., monitoring, logging, and backup)
- Independent assessment and periodic independent assessment reports
- Denial of service (DoS) and distributed denial of service (DDoS) attack mitigation
- Computer and network incident response policies, plans, and processes
- Minimization of risk of unauthorized access to systems or tampering with registry data
- Intrusion detection mechanisms, threat analysis, defenses, and updates
- Auditing of network access
- Physical security

Further details of these processes and solutions are provided in Part B of this response.

30A.1.1 Security Policy and Procedures for the Proposed Registry

Specific security policy related details, requested as the bulleted items of Question 30 – Part A, are provided here.

Independent Assessment and Periodic Independent Assessment Reports.

To help ensure effective security controls are in place, Merck Registry Holdings, Inc., through its selected back-end registry services provider, Verisign, conducts a yearly American Institute of Certified Public Accountants (AICPA) and Canadian Institute of Chartered Accountants (CICA) SAS 70 audit on all of its data centers, hosted systems, and applications. During these SAS 70 audits, security controls at the operational, technical, and human level are rigorously tested. These audits are conducted by a certified and accredited third party and help ensure that Verisign’s in-place environments meet the security criteria specified in Verisign’s customer contractual agreements and are in accordance with commercially accepted security controls and practices. Verisign also performs numerous audits throughout the year to verify its security processes and activities. These audits cover many different environments and technologies and validate Verisign’s capability to protect its registry and DNS resolution environments. Figure 30A-1 lists a subset of the audits that Verisign conducts. For each audit program or certification listed in Figure 30A-1, Verisign has included, as attachments to the Part B component of this response, copies of the assessment reports conducted by the listed third-party auditor. From Verisign’s experience operating registries, it has determined that together these audit programs and certifications provide a reliable means to ensure effective security controls are in place and that these controls are sufficient to meet ICANN security requirements and therefore are commensurate with the guidelines defined by ISO 27001.

(See: Figure 30A-1: Verisign Independent Assessment Activities)

Augmented Security Levels or Capabilities: See Section 5 of this response.

Commitments Made to Registrants Concerning Security Levels: See Section 4 of this response.

30A.2 Security capabilities are consistent with the overall business approach and planned size of the registry

Merck Registry Holdings, Inc. does not foresee the need for any enhanced security mechanisms beyond those currently provided by Verisign based upon the following factors; existing Merck Registry Holdings, Inc. IT security protocols; the restrictive nature of the .MERCK registrant universe; validation procedures that Merck Registry
Holdings, Inc. will be undertaking prior to allocating names in the gTLD; security features imposed at the registrar level; and, the limited number of registrars (likely a single registrar) that will be connecting to the registry.

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCK gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

30A.3 Technical plan adequately resourced in the planned costs detailed in the financial section

30A.3.1 Resource Planning

It is anticipated that Merck Registry Holdings, Inc.’s existing IT personnel will provide security support services, as necessary, to operate the .MERCK registry. In addition, Merck Registry Holdings, Inc. will engage the services of subject matter experts to provide consulting services on any DNS-specific matters that may be outside the skill set of its internal IT staff.

30A.3.2 Resource Planning Specific to Back-End Registry Activities

Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to Merck Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel role, which is described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support its security policy:

Information Security Engineers: 11

To implement and manage the .MERCK gTLD as described in this application, Verisign,
Merck Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

30A.4 Security measures are consistent with any commitments made to registrants regarding security levels

Verisign is Merck Registry Holdings, Inc.’s selected back-end registry services provider. For the .MERCK gTLD, no unique security measures or commitments must be made by Verisign or Merck Registry Holdings, Inc. to any registrant.

30A.5 Security measures are appropriate for the applied-for gTLD string

No unique security measures are necessary to implement the .MERCK gTLD. As defined in Section 1 of this response, Verisign, Merck Registry Holdings, Inc.’s selected back-end registry services provider, commits to providing back-end registry services in accordance with the following international and relevant security standards:
- American Institute of Certified Public Accountants (AICPA) and Canadian Institute of Chartered Accountants (CICA) SAS 70
- WebTrust/SysTrust for Certification Authorities (CA)

Merck Registry Holdings, Inc. does not foresee the need for any enhanced security mechanisms beyond those currently provided by Verisign based upon the following factors; existing Merck Registry Holdings, Inc. IT security protocols; the restrictive nature of the .MERCK registrant universe; validation procedures that Merck Registry Holdings, Inc. will be undertaking prior to allocating names in the gTLD; security features imposed at the registrar level; and, the limited number of registrars (likely a single registrar) that will be connecting to the registry.
ANNEX 14
New gTLD Application Submitted to ICANN by: MSD Registry Holdings, Inc.

String: MERCKMSD

Originally Posted: 13 June 2012

Application ID: 1-1704-28482

Applicant Information

1. Full legal name

MSD Registry Holdings, Inc.

2. Address of the principal place of business

One Merck Drive
Whitehouse Station   08889
US

3. Phone number

+1 908 423 1000

4. Fax number

+1 908 423 1487
5. If applicable, website or URL

Primary Contact

6(a). Name
Mr. Joshua Bourne

6(b). Title
Managing Partner

6(c). Address

6(d). Phone Number
+1 202 223 9252

6(e). Fax Number

6(f). Email Address
bourne.ms@fairwindspartners.com

Secondary Contact

7(a). Name
Ms. Rashi Rai
7(b). Title
Manager - Strategic Architecture

7(c). Address

7(d). Phone Number
+1 908 423 2831

7(e). Fax Number

7(f). Email Address
rashi_rai@merck.com

Proof of Legal Establishment

8(a). Legal form of the Applicant
Corporation

8(b). State the specific national or other jurisdiction that defines the type of entity identified in 8(a).
New Jersey

8(c). Attach evidence of the applicant’s establishment.
Attachments are not displayed on this form.

9(a). If applying company is publicly traded, provide the exchange and symbol.
9(b). If the applying entity is a subsidiary, provide the parent company.

Merck Sharp & Dohme Corp.

9(c). If the applying entity is a joint venture, list all joint venture partners.

Applicant Background

11(a). Name(s) and position(s) of all directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>John C. Filderman</td>
<td>Director</td>
</tr>
<tr>
<td>Joseph Brian Promo</td>
<td>Director</td>
</tr>
<tr>
<td>Stephen C. Propper</td>
<td>Director</td>
</tr>
</tbody>
</table>

11(b). Name(s) and position(s) of all officers and partners

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>James N. Ciriello</td>
<td>President</td>
</tr>
</tbody>
</table>

11(c). Name(s) and position(s) of all shareholders holding at least 15% of shares

<table>
<thead>
<tr>
<th>Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Merck Sharp &amp; Dohme Corp.</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

11(d). For an applying entity that does not have directors, officers, partners, or shareholders: Name(s) and position(s) of all individuals having legal or executive responsibility

Applied-for gTLD string

13. Provide the applied-for gTLD string. If an IDN, provide the U-label.
14(a). If an IDN, provide the A-label (beginning with "xn--").

14(b). If an IDN, provide the meaning or restatement of the string in English, that is, a description of the literal meaning of the string in the opinion of the applicant.

14(c). If an IDN, provide the language of the label (in English).

14(c). If an IDN, provide the language of the label (as referenced by ISO-639-1).

14(d). If an IDN, provide the script of the label (in English).

14(d). If an IDN, provide the script of the label (as referenced by ISO 15924).

14(e). If an IDN, list all code points contained in the U-label according to Unicode form.

15(a). If an IDN, Attach IDN Tables for the proposed registry.

Attachments are not displayed on this form.

15(b). Describe the process used for development of the IDN tables submitted, including consultations and sources used.

15(c). List any variant strings to the applied-for gTLD string according to the relevant IDN tables.
16. Describe the applicant’s efforts to ensure that there are no known operational or rendering problems concerning the applied-for gTLD string. If such issues are known, describe steps that will be taken to mitigate these issues in software and other applications.

MSD Registry Holdings, Inc. (“MSDRH”) foresees no known rendering issues in connection with the proposed .MERCKMSD gTLD for which it is applying. This answer is based upon consultation with MSDRH’s selected back-end provider, VeriSign, Inc., which has successfully launched a number of new gTLDs over the last decade. In reaching this determination, the following data points were analyzed:

- ICANN’s Security Stability Advisory Committee (SSAC) entitled Alternative TLD Name Systems and Roots: Conflict, Control and Consequences (SAC009);
- IAB - RFC3696 “Application Techniques for Checking and Transformation of Names”
- Known software issues which Verisign has encountered during the last decade launching new gTLDs;
- Character type and length;
- ICANN supplemental notes to Question 16; and
- ICANN’s presentation during its Costa Rica regional meeting on TLD Universal Acceptance.

17. (OPTIONAL) Provide a representation of the label according to the International Phonetic Alphabet (http://www.langsci.ucl.ac.uk/ipa/).

Mission/Purpose

18(a). Describe the mission/purpose of your proposed gTLD.

18.1 Mission and Purpose of .MERCKMSD

MSD Registry Holdings, Incorporated’s (“MSDRH”) parent company, Merck Sharp & Dohme, Corp. (“MSD”), is a leading healthcare company serving the wide-ranging needs of end-users and providers around the world, with approximately 85,000 employees in more than 140 countries. MSD serves a variety of retailers, physicians, veterinarians, managed health care providers, food chain and mass merchandiser outlets, hospitals, and government agencies. MSD’s stated mission is to discover, develop, and provide innovative products and services that save and improve lives.

MSD has operations in several main business segments:

- PHARMACEUTICAL: MSD’s Pharmaceutical segment offers therapeutic and preventive agents for the treatment of human disorders in the areas of bone, respiratory, immunology, dermatology, cardiovascular, diabetes and obesity, oncology, infectious diseases, etc. The unit also offers preventive vaccines for children, adolescents, and adults.
- ANIMAL HEALTH: MSD’s Animal Health segment provides antibiotics, anti-inflammatory products, vaccines, and parasiticides for a variety of animals including cats, dogs, cattle, horses, and fish.
- CONSUMER CARE: In addition, MSD offers a wide range of over-the-counter products such as antihistamines, foot and skin care lotions, heartburn medication, and constipation
relief treatments.

-ALLIANCES: MSD partners with a variety of corporations, organizations and educational institutions in product development and research efforts across the world.

The potential use of the .MERCKMSD gTLD by these or other business segments will primarily be driven by MSD’s future business strategies as identified in its annual report and investor filings, see http://www.merck.com/investors/home.html.

The intended future mission and purpose of the .MERCKMSD gTLD is to serve as a trusted, hierarchical, and intuitive namespace for MSD and end-users, and potentially MSD’s qualified subsidiaries and affiliates and potentially its licensees and other strategic parties.

Recognizing the potential dynamic evolution of the .MERCKMSD gTLD as a trusted brand namespace, MSD has decided to utilize a wholly owned subsidiary, MSDRH, as the entity to file this application and bring the .MERCKMSD gTLD to market. Although MSDRH is committed to moving forward with the .MERCKMSD gTLD application, it has not at the time of filing this application been able to fully vet and analyze all potential use case options.

Although ICANN has not specifically recognized a .BRAND gTLD specification in the current gTLD application round, it is widely anticipated in the brand owner community that this will become a specialty subset of gTLDs.

.MERCKMSD is intended to be one of those .BRAND gTLDs, with the goal of protecting MSD’s online presence and identity, expanding its marketing and promotion efforts, providing a secure channel for online products and services, and offering a platform through which to consolidate many of the intellectual property activities of MSD.

MSDRH intends to initially limit registration and use of domain names within the .MERCKMSD gTLD to MSD and potentially its qualified subsidiaries and affiliates. This initial limited use will allow MSD to establish its operations and achieve full sustainability. This limited distribution, coupled with the other requirements set forth in Specification 9 of the template Registry Agreement, is intended to exempt MSD from its annual Code of Conduct Compliance requirements.

After Stage Three, MSD will evaluate whether opportunities exist to carry out the business strategy for the .MERCKMSD gTLD through expansion that continues the sustainable operations of the registry through registrations that may or may not be fee-based to parties other than MSD and potentially its qualified subsidiaries and affiliates.

MSDRH currently plans a four-stage rollout for the .MERCKMSD gTLD:

1. Stage One

   The initial stage of implementation of the gTLD will involve MSDRH registering a limited number of .MERCKMSD second-level domain names.

   This initial use will provide MSD’s IT and security personnel the time to run a number of tests to ensure seamless and secure access using the .MERCKMSD gTLD domain names, interoperability with various software and Web-based applications, and unbroken and secure use of all names. This initial allocation will also allow the appropriate MSDRH staff to coordinate with the internal and external staff responsible for the delegation and setup phases of the .MERCKMSD gTLD to ensure a proper transition from delegation to full operation.

2. Stage Two

   Once all testing has been successfully completed, MSDRH will begin allocating domain names in .MERCKMSD for more widespread internal corporate use.

   It is in Stage Two that MSDRH will evaluate expanding the operations of the .MERCKMSD gTLD to permit registration by other registrants, such as licensees of MSD or other...
strategic parties. Should an assessment of its expansion strategy lead to a decision to extend registration rights to other parties, this expansion is currently planned to take place during Stage Three.

However, any expansion would be conditioned upon a review of Specification 9 (Registry Code of Conduct) set forth in the template Registry Agreement to ensure compliance with MSDRH’s business model.

3. Stage Three

It is in this stage that MSDRH may implement its decision to extend registration rights to MSD licensees or strategic parties, depending upon compliance with Specification 9 as noted above. The dates of such expansion are subject to change depending upon business, strategic, and industry factors at the time.

After consideration of the following factors: analysis of MSD’s existing domain name portfolio; internal analysis of marketing initiatives; and the fact that MSDRH will have full control over the number of registrations in the .MERCKMSD gTLD namespace, MSDRH is confident that the number of domain name registrations will be less than 10,000 in the first five years of operation.

4. Stage Four

Based on its experience to the end of Year 5, and based on its experience with any expansion implemented in Stage Three, MSDRH will assess whether its business plan and expansion strategy should be augmented by extending registration rights to a broader class of licensees and strategic parties. It is anticipated by MSD that changes to the domain name industry, and particularly the impact of .BRAND gTLDs, will take a number of years to be realized and assessed. Any decision to expand the gTLDs beyond corporate use, and potentially use by qualified subsidiaries, affiliates, licensees, and strategic parties, will take into account this experience as well as the technical analysis of potential expansion.

Utilizing current projections based upon MSD’s existing businesses, future business plans, current domain name portfolio, and other strategic factors, MSDRH estimates second-level domain name registrations to be in line with the projections set forth in the financial template provided in the response to Question 46 of this application.

18(b). How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

18.2 How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

MSDRH believes that the proposed .MERCKMSD gTLD has the potential to offer a variety of benefits to Internet end users, such as establishing a trusted source of information and online marketplace for the millions of end-users searching for related information through MSD’s online resources.

In addition, MSDRH anticipates that .MERCKMSD can provide MSD and potentially its qualified subsidiaries and affiliates with short and memorable Internet addresses, as well as provide increased navigation to products, services, advertising campaigns, public interest content, and public awareness initiatives.

A .MERCKMSD gTLD can also minimize the cost and need for defensive registrations because domain names within the .MERCKMSD gTLD will initially only be allocated by MSDRH to MSD’s internal departments and potentially to qualified subsidiaries and affiliates of MSD.

Also, end users may benefit from lower incidents of phishing and malware often associated with mistypes of domain names in the .COM space that are owned by
cybersquatters since they will be navigating to domain names in the .MERCKMSD gTLD.

18.2.1 What is the goal of your proposed gTLD in terms of areas of specialty, service levels, or reputation?

The primary mission and purpose of the .MERCKMSD gTLD is to provide a trusted, hierarchical, and intuitive online marketplace for MSD content and other products and services. Given that end-users are increasingly demanding access to MSD information through a variety of channels, which include domain names, MSDRH believes that the .MERCKMSD gTLD has the potential to provide an innovative, virtual avenue to content from MSD that will deepen and broaden its relationship with these end-users.

As MSDRH’s parent company, MSD, continues to expand its product offerings and research areas, the company has considered using .MERCKMSD to pursue and develop opportunities to market and distribute its online content and products to end users on various platforms, including the Internet and mobile devices, among others. Providing end-users with a trusted experience is paramount to MSDRH and its parent company, MSD, and the .MERCKMSD gTLD will be used to further that goal.

While healthcare companies, such as MSD, fight never-ending battles to protect their valuable intellectual property from fraud and piracy on the Internet, the .MERCKMSD gTLD would offer end-users a safe and intuitive means of accessing authorized content from MSD and potentially MSD’s qualified subsidiaries and affiliates and potential licensees and strategic parties.

18.2.2 What do you anticipate your proposed gTLD will add to the current space, in terms of competition, differentiation, or innovation?

As a .BRAND gTLD, the primary driving factors of the .MERCKMSD gTLD are differentiation and innovation. The success of the gTLD will not be measured by the number of domain names registered. Instead, it will be measured by the levels of consumer recognition and trust that are placed in the .MERCKMSD gTLD. Using this benchmark, MSDRH will strive to build consumer recognition and trust that rise to the levels of those found in the .EDU and .GOV gTLDs.

As noted above, MSDRH’s parent, MSD, is a leading healthcare company that leverages emerging technologies to deliver healthcare information, products, and services internationally.

The .MERCKMSD gTLD has the potential to aid this online strategy, if potential consumer benefits that ICANN experts have anticipated become a reality.

18.2.3 What goals does your proposed gTLD have in terms of user experience?

MSDRH believes that the .MERCKMSD gTLD will provide a single, trusted ecosystem experience for the millions of end-users seeking information about MSD and its products and services. In addition to providing end-users with short, memorable, and intuitive domain names, MSDRH will have best-in-class safeguards to minimize any potential infringing or pirated content within the .MERCKMSD gTLD.

MSD will continue to stay abreast of changes in the new gTLD space following commencement of operations and will adjust its strategy as needed to ensure it is providing the most valuable and relevant experience for end users.

18.2.4 Provide a complete description of the applicant’s intended registration policies in support of the goals listed above.

The .MERCKMSD gTLD is currently intended to be exclusively used by MSD and potentially MSD’s qualified subsidiaries and affiliates. Because of this condition precedent, any registration and use requirements are more appropriately vested in corporate-affiliate agreements and not in a domain name registration agreement. MSDRH reserves the right to consider allowing third party registrants outside of current affiliate or subsidiary relationships to own .MERCKMSD domains for a fee at a future date. This would only be determined following an
extensive, internal evaluation of MSD’s on-going branding and online goals, and discussions with MSD’s registry services provider.

MSDRH will incorporate all required ICANN consensus policies and other legal/policy requirements imposed on new gTLD applicants into the appropriate agreements.

18.2.5 Will your proposed gTLD impose any measures for protecting the privacy or confidential information of registrants or users? If so, please describe any such measures.

MSD recognizes first hand that this is an evolving area of law in which there is no uniform international standard. As a global healthcare company, MSD respects the privacy of its end-users. The company employs a variety of physical, electronic, contractual, and managerial safeguards to protect personal and confidential information on its websites.

MSDRH will take similar precautions to protect registrant and user data associated with the .MERCKMSD gTLD.

Furthermore, given that every domain name will be registered to MSD or potentially a qualified subsidiary or affiliate and potentially licensees or strategic parties, MSDRH has a vested interest in ensuring that accurate and current registrant information is readily available in connection with each .MERCKMSD domain name.

MSD will ensure that the operation of the .MERCKMSD gTLD will be consistent with MSD’s Statement of Privacy Principles, available on its website at http://www.merck.com/privacy/.

In addition, MSDRH intends to incorporate contractual language in its Registry-Registrar Agreement (RRA) modeled after language that has been included in the template Registry Agreement and that has been successful utilized by existing ICANN gTLD Registry Operators. The template Registry Agreement states “Registry Operator shall (i) notify each ICANN-accredited registrar that is a party to the registry-registrar agreement for the TLD of the purposes for which data about any identified or identifiable natural person (“Personal Data”) submitted to Registry Operator by such registrar is collected and used under this Agreement or otherwise and the intended recipients (or categories of recipients) of such Personal Data, and (ii) require such registrar to obtain the consent of each registrant in the TLD for such collection and use of Personal Data. Registry Operator shall take reasonable steps to protect Personal Data collected from such registrar from loss, misuse, unauthorized disclosure, alteration or destruction. Registry Operator shall not use or authorize the use of Personal Data in a way that is incompatible with the notice provided to registrars.”

18.2.6 Describe whether and in what ways outreach and communications will help to achieve your projected benefits.

MSDRH plans to start using .MERCKMSD domain names primarily as redirects to existing .COM and other domains that MSD and potentially, MSD’s qualified subsidiaries and affiliates, currently operate. MSDRH also plans to carefully review the response from search engines to .BRAND gTLDs, and the perception of end users. As the marketplace evolves, MSDRH will invest in outreach and communication as needed to ensure that its end-users continue to interact with MSDRH content, services, and products in a simplified, efficient, and productive manner.

18(c). What operating rules will you adopt to eliminate or minimize social costs?

18.3.1 What operating rules will you adopt to eliminate or minimize social costs (e.g., time or financial resource costs, as well as various types of consumer vulnerabilities)?

MSDRH has proposed operating rules to limit registration to MSDRH and potentially
qualified subsidiaries and affiliates and will provide a trusted online environment for end-users.

Therefore, one way in which social costs will be eliminated is that there will be no defensive need for other trademark and brand owners to register second-level domains in the .MERCKMSD gTLD. In addition, the .MERCKMSD gTLD will provide end-users with a trusted source for MSDRH information, goods, and services.

18.3.2 What other steps will you take to minimize negative consequences/costs imposed upon consumers?

MSDRH believes that the proposed operation of the .MERCKMSD gTLD as set forth in this application has no known negative consequences or cost implications to end users. On the contrary, the proposed operation of this registry will likely lead to direct and quantifiable benefits to end users.

18.3.3 How will multiple applications for a particular domain name be resolved, for example, by auction or on a first-come-first-serve basis?

MSDRH does not envision multiple applicants for the same domain name, as domain names will only be allocated to its parent company, MSD, and potentially MSD’s qualified subsidiaries and affiliates.

18.3.4 Explain any cost benefits for registrants you intend to implement (e.g., advantageous pricing, introductory discounts, bulk registration discounts).

MSDRH does not envision any pricing, introductory discounts, or bulk registration discounts at this time because these marketing/commercial initiatives are inconsistent with the mission and purpose of the .MERCKMSD gTLD as a trusted online source identifier for MSD, and potentially its qualified subsidiaries and affiliates.

Moreover, it is the current intention of MSD to have MSDRH provide domain name registrations initially at no cost, at least for the first five years of operation.

However, the company reserves the right to reevaluate this decision and may choose to impose a fee in the future. Any potential registrant fees imposed upon licensees or strategic parties will be commensurate with commercial agreements and made if this class of registrants is permitted to register domain names in the .MERCKMSD gTLD.

18.3.5 Note that the Registry Agreement requires that registrars be offered the option to obtain initial domain name registrations for periods of one to ten years at the discretion of the registrar, but no greater than ten years. Additionally, the Registry Agreement requires advance written notice of price increases. Do you intend to make contractual commitments to registrants regarding the magnitude of price escalation? If so, please describe your plans.

MSDRH is committed to providing the domain name registration periods set forth in the Registry Agreement. Therefore, providing contractual commitments in a domain name Registrant Agreement regarding the magnitude of price escalations does not seem relevant or appropriate. MSDRH acknowledges that the current template Registry Agreement requires that the Registry Operator “shall offer registrars the option to obtain registration periods for one to ten years at the discretion of the registrar.”

MSDRH acknowledges that the current template Registry Agreement requires that the Registry Operator “shall offer registrars the option to obtain registration periods for one to ten years at the discretion of the registrar.” However, MSD, as the sole registrant within the .MERCKMSD gTLD, intends to only register domain names on an annual basis through a single registrar.

This is done to better account for costs on an annual basis as well as to provide for more concise financial statements in Question 46, (e.g., no multi-year registration or deferred revenue).
Community-based Designation

19. Is the application for a community-based TLD?
No

20(a). Provide the name and full description of the community that the applicant is committing to serve.

20(b). Explain the applicant's relationship to the community identified in 20(a).

20(c). Provide a description of the community-based purpose of the applied-for gTLD.

20(d). Explain the relationship between the applied-for gTLD string and the community identified in 20(a).

20(e). Provide a description of the applicant's intended registration policies in support of the community-based purpose of the applied-for gTLD.

20(f). Attach any written endorsements from institutions/groups representative of the community identified in 20(a).

Attachments are not displayed on this form.

Geographic Names

21(a). Is the application for a geographic name?
No
Protection of Geographic Names

22. Describe proposed measures for protection of geographic names at the second and other levels in the applied-for gTLD.

MSD Registry Holdings, Incorporated ("MSDRH") is keenly aware of the sensitivity of national governments in connection with protecting country and territory identifiers in the DNS. In preparation for answering this question, MSDRH reviewed relevant background material regarding the protection of geographic names in the DNS including:

- ICANN Board Resolution 01-92 regarding the methodology developed for the reservation and release of country names in the .INFO top-level domain (see http://www.icann.org/en/minutes/minutes-10sep01.htm);
- ICANN’s Proposed Action Plan on .INFO Country Names (see http://www.icann.org/en-meetings-montevideo-action-plan-country-names-09oct01.htm);
- ICANN’s Governmental Advisory Committee (GAC) Principles Regarding New gTLDs, (see https://gacweb.icann.org/download-attachments/1540128/gTLD_principles_0.pdf?version=1&modificationDate=1312358178000); and

MSDRH is committed to initially reserving the country and territory names contained in the internationally-recognized lists described in Article 5 of Specification 5 attached to the New gTLD Applicant Guidebook at the second level and at all other levels within the .MERCKMSD gTLD at which MSDRH will provide for registrations. Specifically, MSDRH will reserve:

- The short form (in English) of all country and territory names contained on the ISO 3166-1 list, as updated from time to time, including the European Union, which is exceptionally reserved on the ISO 3166-1 list, and its scope extended in August 1999 to any application needing to represent the name European Union (see http://www.iso.org/iso/support/country_codes/iso_3166_code_lists/iso-3166-1_decoding_table.html#EU);
- The United Nations Group of Experts on Geographical Names, Technical Reference Manual for the Standardization of Geographical Names, Part III Names of Countries of the World; and

MSDRH’s parent company, Merck Sharp & Dohme Corp., ("MSD"), is a leading healthcare company serving the wide-ranging needs of patients and providers around the world, with more than 86,000 employees in upwards of 140 countries. Given this geographic approach to finding localized MSD content, MSDRH intends to explore the option of providing a hierarchical and intuitive framework for the .MERCKMSD namespace by using geographical identifiers as second-level domain names.

MSDRH, either directly or through its designated representatives, will monitor efforts by other new gTLD Registry Operators in potentially working with ICANN’s GAC to explore potential processes that could permit the release of initially-reserved country names (including ISO-3166 two characters). Specifically, MSDRH is interested in exploring Registry Service Evaluation Processes (RSEP) requests that have been filed by other gTLD Registry Operators in releasing reserved domain names.
Registry Services

23. Provide name and full description of all the Registry Services to be provided.

Q.23 - Registry Services

23.1 Customary Registry Services

As MSD Registry Holdings, Inc.’s selected provider of backend registry services, Verisign provides a comprehensive system and physical security solution that is designed to ensure a TLD is protected from unauthorized disclosure, alteration, insertion, or destruction of registry data. Verisign’s system addresses all areas of security, including information and policies, security procedures, the systems development lifecycle, physical security, system hacks, break-ins, data tampering, and other disruptions to operations. Verisign’s operational environments not only meet the security criteria specified in its customer contractual agreements, thereby preventing unauthorized access to or disclosure of information or resources on the Internet by systems operating in accordance with applicable standards, but also are subject to multiple independent assessments as detailed in the response to Question 30, Security Policy. Verisign’s physical and system security methodology follows a mature, ongoing lifecycle that was developed and implemented many years before the development of the industry standards with which Verisign currently complies. Please see the response to Question 30, Security Policy, for details of the security features of Verisign’s registry services.

Verisign’s registry services fully comply with relevant standards and best current practice RFCs published by the Internet Engineering Task Force (IETF), including all successor standards, modifications, or additions relating to the DNS and name server operations including without limitation RFCs 1034, 1035, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 3901, 4343, and 4472. Moreover, Verisign’s Shared Registration System (SRS) supports the following IETF Extensible Provisioning Protocol (EPP) specifications, where the Extensible Markup Language (XML) templates and XML schemas are defined in RFC 3915, 5730, 5731, 5732, 5733, and 5734. By strictly adhering to these RFCs, Verisign helps to ensure its registry services do not create a condition that adversely affects the throughput, response time, consistency, or coherence of responses to Internet servers or end systems. Besides its leadership in authoring RFCs for EPP, Domain Name System Security Extensions (DNSSEC), and other DNS services, Verisign has created and contributed to several now well-established IETF standards and is a regular and long-standing participant in key Internet standards forums.

Figure 23-1 summarizes the technical and business components of those registry services, customarily offered by a registry operator (i.e., Verisign), that support this application. These services are currently operational and support both large and small Verisign-managed registries. Customary registry services are provided in the same manner as Verisign provides these services for its existing gTLDs.

Through these established registry services, Verisign has proven its ability to operate a reliable and low-risk registry that supports millions of transactions per day. Verisign is unaware of any potential security or stability concern related to any of these services.

Registry services defined by this application are not intended to be offered in a manner unique to the new generic top-level domain (gTLD) nor are any proposed services unique to this application’s registry.

See Figure 0-1: Registry Services. Each proposed service has been previously approved by ICANN to ensure registry security and stability.

In addition the registry services found in Table 23-1, MSD Registry Holdings, Inc. is
evaluating offering the following registry services:

1. Imposition of an annual cost recovery based fee to validate registrars that will be providing domain name registration services in the .MERCKMSD gTLD.

2. The use of RFPs (Request for Proposals) and Auctions to determine string allocation in appropriate circumstances.

As further evidence of Verisign’s compliance with ICANN mandated security and stability requirements, Verisign allocates the applicable RFCs to each of the five customary registry services (items A – E above). For each registry service, Verisign also provides evidence in Figure 23 2 of Verisign’s RFC compliance and includes relevant ICANN prior-service approval actions.

See: Figure 23 2: ICANN RFC Compliance. Verisign currently operates TLDs in full compliance with each registry service’s applicable RFC(s). Each listed Verisign service has been previously approved by ICANN and is now operational on registries under Verisign management.

23.1.1 Critical Operations of the Registry

i. Receipt of Data from Registrars Concerning Registration of Domain Names and Name Servers
See Item A in Figure 23 1 and Figure 23 2.

Verisign is MSD Registry Holdings, Inc.’s selected provider of backend registry services. Verisign registry services provisions to registrars status information relating to zone servers for the TLD. The services also allow a domain name to be updated with clientHold, serverHold status, which removes the domain name server details from zone files. This ensures that DNS queries of the domain name are not resolved temporarily. When these hold statuses are removed, the name server details are written back to zone files and DNS queries are again resolved. Figure 23 3 describes the domain name status information and zone insertion indicator provided to registrars. The zone insertion indicator determines whether the name server details of the domain name exist in the zone file for a given domain name status. Verisign also has the capability to withdraw domain names from the zone file in near-real time by changing the domain name statuses upon request by customers, courts, or legal authorities as required.

See: Figure 23 3: Zone Server Status Information. Verisign provisions to registrars status information related to the TLD.

ii. Provision to Registrars Status Information Relating to the Zone Servers
See Item B in Figure 23 1 and Figure 23 2.

Verisign is MSD Registry Holdings, Inc.’s selected provider of backend registry services. Verisign, as a company, operates zone servers and serves DNS resolution from 76 geographically distributed resolution sites located in North America, South America, Africa, Europe, Asia, and Australia. Currently, 17 DNS locations are designated primary sites, offering greater capacity than smaller sites comprising the remainder of the Verisign constellation. Verisign also uses Anycast techniques and regional Internet resolution sites to expand coverage, accommodate emergency or surge capacity, and support system availability during maintenance procedures. Verisign operates MSD Registry Holdings, Inc.’s gTLD from a minimum of eight of its primary sites (two on the East Coast of the United States, two on the West Coast of the United States, two in Europe, and two in Asia) and expands resolution sites based on traffic volume and patterns. Further details of the geographic diversity of Verisign’s zone servers are provided in the response to Question 34, Geographic Diversity. Moreover, additional details of Verisign’s zone servers are provided in the response to Question 32, Architecture and the response to Question 35, DNS Service.

iii. Dissemination of TLD Zone Files
See Item C in Figure 23 1 and Figure 23 2.

iv. Operation of the Registry Zone Servers
See Item D in Figure 23 1 and Figure 23 2.

v. Dissemination of Contact and Other Information Concerning Domain Name Server Registrations
See Item E in Figure 23 1 and Figure 23 2.
23.2 Other Products or Services the Registry Operator Is Required to Provide Because of the Establishment of a Consensus Policy

Verisign, MSD Registry Holdings, Inc.’s selected provider of backend registry services, is a proven supporter of ICANN’s consensus-driven, bottom-up policy development process whereby community members identify a problem, initiate policy discussions, and generate a solution that produces effective and sustained results. Verisign currently provides all of the products or services (collectively referred to as services) that the registry operator is required to provide because of the establishment of a Consensus Policy. For the .MERCKMSD gTLD, Verisign implements these services using the same proven processes and procedures currently in-place for all registries under Verisign’s management. Furthermore, Verisign executes these services on computing platforms comparable to those of other registries under Verisign’s management. Verisign’s extensive experience with consensus policy required services and its proven processes to implement these services greatly minimize any potential risk to Internet security or stability. Details of these services are provided in the following subsections. It shall be noted that consensus policy services required of registrars (e.g., WHOIS Reminder, Expired Domain) are not included in this response. This exclusion is in accordance with the direction provided in the question’s Notes column to address registry operator services.

23.2.1 Inter-Registrar Transfer Policy (IRTP)
Technical Component: In compliance with the IRTP consensus policy, Verisign, MSD Registry Holdings, Inc.’s selected provider of backend registry services, has designed its registration systems to systematically restrict the transfer of domain names within 60 days of the initial create date. In addition, Verisign has implemented EPP and “AuthInfo” code functionality, which is used to further authenticate transfer requests. The registration system has been designed to enable compliance with the five-day Transfer grace period and includes the following functionality:
- Allows the losing registrar to proactively ‘ACK’ or acknowledge a transfer prior to the expiration of the five-day Transfer grace period
- Allows the losing registrar to proactively ‘NACK’ or not acknowledge a transfer prior to the expiration of the five-day Transfer grace period
- Allows the system to automatically ACK the transfer request once the five-day Transfer grace period has passed if the losing registrar has not proactively ACK’d or NACK’d the transfer request.

Business Component: All requests to transfer a domain name to a new registrar are handled according to the procedures detailed in the IRTP. Dispute proceedings arising from a registrar’s alleged failure to abide by this policy may be initiated by any ICANN-accredited registrar under the Transfer Dispute Resolution Policy. MSD Registry Holdings, Inc.’s compliance office serves as the first-level dispute resolution provider pursuant to the associated Transfer Dispute Resolution Policy. As needed, Verisign is available to offer policy guidance as issues arise.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the service, on throughput, response time, consistency, or coherence of the responses to Internet servers or end-user systems. By implementing the IRTP in accordance with ICANN policy, security is enhanced as all transfer commands are authenticated using the AuthInfo code prior to processing.

ICANN Prior Approval: Verisign has been in compliance with the IRTP since November 2004 and is available to support MSD Registry Holdings, Inc. in a consulting capacity as needed.

Unique to the TLD: This service is not provided in a manner unique to the .MERCKMSD gTLD.

23.2.2 Add Grace Period (AGP) Limits Policy
Technical Component: Verisign’s registry system monitors registrars’ Add grace period deletion activity and provides reporting that permits MSD Registry Holdings, Inc. to assess registration fees upon registrars that have exceeded the AGP thresholds stipulated in the AGP Limits Policy. Further, MSD Registry Holdings, Inc. accepts and evaluates all exemption requests received from registrars and determines whether the exemption request meets the exemption criteria. MSD Registry Holdings, Inc. maintains all AGP Limits Policy exemption request activity so that this material may be included within MSD Registry Holdings, Inc.’s Monthly Registry Operator Report to ICANN.
Registrars that exceed the limits established by the policy may submit exemption requests to MSD Registry Holdings, Inc. for consideration. MSD Registry Holdings, Inc.’s compliance office reviews these exemption requests in accordance with the AGP Limits Policy and renders a decision. Upon request, MSD Registry Holdings, Inc. submits associated reporting on exemption request activity to support reporting in accordance with established ICANN requirements.

Business Component: The Add grace period (AGP) is restricted for any gTLD operator that has implemented an AGP. Specifically, for each operator:
- During any given month, an operator may not offer any refund to an ICANN-accredited registrar for any domain names deleted during the AGP that exceed (i) 10 percent of that registrar’s net new registrations (calculated as the total number of net adds of one-year through ten-year registrations as defined in the monthly reporting requirement of Operator Agreements) in that month, or (ii) fifty (50) domain names, whichever is greater, unless an exemption has been granted by an operator.
- Upon the documented demonstration of extraordinary circumstances, a registrar may seek from an operator an exemption from such restrictions in a specific month. The registrar must confirm in writing to the operator how, at the time the names were deleted, these extraordinary circumstances were not known, reasonably could not have been known, and were outside the registrar’s control. Acceptance of any exemption will be at the sole and reasonable discretion of the operator; however “extraordinary circumstances” that reoccur regularly for the same registrar will not be deemed extraordinary.

In addition to all other reporting requirements to ICANN, MSD Registry Holdings, Inc. identifies each registrar that has sought an exemption, along with a brief description of the type of extraordinary circumstance and the action, approval, or denial that the operator took.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the policy, on throughput, response time, consistency, or coherence of the responses to Internet servers or end-user systems.

ICANN Prior Approval: Verisign, MSD Registry Holdings, Inc.’s backend registry services provider, has had experience with this policy since its implementation in April 2009 and is available to support MSD Registry Holdings, Inc. in a consulting capacity as needed.

Unique to the TLD: This service is not provided in a manner unique to the .MERCKMSD gTLD.

23.2.3 Registry Services Evaluation Policy (RSEP)
Technical Component: Verisign, MSD Registry Holdings, Inc.’s selected provider of backend registry services, adheres to all RSEP submission requirements. Verisign has followed the process many times and is fully aware of the submission procedures, the type of documentation required, and the evaluation process that ICANN adheres to.

Business Component: In accordance with ICANN procedures detailed on the ICANN RSEP website (http://www.icann.org/en/registries/rsep/), all gTLD registry operators are required to follow this policy when submitting a request for new registry services.

Security and Stability Concerns: As part of the RSEP submission process, Verisign, MSD Registry Holdings, Inc.’s backend registry services provider, identifies any potential security and stability concerns in accordance with RSEP stability and security requirements. Verisign never launches services without satisfactory completion of the RSEP process and resulting approval.

ICANN Prior Approval: Not applicable.

Unique to the TLD: gTLD RSEP procedures are not implemented in a manner unique to the .MERCKMSD gTLD.

23.3 Products or Services Only a Registry Operator Is Capable of Providing by Reason of Its Designation As the Registry Operator

Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider, has developed a Registry-Registrar Two-Factor Authentication Service that complements traditional registration and resolution registry services. In accordance with direction provided in Question 23, Verisign details below the technical and business components
of the service, identifies any potential threat to registry security or stability, and lists previous interactions with ICANN to approve the operation of the service. The Two-Factor Authentication Service is currently operational, supporting multiple registries under ICANN’s purview.

MSD Registry Holdings, Inc. is unaware of any competition issue that may require the registry service(s) listed in this response to be referred to the appropriate governmental competition authority or authorities with applicable jurisdiction. ICANN previously approved the service(s), at which time it was determined that either the service(s) raised no competitive concerns or any applicable concerns related to competition were satisfactorily addressed.

23.3.1 Two-Factor Authentication Service
Technical Component: The Registry-Registrar Two-Factor Authentication Service is designed to improve domain name security and assist registrars in protecting the accounts they manage. As part of the service, dynamic one-time passwords augment the user names and passwords currently used to process update, transfer, and/or deletion requests. These one-time passwords enable transaction processing to be based on requests that are validated both by “what users know” (i.e., their user name and password) and “what users have” (i.e., a two-factor authentication credential with a one-time-password).

Demonstration of Technical & Operational Capability

24. Shared Registration System (SRS) Performance

Q.24 – Shared Registration System (SRS) Performance

24.1 Robust Plan for Operating a Reliable SRS

24.1.1 High-Level Shared Registration System (SRS) System Description

VeriSign, Inc. ("Verisign"), MSD Registry Holdings, Inc.’s selected provider of back-end registry services, provides and operates a robust and reliable SRS that enables multiple registrars to provide domain name registration services in the top-level domain (TLD). Verisign’s proven reliable SRS serves approximately 915 registrars, and Verisign, as a company, has averaged more than 140 million registration transactions per day. The SRS provides a scalable, fault-tolerant platform for the delivery of gTLDs through the use of a central customer database, a Web interface, a standard provisioning protocol (i.e., Extensible Provisioning Protocol, "EPP"), and a transport protocol (i.e., Secure Sockets Layer, "SSL").

The SRS components include:

-Web Interface: Allows customers to access the authoritative database for accounts, contacts, users, authorization groups, product catalog, product subscriptions, and customer notification messages.

-EPP Interface: Provides an interface to the SRS that enables registrars to use EPP to register and manage domains, hosts, and contacts.

-Authentication Provider: A Verisign-developed application, specific to the SRS, that authenticates a user based on a login name, password, and the SSL certificate common name and client IP address.

The SRS is designed to be scalable and fault tolerant by incorporating clustering in multiple tiers of the platform. New nodes can be added to a cluster within a single
tier to scale a specific tier, and if one node fails within a single tier, the services will still be available. The SRS allows registrars to manage the .MERCKMSD gTLD domain names in a single architecture.

To flexibly accommodate the scale of its transaction volumes, as well as new technologies, Verisign employs the following design practices:

- **Scale for Growth**: Scale to handle current volumes and projected growth.

- **Scale for Peaks**: Scale to twice base capacity to withstand “registration add attacks” from a compromised registrar system.

- **Limit Database CPU Utilization**: Limit utilization to no more than 50 percent during peak loads.

- **Limit Database Memory Utilization**: Each user’s login process that connects to the database allocates a small segment of memory to perform connection overhead, sorting, and data caching. Verisign’s standards mandate that no more than 40 percent of the total available physical memory on the database server will be allocated for these functions.

Verisign’s SRS is built upon a three-tier architecture as illustrated in Figure 24-1 and detailed here.

(See Figure 24-1, SRS Architecture: Verisign’s SRS is hierarchically designed to meet the forecasted registration volume of the .MERCKMSD gTLD, and it can be scaled to meet future registration volume increases.)

- **Gateway Layer**: The first tier, the gateway servers, uses EPP to communicate with registrars. These gateway servers then interact with application servers, which comprise the second tier.

- **Application Layer**: The application servers contain business logic for managing and maintaining the registry business. The business logic is particular to each TLD’s business rules and requirements. The flexible internal design of the application servers allows Verisign to easily leverage existing business rules to apply to the .MERCKMSD gTLD. The application servers store MSD Registry Holdings, Inc.’s data in the registry database, which comprises the third and final tier. This simple, industry-standard design has been highly effective with other customers for whom Verisign provides backend registry services.

- **Database Layer**: The database is the heart of this architecture. It stores all the essential information provisioned from registrars through the gateway servers. Separate servers query the database, extract updated zone and WHOIS information, validate that information, and distribute it around the clock to Verisign’s worldwide domain name resolution sites.

- **Scalability and Performance**: Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, implements its scalable SRS on a supportable infrastructure that achieves the availability requirements in Specification 10. Verisign employs the design patterns of simplicity and parallelism in both its software and systems, based on its experience that these factors contribute most significantly to scalability and reliable performance. Going counter to feature-rich development patterns, Verisign intentionally minimizes the number of lines of code between the end-user and the data delivered. The result is a network of restorable components that provide rapid, accurate updates. Figure 24-2 depicts EPP traffic flows and local redundancy in Verisign’s SRS provisioning architecture. As detailed in the figure, local redundancy is maintained for each layer as well as each piece of equipment. This built-in redundancy enhances operational performance while enabling the future system scaling necessary to meet additional demand created by this or future registry applications.

(See Figure 24-2, Built-in SRS Redundancy: Verisign’s SRS system is built upon multiple layers of redundancy to ensure the system remains highly available.)

Besides improving scalability and reliability, local SRS redundancy enables Verisign to
take down individual system components for maintenance and upgrades, with little to no performance impact. With Verisign’s redundant design, Verisign can perform routine maintenance while the remainder of the system remains online and unaffected. For the .MERCKMSD gTLD registry, this flexibility minimizes unplanned downtime and provides a more consistent end-user experience.

24.1.2 Representative Network Diagrams

Figure 24-3 provides a summary network diagram of MSD Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) SRS. This configuration at both the primary and alternate-primary Verisign data centers provides a highly reliable backup capability. Data is continuously replicated between both sites to ensure failover to the alternate-primary site can be implemented expeditiously to support both planned and unplanned outages.

(See Figure 24-3, SRS Network Diagram: Verisign’s fully redundant SRS design and geographically separated data centers help ensure service level availability requirements are met.)

24.1.3 Number of Servers

As MSD Registry Holdings, Inc.’s selected provider of back-end registry services, Verisign continually reviews its server deployments for all aspects of its registry service. Verisign evaluates usage based on peak performance objectives as well as current transaction volumes, which drive the quantity of servers in its implementations. Verisign’s scaling is based on the following factors:

Server configuration is based on CPU, memory, disk IO, total disk, and network throughput projections.

Server quantity is determined through statistical modeling to fulfill overall performance objectives as defined by both the service availability and the server configuration.

To ensure continuity of operations for the .MERCKMSD gTLD, Verisign uses a minimum of 100 dedicated servers per SRS site. These servers are virtualized to meet demand.

24.1.4 Description of Interconnectivity with Other Registry Systems

Figure 24-4 provides a technical overview of the MSD Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) SRS, showing how the SRS component fits into this larger system and interconnects with other system components.

(See Figure 24-4, Technical Overview: Verisign’s SRS provides the registrar-facing component of the system establishing the zone file needed to enable DNS and WHOIS services.)

24.1.5 Frequency of Synchronization Between Servers

As MSD Registry Holdings, Inc.’s selected provider of back-end registry services, Verisign uses synchronous replication to keep the Verisign SRS continuously in sync between the two data centers. This synchronization is performed in near-real time, thereby supporting rapid failover should a failure occur or a planned maintenance outage be required.

24.1.6 Synchronization Scheme

Verisign uses synchronous replication to keep the Verisign SRS continuously in sync between the two data centers. Because the alternate-primary site is continuously up, and built using an identical design to the primary data center, it is classified as a “hot standby.”

24.2 Scalability and Performance Are Consistent with the overall business approach and planned size of the registry

Verisign is an experienced back-end registry provider that has developed and uses
proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCKMSD gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MSD Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

24.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, the MSD Registry Holdings, Inc.’s selected provider of back-end registry services, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 - Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services provided to MSD Registry Holdings, Inc. fully accounts for this personnel-related cost, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31 of this application, Technical Overview of Proposed Registry, to support SRS performance:

- Application Engineers: 19
- Database Administrators: 8
- Database Engineers: 3
- Network Administrators: 11
- Network Architects: 4
- Project Managers: 25
- Quality Assurance Engineers: 11
- SRS System Administrators: 13
- Storage Administrators: 4
- Systems Architects: 9

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates.
These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

24.4 Evidence of Compliance with Specification 6 and 10 to the Registry Agreement

24.4.1 Section 1.2 (EPP) of Specification 6, Registry Interoperability and Continuity Specifications

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, provides these services using its SRS, which complies fully with Specification 6, Section 1.2 of the Registry Agreement. In using its SRS to provide back-end registry services, Verisign implements and complies with relevant existing RFCs (i.e., 5730, 5731, 5732, 5733, 5734, and 5910) and intends to comply with RFCs that may be published in the future by the Internet Engineering Task Force (IETF), including successor standards, modifications, or additions thereto relating to the provisioning and management of domain names that use EPP. In addition, Verisign’s SRS includes a Registry Grace Period (RGP) and thus complies with RFC 3915 and its successors. Details of the Verisign SRS’ compliance with RFC SRS-EPP are provided in the response to Question 25, Extensible Provisioning Protocol, of this application. Verisign does not use functionality outside the base EPP RFCs, although proprietary EPP extensions are documented in Internet-Draft format following the guidelines described in RFC 3735 within the response to Question 25 of this application. Moreover, prior to deployment, MSD Registry Holdings, Inc. will provide to ICANN updated documentation of all the EPP objects and extensions supported in accordance with Specification 6, Section 1.2.

24.4.2 Specification 10, EPP Registry Performance Specifications

Verisign’s SRS meets all EPP Registry Performance Specifications detailed in Specification 10, Section 2. Evidence of this performance can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports, which Verisign files with ICANN. These reports detail Verisign’s operational status of the .COM and .NET registries, which use an SRS design and approach comparable to the one proposed for the .MERCKMSD gTLD. These reports provide evidence of Verisign’s ability to meet registry operation service level agreements (SLAs) comparable to those detailed in Specification 10. The reports are accessible at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

In accordance with EPP Registry Performance Specifications detailed in Specification 10, Verisign's SRS meets the following performance attributes:

- EPP service availability: ≤ 864 minutes of downtime (≈98%)
- EPP session-command round trip time (RTT): ≤4000 milliseconds (ms), for at least 90 percent of the commands
- EPP query-command RTT: ≤2000 ms, for at least 90 percent of the commands
- EPP transform-command RTT: ≤4000 ms, for at least 90 percent of the commands

Registrars can use the one-time-password when communicating directly with Verisign’s Customer Service department as well as when using the registrar portal to make manual updates, transfers, and/or deletion transactions. The Two-Factor Authentication Service is an optional service offered to registrars that execute the Registry-Registrar Two-Factor Authentication Service Agreement.

Business Component: There is no charge for the Registry-Registrar Two-Factor Authentication Service. It is enabled only for registrars that wish to take advantage of the added security provided by the service.

Security and Stability Concerns: Verisign is unaware of any impact, caused by the service, on throughput, response time, consistency, or coherence of the responses to
Internet servers or end-user systems. The service is intended to enhance domain name security, resulting in increased confidence and trust by registrants.

ICANN Prior Approval: ICANN approved the same Two-Factor Authentication Service for Verisign’s use on .COM and .NET on 10 July 2009 (RSEP Proposal 2009004) and for .NAME on 16 February 2011 (RSEP Proposal 2011001).

Unique to the TLD: This service is not provided in a manner unique to the .MERCKMSD gTLD.

25. Extensible Provisioning Protocol (EPP)

Q.25 – Extensible Provisioning Protocol (EPP)

25.1 Complete knowledge and understanding of this aspect of registry technical requirements

VeriSign, Inc. ("Verisign’), MSD Registry Holdings, Inc.’s selected back-end registry services provider, has used Extensible Provisioning Protocol (EPP) since its inception and possesses complete knowledge and understanding of EPP registry systems. Its first EPP implementation – for a thick registry for the .NAME generic top-level domain (gTLD) – was in 2002. Since then Verisign has continued its RFC-compliant use of EPP in multiple TLDs. as detailed in Figure 25-1.

(See: Figure 25 1: EPP Implementations. Verisign has repeatedly proven its ability to successfully implement EPP for both small and large registries.)

Verisign’s understanding of EPP and its ability to implement code that complies with the applicable RFCs is unparalleled. Mr. Scott Hollenbeck, Verisign’s director of software development, authored the Extensible Provisioning Protocol and continues to be fully engaged in its refinement and enhancement (U.S. Patent Number 7299299 – Shared registration system for registering domain names). Verisign has also developed numerous new object mappings and object extensions following the guidelines in RFC 3735 (Guidelines for Extending the Extensible Provisioning Protocol). Mr. James Gould, a principal engineer at Verisign, led and co-authored the most recent EPP Domain Name System Security Extensions (DNSSEC) RFC effort (RFC 5910).

All registry systems for which Verisign is the registry operator or provides back-end registry services use EPP. Upon approval of this application, Verisign will use EPP to provide the back-end registry services for this gTLD. The .COM, .NET, and .NAME registries for which Verisign is the registry operator use an SRS design and approach comparable to the one proposed for this gTLD. Approximately 915 registrars use the Verisign EPP service, and the registry system performs more than 140 million EPP transactions daily without performance issues or restrictive maintenance windows. The processing time service level agreement (SLA) requirements for the Verisign-operated .NET gTLD are the strictest of the current Verisign managed gTLDs. All processing times for Verisign-operated gTLDs can be found in ICANN’s Registry Operator’s Monthly Reports at http://www.icann.org/en/tlds/monthly-reports/.

Verisign has also been active on the Internet Engineering Task Force (IETF) Provisioning Registry Protocol (provreg) working group and mailing list since work started on the EPP protocol in 2000. This working group provided a forum for members of the Internet community to comment on Mr. Scott Hollenbeck’s initial EPP drafts, which Mr. Hollenbeck refined based on input and discussions with representatives from registries, registrars, and other interested parties. The working group has since concluded, but the mailing list is still active to enable discussion of different aspects of EPP.

25.1.1 EPP Interface with Registrars

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, fully supports the features defined in the EPP specifications and provides a set of software development kits (SDK) and tools to help registrars build secure and stable interfaces. Verisign’s SDKs give registrars the option of either fully writing their
own EPP client software to integrate with the Shared Registration System (SRS), or
using the Verisign-provided SDKs to aid them in the integration effort. Registrars can
download the Verisign EPP SDKs and tools from the registrar website (http://www.Verisign.com/domain-name-services/current-registrars/epp-sdk/index.html).
The EPP SDKs provide a host of features including connection pooling, Secure Sockets
Layer (SSL), and a test server (stub server) to run EPP tests against. One tool—the EPP
tool—provides a web interface for creating EPP Extensible Markup Language (XML)
commands and sending them to a configurable set of target servers. This helps
registrars in creating the template XML and testing a variety of test cases against the
EPP servers. An Operational Test and Evaluation (OT&E) environment, which runs the same
software as the production system so approved registrars can integrate and test their
software before moving into a live production environment, is also available.

25.2 Technical plan scope/scale consistent with the overall business approach and
planned size of the registry

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider,
is an experienced back-end registry provider that has developed and uses proprietary
system scaling models to guide the growth of its TLD supporting infrastructure. These
models direct Verisign’s infrastructure scaling to include, but not be limited to,
server capacity, data storage volume, and network throughput that are aligned to
projected demand and usage patterns. Verisign periodically updates these models to
account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As
such, they provide the means to link the projected infrastructure needs of the
.MERCKMSD gTLD with necessary implementation and sustainment cost. Using the projected
usage volume for the most likely scenario (defined in Question 46, Template 1—Financial Projections: Most Likely) as an input to its scaling models, Verisign derived
the necessary infrastructure required to implement and sustain this gTLD. Verisign’s
pricing for the back-end registry services it provides to MSD Registry Holdings, Inc.
fully accounts for cost related to this infrastructure, which is provided as “Total
Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question
46 financial projections response.

25.3 Technical plan that is adequately resourced in the planned costs detailed in the
financial section

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider,
is an experienced back-end registry provider that has developed a set of proprietary
resourcing models to project the number and type of personnel resources necessary to
operate a TLD. Verisign routinely adjusts these staffing models to account for new
tools and process innovations. These models enable Verisign to continually right-size
its staff to accommodate projected demand and meet service level agreements as well as
Internet security and stability requirements. Using the projected usage volume for the
most likely scenario (defined in Question 46, Template 1—Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel
levels required for this gTLD’s initial implementation and ongoing maintenance.

Verisign’s pricing for the back-end registry services it provides to MSD Registry
Holdings, Inc. fully accounts for cost related to this infrastructure, which is
provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G)
within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its
technical work force. (Current statistics are publicly available in Verisign’s
quarterly filings.) Drawing from this pool of on-hand and fully committed technical
resources, Verisign has maintained DNS operational accuracy and stability 100 percent
of the time for more than 13 years for .com, proving Verisign’s ability to align
personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in
Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to
support the provisioning of EPP services:
- Application Engineers: 19
- Database Engineers: 3
Quality Assurance Engineers: 11

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

25.4 Ability to comply with Relevant RFCs

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, incorporates design reviews, code reviews, and peer reviews into its software development lifecycle (SDLC) to ensure compliance with the relevant RFCs. Verisign’s dedicated QA team creates extensive test plans and issues internal certifications when it has confirmed the accuracy of the code in relation to the RFC requirements. Verisign’s QA organization is independent from the development team within engineering. This separation helps Verisign ensure adopted processes and procedures are followed, further ensuring that all software releases fully consider the security and stability of the TLD.

For the .MERCKMSD gTLD, the Shared Registration System (SRS) complies with the following IETF EPP specifications, where the XML templates and XML schemas are defined in the following specifications:
- EPP 5730 (http://tools.ietf.org/html/rfc5730): Base EPP specification (authored by Verisign’s Scott Hollenbeck)
- EPP Domain 5731 (http://tools.ietf.org/html/rfc5731): EPP Domain Name Mapping specification (authored by Verisign’s Scott Hollenbeck)
- EPP Contact 5733 (http://tools.ietf.org/html/rfc5733): EPP Contact Mapping specification (authored by Verisign’s Scott Hollenbeck)

25.5 Proprietary EPP Extensions

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, uses its SRS to provide registry services. The SRS supports the following EPP specifications, which Verisign developed following the guidelines in RFC 3735, where the XML templates and XML schemas are defined in the specifications:
- IDN Language Tag (http://www.verisigninc.com/assets/idn-language-tag.pdf): EPP internationalized domain names (IDN) language tag extension used for IDN domain name registrations
- WHOIS Info Extension (http://www.verisigninc.com/assets/whois-info-extension.pdf)
EPP extension for returning additional information needed for transfers
- EPP Consolidate Mapping (http://www.verisigninc.com/assets/consolidate-mapping.txt): EPP mapping to support a Domain Sync operation for synchronizing domain name expiration dates
- NameStore Extension (http://www.verisigninc.com/assets/namestore-extension.pdf): EPP extension for routing with an EPP intelligent gateway to a pluggable set of back-end products and services
- Low Balance Mapping (http://www.verisigninc.com/assets/low-balance-mapping.pdf): EPP mapping to support low balance poll messages that proactively notify registrars of a low balance (available credit) condition

As part of the 2006 implementation report to bring the EPP RFC documents from Proposed Standard status to Draft Standard status, an implementation test matrix was completed. Two independently developed EPP client implementations based on the RFCs were tested against the Verisign EPP server for the domain, host, and contact transactions. No compliance-related issues were identified during this test, providing evidence that these extensions comply with RFC 3735 guidelines and further demonstrating Verisign’s ability to design, test, and deploy an RFC-compliant EPP implementation.

25.5.1 EPP Templates and Schemas

The EPP XML schemas are formal descriptions of the EPP XML templates. They are used to express the set of rules to which the EPP templates must conform in order to be considered valid by the schema. The EPP schemas define the building blocks of the EPP templates, describing the format of the data and the different EPP commands’ request and response formats. The current EPP implementations managed by Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, use these EPP templates and schemas, as will the proposed TLD. For each proprietary XML template/schema, Verisign provides a reference to the applicable template and includes the schema.

25.5.1.1 XML templates/schema for idnLang-1.0
Schema: This schema describes the extension mapping for the IDN language tag. The mapping extends the EPP domain name mapping to provide additional features required for the provisioning of IDN domain name registrations.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<schema targetNamespace="http://www.Verisign.com/epp/idnLang-1.0"
    xmlns:idnLang="http://www.Verisign.com/epp/idnLang-1.0"
    xmlns="http://www.w3.org/2001/XMLSchema"
    elementFormDefault="qualified">
  <annotation>
    <documentation>
      Extensible Provisioning Protocol v1.0 domain name extension schema for IDN Lang Tag.
    </documentation>
  </annotation>
  <!--
  Child elements found in EPP commands.
  -->
  <element name="tag" type="language"/>
  <!--
  End of schema.
  -->
</schema>
```

25.5.1.2 XML templates/schema for rgp-poll-1.0
Template: The templates for rgp-poll-1.0 can be found in Chapter 3, EPP Command Mapping...

Schema: This schema describes the extension mapping for poll notifications. The mapping extends the EPP base mapping to provide additional features for registry grace period (RGP) poll notifications.

```xml
<?xml version="1.0" encoding="UTF-8"?>

<schema targetNamespace="http://www.Verisign.com/epp/rgp-poll-1.0"
  xmlns:rgp-poll="http://www.Verisign.com/epp/rgp-poll-1.0"
  xmlns:eppcom="urn:ietf:params:xml:ns:eppcom-1.0"
  xmlns:rgp="urn:ietf:params:xml:ns:rgp-1.0"
  xmlns="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified">
  <!--
  Import common element types.
  -->
  <import namespace="urn:ietf:params:xml:ns:eppcom-1.0"
    schemaLocation="eppcom-1.0.xsd"/>
  <import namespace="urn:ietf:params:xml:ns:rgp-1.0"
    schemaLocation="rgp-1.0.xsd"/>

  <annotation>
    <documentation>
      Extensible Provisioning Protocol v1.0
      Verisign poll notification specification for registry grace period
      poll notifications.
    </documentation>
  </annotation>

  <!--
  Child elements found in EPP commands.
  -->
  <element name="pollData" type="rgp-poll:pollDataType"/>

  <!--
  Child elements of the <notifyData> element for the redemption grace period.
  -->
  <complexType name="pollDataType">
    <sequence>
      <element name="name" type="eppcom:labelType"/>
      <element name="rgpStatus" type="rgp:statusType"/>
      <element name="reqDate" type="dateTime"/>
      <element name="reportDueDate" type="dateTime"/>
    </sequence>
  </complexType>

  <!--
  End of schema.
  -->
  </schema>
```

25.5.1.3 XML templates

Template: The templates for whoisInf-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/whois-info-extension.pdf.

Schema: This schema describes the extension mapping for the Whois Info extension. The mapping extends the EPP domain name mapping to provide additional features for returning additional information needed for transfers.
25.5.1.4 XML templates/schema for sync-1.0 (consoliDate)
Template: The templates for sync-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/consolidate-mapping.txt.
Schema: This schema describes the extension mapping for the synchronization of domain name registration period expiration dates. This service is known as "ConsoliDate." The mapping extends the EPP domain name mapping to provide features that allow a protocol client to end a domain name registration period on a specific month and day.
Extensible Provisioning Protocol v1.0 domain name extension schema for expiration date synchronization.

Child elements found in EPP commands.

Child elements of the <update> command.

End of schema.

25.5.1.5 XML templates/schema for namestoreExt-1.1
Template: The templates for namestoreExt-1.1 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/namestore-extension.pdf.
Schema: This schema describes the extension mapping for the routing with an EPP intelligent gateway to a pluggable set of back-end products and services. The mapping extends the EPP domain name and host mapping to provide a sub-product identifier to identify the target sub-product that the EPP operation is intended for.

<!-- General Data types. -->
<complexType name="subProductType">
  <sequence>
    <element name="expMonthDay" type="gMonthDay"/>
  </sequence>
</complexType>
25.5.1.6 XML templates

Template: The templates for lowbalance-poll-1.0 can be found in Chapter 3, EPP Command Mapping of the relevant EPP documentation, http://www.verisigninc.com/assets/low-balance-mapping.pdf.

Schema: This schema describes the extension mapping for the account low balance notification. The mapping extends the EPP base mapping so an account holder can be notified via EPP poll messages whenever the available credit for an account reaches or goes below the credit threshold.

<?xml version="1.0" encoding="UTF-8"?>

<schema targetNamespace="http://www.Verisign.com/epp/lowbalance-poll-1.0"/>
25.6 Proprietary EPP Extension Consistency with Registration Lifecycle

MSD Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) proprietary EPP extensions, defined in Section 5 above, are consistent with the registration lifecycle documented in the response to Question 27, Registration Lifecycle. Details of the registration lifecycle are presented in that response. As new registry features are required, Verisign develops proprietary EPP extensions to address new operational requirements. Consistent with ICANN procedures Verisign adheres to all applicable Registry Services Evaluation Process (RSEP) procedures.
26. Whois

26.1 Complete knowledge and understanding of this aspect of registry technical requirements

VeriSign, Inc. ("Verisign") MSD Registry Holdings, Inc.’s selected back-end registry services provider, has operated the WHOIS lookup service for the gTLDs and ccTLDs it manages since 1991, and will provide these proven services for the .MERCKMSD gTLD registry. In addition, it continues to work with the Internet community to improve the utility of WHOIS data, while thwarting its application for abusive uses.

26.1.1 High-Level WHOIS System Description

Like all other components of MSD Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) registry service, Verisign’s WHOIS system is designed and built for both reliability and performance in full compliance with applicable RFCs. Verisign’s current WHOIS implementation has answered more than five billion WHOIS queries per month for the TLDs it manages, and has experienced more than 250,000 queries per minute in peak conditions. The proposed gTLD uses a WHOIS system design and approach that is comparable to the current implementation. Independent quality control testing ensures Verisign’s WHOIS service is RFC-compliant through all phases of its lifecycle.

Verisign’s redundant WHOIS databases further contribute to overall system availability and reliability. The hardware and software for its WHOIS service is architected to scale both horizontally (by adding more servers) and vertically (by adding more CPUs and memory to existing servers) to meet future need. Verisign can fine-tune access to its WHOIS database on an individual Internet Protocol (IP) address basis, and it works with registrars to help ensure their services are not limited by any restriction placed on WHOIS. Verisign provides near real-time updates for WHOIS services for the TLDs under its management. As information is updated in the registration database, it is propagated to the WHOIS servers for quick publication. These updates align with the near real-time publication of Domain Name System (DNS) information as it is updated in the registration database. This capability is important for the .MERCKMSD gTLD registry as it is Verisign’s experience that when DNS data is updated in near real time, so should WHOIS data be updated to reflect the registration specifics of those domain names.

Verisign’s WHOIS response time has been less than 500 milliseconds for 95 percent of all WHOIS queries in .COM, .NET, .TV, and .CC. The response time in these TLDs, combined with Verisign’s capacity, enables the WHOIS system to respond to up to 30,000 searches (or queries) per second for a total capacity of 2.6 billion queries per day. The WHOIS software written by Verisign complies with RFC 3912. Verisign uses an advanced in-memory database technology to provide exceptional overall system performance and security. In accordance with RFC 3912, Verisign provides a website at whois.nic.MERCKMSD that provides free public query-based access to the registration data.

Verisign currently operates both thin and thick WHOIS systems. Verisign commits to implementing a RESTful WHOIS service upon finalization of agreements with the IETF (Internet Engineering Task Force).

26.1.1a Provided Functionalities for User Interface

To use the WHOIS service via port 43, the user enters the applicable parameter on the command line as illustrated here:

- For domain name: whois EXAMPLE.TLD
- For registrar: whois "registrar Example Registrar, Inc."
- For name server: whois "NS1.EXAMPLE.TLD" or whois "name server (IP address)"

To use the WHOIS service via the Web-based directory service search interface:
- Go to http://whois.nic.MERCKMSD
- Click on the appropriate button (Domain, Registrar, or Name Server)
- Enter the applicable parameter:
  --Domain name, including the TLD (e.g., EXAMPLE.TLD)
  --Full name of the registrar, including punctuation (e.g., Example Registrar, Inc.)
  --Full host name or the IP address (e.g., NS1.EXAMPLE.TLD or 198.41.3.39)
- Click on the Submit button.
26.1.1b Provisions to Ensure That Access Is Limited to Legitimate Authorized Users and Is in Compliance with Applicable Privacy Laws or Policies

To further promote reliable and secure WHOIS operations, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, has implemented rate-limiting characteristics within the WHOIS service software. For example, to prevent data mining or other abusive behavior, the service can throttle a specific requestor if the query rate exceeds a configurable threshold. In addition, QoS technology enables rate limiting of queries before they reach the servers, which helps protect against denial of service (DoS) and distributed denial of service (DDoS) attacks.

Verisign’s software also permits restrictions on search capabilities. For example, wildcard searches can be disabled. If needed, it is possible to temporarily restrict and/or block requests coming from specific IP addresses for a configurable amount of time. Additional features that are configurable in the WHOIS software include help files, headers and footers for WHOIS query responses, statistics, and methods to memory map the database. Furthermore, Verisign is European Union (EU) Safe Harbor certified and has worked with European data protection authorities to address applicable privacy laws by developing a tiered WHOIS access structure that requires users who require access to more extensive data to (i) identify themselves, (ii) confirm that their use is for a specified purpose and (iii) enter into an agreement governing their use of the more extensive WHOIS data.

26.1.2 Relevant Network Diagrams

Figure 26-1 provides a summary network diagram of the WHOIS service provided by Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider. The figure details the configuration with one resolution/WHOIS site. For the .MERCKMSD gTLD, Verisign provides WHOIS service from six of its 17 primary sites based on the proposed gTLD’s traffic volume and patterns. A functionally equivalent resolution architecture configuration exists at each WHOIS site.

26.1.3 IT and Infrastructure Resources

Figure 26-2 summarizes the IT and infrastructure resources that Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, uses to provision WHOIS services from Verisign primary resolution sites. As needed, virtual machines are created based on actual and projected demand.

See Figure 26-2

26.1.4 Description of Interconnectivity with Other Registry Systems

Figure 26-3 provides a technical overview of the registry system provided by Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, and shows how the WHOIS service component fits into this larger system and interconnects with other system components.

26.1.5 Frequency of Synchronization Between Servers

Synchronization between the SRS and the geographically distributed WHOIS resolution sites occurs approximately every three minutes. Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, uses a two-part WHOIS update process to ensure WHOIS data is accurate and available. Every 12 hours an initial file is distributed to each resolution site. This file is a complete copy of all WHOIS data fields associated with each domain name under management. As interactions with the SRS cause the WHOIS data to be changed, these incremental changes are distributed to the resolution sites as an incremental file update. This incremental update occurs approximately every three minutes. When the new 12-hour full update is distributed, this file includes all past incremental updates. Verisign’s approach to frequency of synchronization between servers meets the Performance Specifications defined in Specification 10 of the Registry Agreement for new gTLDs.

26.2 Technical plan scope/scale consistent with the overall business approach and planned size of the registry

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCKMSD gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1-
Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MSD Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

26.3 Technical plan that is adequately resourced in the planned costs detailed in the financial section

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the “Most Likely” scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MSD Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, of this application to support WHOIS services:

- Application Engineers: 19
- Database Engineers: 3
- Quality Assurance Engineers: 11

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area. When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

26.4 Compliance with Relevant RFC

MSD Registry Holdings, Inc.’s selected back-end registry services provider’s (Verisign’s) WHOIS service complies with the data formats defined in Specification 4 of the Registry Agreement. Verisign will provision WHOIS services for registered domain names and associated data in the top-level domain (TLD). Verisign’s WHOIS services are accessible over Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6), via both Transmission Control Protocol (TCP) port 43 and a Web-based directory service at whois.nic.(TLD), which, in accordance with RFC 3912, provides free public query-based access to domain name, registrar, and name server lookups. Verisign’s proposed WHOIS system meets all requirements as defined by ICANN for each registry under Verisign management. Evidence of this successful implementation, and thus compliance with the applicable RFCs, can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports that Verisign files with ICANN. These reports provide evidence of Verisign’s ability to meet registry operation service level
agreements (SLAs) comparable to those detailed in Specification 10. The reports are accessible at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

26.5 Compliance with Specifications 4 and 10 of Registry Agreement

In accordance with Specification 4, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, provides a WHOIS service that is available via both port 43 in accordance with RFC 3912, and a Web-based directory service at whois.nic. (TLD) also in accordance with RFC 3912, thereby providing free public query-based access. Verisign acknowledges that ICANN reserves the right to specify alternative formats and protocols, and upon such specification, Verisign will implement such alternative specification as soon as reasonably practicable.

The format of the following data fields conforms to the mappings specified in Extensible Provisioning Protocol (EPP) RFCs 5730 – 5734 so the display of this information (or values returned in WHOIS responses) can be uniformly processed and understood: domain name status, individual and organizational names, address, street, city, state-province, postal code, country, telephone and fax numbers, email addresses, date, and times.

Specifications for data objects, bulk access, and lookups comply with Specification 4 and are detailed in the following subsections, provided in both bulk access and lookup modes.

Bulk Access Mode: This data is provided on a daily schedule to a party designated from time to time in writing by ICANN. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until revised in the ICANN Registry Agreement.

The data is provided in three files:
- Domain Name File: For each domain name, the file provides the domain name, server name for each name server, registrar ID, and updated date.
- Name Server File: For each registered name server, the file provides the server name, each IP address, registrar ID, and updated date.
- Registrar File: For each registrar, the following data elements are provided: registrar ID, registrar address, registrar telephone number, registrar email address, WHOIS server, referral URL, updated date, and the name, telephone number, and email address of all the registrar’s administrative, billing, and technical contacts.

Lookup Mode: Figures 26-4 through 26-6 provide the query and response format for domain name, registrar, and name server data objects.

26.5.1 Specification 10, RDDS Registry Performance Specifications

The WHOIS service meets all registration data directory services (RDDS) registry performance specifications detailed in Specification 10, Section 2. Evidence of this performance can be verified by a review of the .COM and .NET Registry Operator’s Monthly Reports that Verisign files monthly with ICANN. These reports are accessible from the ICANN website at the following URL: http://www.icann.org/en/tlds/monthly-reports/.

In accordance with RDDS registry performance specifications detailed in Specification 10, Verisign’s WHOIS service meets the following proven performance attributes:
- RDDS availability: ≥864 min of downtime (≥98%)
- RDDS query RTT: ≤2000 ms, for at least 95% of the queries
- RDDS update time: ≤60 min, for at least 95% of the probes

26.6 Searchable WHOIS

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, provides a searchable WHOIS service for the .MERCKMSD gTLD. Verisign has experience in providing tiered access to WHOIS for the .NAME registry, and uses these methods and control structures to help reduce potential malicious use of the function. The searchable WHOIS system currently uses Apache’s Lucene full text search engine to index relevant WHOIS content with near-real time incremental updates from the provisioning system.

Features of the Verisign searchable WHOIS function include:
- Provision of a Web-based searchable directory service
- Ability to perform partial match, at least, for the following data fields: domain name, contacts and registrant’s name, and contact and registrant’s postal address, including all the sub-fields described in EPP (e.g., street, city, state, or province)
- Ability to perform exact match, at least, on the following fields: registrar ID, name server name, and name server’s IP address (only applies to IP addresses stored by the registry, i.e., glue records)
- Ability to perform Boolean search supporting, at least, the following logical operators to join a set of search criteria: AND, OR, NOT
- Search results that include domain names that match the selected search criteria.

Verisign’s implementation of searchable WHOIS is EU Safe Harbor certified and includes appropriate access control measures that help ensure that only legitimate authorized users can use the service. Furthermore, Verisign’s compliance office monitors current ICANN policy and applicable privacy laws or policies to help ensure the solution is maintained within compliance of applicable regulations. Features of these access control measures include:
- All unauthenticated searches are returned as thin results.
- Registry system authentication is used to grant access to appropriate users for thick WHOIS data search results.
- Account access is granted by the MSD Registry Holdings, Inc.’s defined .MERCKMSD gTLD admin user.

Potential Forms of Abuse and Related Risk Mitigation: Leveraging its experience providing tiered access to WHOIS for the .NAME registry and interacting with ICANN, data protection authorities, and applicable industry groups, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, is knowledgeable of the likely data mining forms of abuse associated with a searchable WHOIS service. Figure 26-7 summarizes these potential forms of abuse and Verisign’s risk mitigation approach.

27. Registration Life Cycle

27.1 Complete Knowledge and Understanding of Registration Lifecycles and States
Starting with domain name registration and continuing through domain name delete operations, MSD Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registry implements the full registration lifecycle for domain names supporting the operations in the Extensible Provisioning Protocol (EPP) specification. The registration lifecycle of the domain name starts with registration and traverses various states as specified in the following sections. The registry system provides options to update domain names with different server and client status codes that block operations based on the EPP specification. The system also provides different grace periods for different billable operations, where the price of the billable operation is credited back to the registrar if the billable operation is removed within the grace period. Together Figure 27 1 and Figure 27 2 define the registration states comprising the registration lifecycle and explain the trigger points that cause state-to-state transitions. States are represented as green rectangles within Figure 27 1.

See: Figure 27 1: Registration Lifecycle State Diagram
See: Figure 27 2: Registration States

27.1.1 Registration Lifecycle of Create⁄Update⁄Delete
The following section details the create⁄update⁄delete processes and the related renewal process that Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider, follows. For each process, this response defines the process function and its characterization, and as appropriate provides a process flow chart.

Create Process: The domain name lifecycle begins with a registration or what is referred to as a Domain Name Create operation in EPP. The system fully supports the EPP Domain Name Mapping as defined by RFC 5731, where the associated objects (e.g., hosts and contacts) are created independent of the domain name.

Process Characterization: The Domain Name Create command is received, validated, run through a set of business rules, persisted to the database, and committed in the database if all business rules pass. The domain name is included with the data flow to the DNS and WHOIS resolution services. If no name servers are supplied, the domain name is not included with the data flow to the DNS. A successfully created domain name has the created date and expiration date set in the database. Creates are subject to grace periods as described in Section 1.3 of this response, Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers.

The Domain Name Create operation is detailed in Figure 27 3 and requires the following attributes:
- A domain name that meets the string restrictions.
- A domain name that does not already exist.
- The registrar is authorized to create a domain name in .MERCKMSD.
The registrar has available credit.
- A valid Authorization Information (Auth-Info) value.
- Required contacts (e.g., registrant, administrative contact, technical contact, and billing contact) are specified and exist.
- The specified name servers (hosts) exist, and there is a maximum of 13 name servers.
- A period in units of years with a maximum value of 10 (default period is one year).

See: Figure 27 3: Create Process Flow Chart

Renewal Process: The domain name can be renewed unless it has any form of Pending Delete, Pending Transfer, or Renew Prohibited.

A request for renewal that sets the expiry date to more than ten years in the future is denied. The registrar must pass the current expiration date (without the timestamp) to support the idempotent features of EPP, where sending the same command a second time does not cause unexpected side effects.

Automatic renewal occurs when a domain name expires. On the expiration date, the registry extends the registration period one year and debits the registrar account balance. In the case of an auto-renewal of the domain name, a separate Auto-Renew grace period applies. Renewals are subject to grace periods as described in Section 1.3 of this response, Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers.

Process Characterization: The Domain Name Renew command is received, validated, authorized, and run through a set of business rules. The data is updated and committed in the database if it passes all business rules. The updated domain name’s expiration date is included in the flow to the WHOIS resolution service.

The Domain Name Renew operation is detailed in Figure 27 4 and requires the following attributes:
- A domain name that exists and is sponsored by the requesting registrar.
- The registrar is authorized to renew a domain name in .MERCKMSD.
- The registrar has available credit.
- The passed current expiration date matches the domain name’s expiration date.
- A period in units of years with a maximum value of 10 (default period is one year). A domain name expiry past ten years is not allowed.

See: Figure 27 4: Renewal Process Flow Chart

Registrar Transfer Procedures. A registrant may transfer his/her domain name from his/her current registrar to another registrar. The database system allows a transfer as long as the transfer is not within the initial 60 days, per industry standard, of the original registration date.

The registrar transfer process goes through many process states, which are described in detail below, unless it has any form of Pending Delete, Pending Transfer, or Transfer Prohibited.

A transfer can only be initiated when the appropriate Auth-Info is supplied. The Auth-Info for transfer is only available to the current registrar. Any other registrar requesting to initiate a transfer on behalf of a registrant must obtain the Auth-Info from the registrant.

The Auth-Info is made available to the registrant upon request. The registrant is the only party other than the current registrar that has access to the Auth-Info. Registrar transfer entails a specified extension of the expiry date for the object. The registrar transfer is a billable operation and is charged identically to a renewal for the same extension of the period. This period can be from one to ten years, in one-year increments.

Because registrar transfer involves an extension of the registration period, the rules and policies applying to how the resulting expiry date is set after transfer are based on the renewal policies on extension.

Per industry standard, a domain name cannot be transferred to another registrar within the first 60 days after registration. This restriction continues to apply if the domain name is renewed during the first 60 days. Transfer of the domain name changes the sponsoring registrar of the domain name, and also changes the child hosts (ns1.sample.xyz) of the domain name (sample .xyz).

The domain name transfer consists of five separate operations:
- **Transfer Request (Figure 27 5):** Executed by a non-sponsoring registrar with the valid Auth-Info provided by the registrant. The Transfer Request holds funds of the requesting registrar but does not bill the registrar until the transfer is completed. The sponsoring registrar receives a Transfer Request poll message.
- **Transfer Cancel (Figure 27 6):** Executed by the requesting registrar to cancel the pending transfer. The held funds of the requesting registrar are reversed. The sponsoring registrar receives a Transfer Cancel poll message.
- **Transfer Approve (Figure 27 7):** Executed by the sponsoring registrar to approve the Transfer Request. The requesting registrar is billed for the Transfer Request and the sponsoring registrar is credited for an applicable Auto-Renew grace period. The requesting registrar receives a Transfer Approve poll message.
- **Transfer Reject (Figure 27 8):** Executed by the sponsoring registrar to reject the pending transfer. The held funds of the requesting registrar are reversed. The requesting registrar receives a Transfer Reject poll message.
- **Transfer Query (Figure 27 9):** Executed by either the requesting registrar or the sponsoring registrar of the last transfer. The registry auto-approves a transfer if the sponsoring registrar takes no action. The requesting registrar is billed for the Transfer Request and the sponsoring registrar is credited for an applicable Auto-Renew grace period. The requesting registrar and the sponsoring registrar receive a Transfer Auto-Approve poll message.

See: Figure 27 5: Transfer Request Process
See: Figure 27 6: Transfer Cancel Process
See: Figure 27 7: Transfer Approve Process
See: Figure 27 8: Transfer Reject Process
See: Figure 27 9: Transfer Query Process

**Delete Process:** A registrar may choose to delete the domain name at any time. The domain name can be deleted, unless it has any form of Pending Delete, Pending Transfer, or Delete Prohibited. A domain name is also prohibited from deletion if it has any in-zone child hosts that are name servers for domain names. For example, the domain name “sample.xyz” cannot be deleted if an in-zone host “ns.sample.xyz” exists and is a name server for “sample2.xyz.”

If the Domain Name Delete occurs within the Add grace period, the domain name is immediately deleted and the sponsoring registrar is credited for the Domain Name Create. If the Domain Name Delete occurs outside the Add grace period, it follows the Redemption grace period (RGP) lifecycle.

**Update Process:** The sponsoring registrar can update the following attributes of a domain name:
- **Auth-Info**
- **Name servers**
- **Contacts** (i.e., registrant, administrative contact, technical contact, and billing contact)
- **Statuses** (e.g., Client Delete Prohibited, Client Hold, Client Renew Prohibited, Client Transfer Prohibited, Client Update Prohibited)

**Process Characterization:** Updates are allowed provided that the update includes the removal of any Update Prohibited status. The Domain Name Update operation is detailed in Figure 27 10.

A domain name can be updated unless it has any form of Pending Delete, Pending Transfer, or Update Prohibited.

See: Figure 27 10: Update Process Flow Chart

**27.1.2 Pending, Locked, Expired, and Transferred**

Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider, handles pending, locked, expired, and transferred domain names as described here. When the domain name is deleted after the five-day Add grace period, it enters into the Pending Delete state. The registrant can return its domain name to active any time within the five-day Pending Delete grace period. After the five-day Pending Delete grace period expires, the domain name enters the Redemption Pending state and then is deleted by the system. The registrant can restore the domain name at any time during the Redemption Pending state.

When a non-sponsoring registrar initiates the domain name transfer request, the domain name enters Pending Transfer state and a notification is mailed to the sponsoring registrar for approvals. If the sponsoring registrar doesn’t respond within five days, the Pending Transfer expires and the transfer request is automatically approved.

EPP specifies both client (registrar) and server (registry) status codes that can be used to prevent registry changes that are not intended by the registrant. Currently,
many registrars use the client status codes to protect against inadvertent modifications that would affect their customers’ high-profile or valuable domain names. Verisign’s registry service supports the following client (registrar) and server (registry) status codes:
- clientHold
- clientRenewProhibited
- clientTransferProhibited
- clientUpdateProhibited
- clientDeleteProhibited
- serverHold
- serverRenewProhibited
- serverTransferProhibited
- serverUpdateProhibited
- serverDeleteProhibited

27.1.3 Add Grace Period, Redemption Grace Period, and Notice Periods for Renewals or Transfers
Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider, handles Add grace periods, Redemption grace periods, and notice periods for renewals or transfers as described here.
- Add Grace Period: The Add grace period is a specified number of days following the initial registration of the domain name. The current value of the Add grace period for all registrars is five days.
- Redemption Grace Period: If the domain name is deleted after the five-day grace period expires, it enters the Redemption grace period and then is deleted by the system. The registrant has an option to use the Restore Request command to restore the domain name within the Redemption grace period. In this scenario, the domain name goes to Pending Restore state if there is a Restore Request command within 30 days of the Redemption grace period. From the Pending Restore state, it goes either to the OK state, if there is a Restore Report Submission command within seven days of the Restore Request grace period, or a Redemption Period state if there is no Restore Report Submission command within seven days of the Restore Request grace period.
- Renew Grace Period: The Renew/Extend grace period is a specified number of days following the renewal/extension of the domain name’s registration period. The current value of the Renew/Extend grace period is five days.
- Auto-Renew Grace Period: All auto-renewed domain names have a grace period of 45 days.
- Transfer Grace Period: Domain names have a five-day Transfer grace period.

27.1.4 Aspects of the Registration Lifecycle Not Covered by Standard EPP RFCs
MSD Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registration lifecycle processes and code implementations adhere to the standard EPP RFCs related to the registration lifecycle. By adhering to the RFCs, Verisign’s registration lifecycle is complete and addresses each registration-related task comprising the lifecycle. No aspect of Verisign’s registration lifecycle is not covered by one of the standard EPP RFCs and thus no additional definitions are provided in this response.

27.2 Consistency with any specific commitments made to registrants as adapted to the overall business approach for the proposed gTLD
The registration lifecycle described above applies to the .MERCKMSD gTLD as well as other TLDs managed by Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider; thus Verisign remains consistent with commitments made to its registrants. No unique or specific registration lifecycle modifications or adaptations are required to support the overall business approach for the .MERCKMSD gTLD. To accommodate a range of registries, Verisign’s registry implementation is capable of offering both a thin and thick WHOIS implementation, which is also built upon Verisign’s award-winning ATLAS infrastructure.

27.3 Compliance with relevant RFCs
MSD Registry Holdings, Inc.’s selected backend registry services provider’s (Verisign’s) registration lifecycle complies with applicable RFCs, specifically RFCs 5730 – 5734 and 3915. The system fully supports the EPP Domain Name Mapping as defined by RFC 5731, where the associated objects (e.g., hosts and contacts) are created independent of the domain name. In addition, in accordance with RFCs 5732 and 5733, the Verisign registration system enforces the following domain name registration constraints:
- Uniqueness-Multiplicity: A second-level domain name is unique in the .MERCKMSD database. Two identical second-level domain names cannot simultaneously exist in
Further, a second-level domain name cannot be created if it conflicts with a reserved domain name.

**Point of Contact Associations:** The domain name is associated with the following points of contact. Contacts are created and managed independently according to RFC 5733.

- Registrant
- Administrative contact
- Technical contact
- Billing contact

**Domain Name Associations:** Each domain name is associated with:

- A maximum of 13 hosts, which are created and managed independently according to RFC 5732
- An Auth-Info, which is used to authorize certain operations on the object
- Status(es), which are used to describe the domain name’s status in the registry
- A created date, updated date, and expiry date

27.4 Demonstrates that technical resources required to carry through the plans for this element are already on hand or readily available

Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider, is an experienced backend registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a TLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance.

Verisign’s pricing for the backend registry services it provides to MSD Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the registration lifecycle:

- Application Engineers: 19
- Customer Support Personnel: 36
- Database Administrators: 8
- Database Engineers: 3
- Quality Assurance Engineers: 11
- SRS System Administrators: 13

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSD Registry Holdings, Inc.’s selected backend registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area. When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.
28. Abuse Prevention and Mitigation

Q.28 – Abuse Prevention and Mitigation

28.1 Abuse Prevention and Mitigation Implementation Plan

MSD Registry Holdings, Inc.’s (“MSDRH”) primary safeguard against mitigating abusive and/or non-compliant registrations within the .MERCKMSD name space is the limited universe of registrants that will be permitted to register with the .MERCKMSD gTLD. As a dot Brand registry, registration will initially be limited to Merck Sharp and Dohme Corp (“MSD”) and its qualified subsidiaries and affiliates. This built-in validation mechanism promotes uniform compliance and increase accuracy of WHOIS data. MSDRH is committed to providing best in class safeguards and will be closely monitoring other .BRAND applicants for suitable safeguards.

28.1.2 Policies for Handling Complaints Regarding Abuse

As required by the ICANN template Registry Agreement, MSDRH will establish, publish, and maintain on its website a single point of contact for handling abuse complaints. This contact will be a role account, e.g., abuse@registry.MERCKMSD. All email inquiries submitted to this email account will be responded to in a reasonably timely manner. MSDRH will employ an escalated complaint procedure. This procedure will place priority on complaints received from a trusted/verified source (e.g. law enforcement). If the complaint falls within the scope of MSDRH’s Abuse Policy Listed below, MSDRH reserves the right to suspend or cancel the non-compliant domain.

MSDRH has not yet finalized an Acceptable Use Policy. A draft policy has been included below but has not yet been finalized by Merck’s legal team. Such approval and posting of the policy will be done in advance of the launch of the registry.

The role email account identified above will have multiple MSDRH staff recipients to allow for monitoring on a 24X7 basis. In addition the phone number provided for on the Registry website will be answered by MSDRH staff during normal working hours.

28.1.3 Proposed Measures for Removal of Orphan Glue Records

Although orphan glue records often support correct and ordinary operation of the Domain Name System (DNS), registry operators will be required to remove orphan glue records (as defined at http://www.icann.org/en/committees/security/sac048.pdf) when provided with evidence in written form that such records are present in connection with malicious conduct. MSDRH’s selected back-end registry services provider’s (Verisign’s) registration system is specifically designed to not allow orphan glue records. Registrars are required to delete/move all dependent DNS records before they are allowed to delete the parent domain.

To prevent orphan glue records, Verisign performs the following checks before removing a domain or name server:

Checks during domain delete:
- Parent domain delete is not allowed if any other domain in the zone refers to the child name server.
- If the parent domain is the only domain using the child name server, then both the domain and the glue record are removed from the zone.

Check during explicit name server delete:
Verisign confirms that the current name server is not referenced by any domain name (in-zone) before deleting the name server.

Zone-file impact:
If the parent domain references the child name server AND if other domains in the zone also reference it AND if the parent domain name is assigned a serverHold status, then the parent domain goes out of the zone but the name server glue record does not. If no domains reference a name server, then the zone file removes the glue record.

28.1.4 Resourcing Plans

Details related to resourcing plans for the initial implementation and ongoing
maintenance of MSDRH’s abuse plan are provided in Section 2 of this response.

28.1.5 Measures to Promote WHOIS Accuracy

Ensuring the accuracy of WHOIS information is of paramount importance to MSDRH in the operation of the .MERCKMSD gTLD. MSDRH will employ the following mechanism to promote WHOIS accuracy.

- Only MSD and its qualified subsidiaries and affiliates will be permitted to register in the .MERCKMSD
- There will be a strict prohibition against the use of proxy registration services;
- MSDRH will maintain a web-based form for third parties to submit claims regarding false and or inaccurate WHOIS data.

28.1.5.1 Authentication of Registrant Information

Because all registrants in the .MERCKMSD gTLD namespace will have a pre-existing relationship with MSD, this will be pre-authenticated thus promoting accurate and complete WHOIS data.

28.1.5.2 Regular Monitoring of Registration Data for Accuracy and Completeness

Verisign, MSDRH’s selected back-end registry services provider, has established policies and procedures to encourage registrar compliance with ICANN’s WHOIS accuracy requirements. Verisign provides the following service to MSDRH for incorporation into its full-service registry operations.

WHOIS data reminder process. Verisign regularly reminds registrars of their obligation to comply with ICANN’s WHOIS Data Reminder Policy, which was adopted by ICANN as a consensus policy on 27 March 2003 (http://www.icann.org/en/registrars/wdrp.htm).

Verisign sends a notice to all registrars once a year reminding them of their obligation to be diligent in validating the WHOIS information provided during the registration process, to investigate claims of fraudulent WHOIS information, and to cancel domain name registrations for which WHOIS information is determined to be invalid.

28.1.5.3 Use of Registrars

MSDRH has not yet made any determinations regarding which registrar will be selected to provide domain name registration services in the gTLD. MSD currently uses one corporate domain name registrar. The likely registrar plan will be to use one corporate registrar. However, any final determination will depend upon MSDRH and the registrar of choice reaching an agreed-upon price for the specified services.

Registrar services will be provided by certain ICANN-accredited registrars that enter into a Registrar-Registry Agreement (RRA) with MSDRH, the Registry Operator.

28.1.6 Malicious or Abusive Behavior Definitions, Metrics, and Service Level Requirements for Resolution

MSDRH will have an Authorized Usage Policy that will govern how a registrant may use its registered domain name(s). A draft framework of this policy is as follows:

By registering a name in this gTLD, the registrant agrees to be bound by the terms of this Acceptable Use Policy (AUP). Registrant may not:
1. Use domain names for any purposes that are prohibited by the laws of the jurisdiction(s) in which registrant does business, or any other applicable law.
2. Use domain names for any purposes or in any manner that violates a statute, rule, or law governing use of the Internet and/or electronic commerce (specifically including “phishing,” “pharming,” distributing Internet viruses and other destructive activities).
3. Use domain names for the following types of activity:
   i. Violation of the privacy or publicity rights of any third party,
   ii. Promotion of or engagement in hate speech; hate crime; terrorism; violence against people, animals, or property; or intolerance of or against any protected class;
   iii. Promotion of or engagement in defamatory, harassing, abusive or otherwise
objectionable behavior;
iv. Promotion of or engagement in child pornography or the exploitation of children;
v. Promotion of or engagement in any spam or other unsolicited bulk email, or computer
or network hacking or cracking;
vi. Infringement on the intellectual property rights of another member of the .MERCKMSD
gTLD community, or any other person or entity;
vii. Engagement in activities designed to impersonate any third party or create a
likelihood of confusion in sponsorship;
viii. Interference with the operation of the .MERCKMSD gTLD or services offered by
MSDRH;
ix. Installation of any viruses, worms, bugs, Trojan horses, or other code, files, or
programs designed to, or capable of, disrupting, damaging, or limiting the
functionality of any software or hardware; or distributing false or deceptive language,
or unsubstantiated or comparative claims, regarding MSDRH;
x. Registration of .MERCKMSD domain names for the purpose of reselling or transferring
those domain names.

28.1.7 Controls to Ensure Proper Access to Domain Functions

MSDRH will primarily be relying upon the safeguards incorporated at the registrar level
to ensure proper access to domain names. Because MSDRH envisions working with a single
corporate registrar, this will provide an important gate keeping function.

28.1.7.2 Requiring Multiple, Unique Points of Contact and Means of Notification

MSDRH will likely assign multiple unique points of contact. In connection with
compliance, abuse, or malicious activity, an individual within MSDRH’s legal department
will be identified. In connection with technical, security, and/or stability issues,
an individual in MSDRH’s IT department will be identified. These unique POCs will have
a corresponding unique email address that will auto-forward emails to these addresses
to multiple individuals in each of the appropriate departments to ensure that there is
no single point of failure in the communication chain.

28.2 Technical plan that is adequately resourced in the planned costs detailed in the
financial section

28.2.1 Resource Planning

MSDRH is committed to operating the .MERCKMSD gTLD in a manner that protects the core
brand of MSDRH. MSDRH has projected that a staff level 0.25 Resource Year (“RY”) (0.5
RY per GTLD for both legal and IT staff) for legal compliance and oversight for the
gTLD. In addition, MSDRH can rely upon existing in-house legal and other support staff
should the need arise. MSDRH has strategically chosen Verisign as its registry
services provider because of their excellent track record in operating some of the
world’s most complex and critical top level domains. Verisign’s support for the
.MERCKMSD gTLD will help ensure its success.

28.2.2 Resource Planning Specific to Back-end Registry Activities

Verisign, MSDRH’s selected back-end registry services provider, is an experienced
back-end registry provider that has developed a set of proprietary resourcing models to
project the number and type of personnel resources necessary to operate a gTLD.
Verisign routinely adjusts these staffing models to account for new tools and process
innovations. These models enable Verisign to continually right-size its staff to
accommodate projected demand and meet service level agreements as well as Internet
security and stability requirements. Using the projected usage volume for the most
likely scenario (defined in Question 46, Template 1 – Financial Projections: Most
Likely) as an input to its staffing models, Verisign derived the necessary personnel
levels required for this gTLD’s initial implementation and ongoing maintenance.
Verisign’s pricing for the back-end registry services it provides to MSDRH fully
accounts for cost related to this infrastructure, which is provided as “Total Critical
Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46
financial projections response.
Verisign employs more than 1,040 individuals of which more than 775 comprise its
technical work force. (Current statistics are publicly available in Verisign’s
quarterly filings.) Drawing from this pool of on-hand and fully committed technical
resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings. Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support abuse prevention and mitigation:

- Application Engineers: 19
- Business Continuity Personnel: 3
- Customer Affairs Organization: 9
- Customer Support Personnel: 36
- Information Security Engineers: 11
- Network Administrators: 11
- Network Architects: 4
- Network Operations Center (NOC) Engineers: 33
- Project Managers: 25
- Quality Assurance Engineers: 11
- Systems Architects: 9

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSDRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

28.3.2 Ongoing Anti-Abuse Policies and Procedures

28.3.2.1 Policies and Procedures that Identify Malicious or Abusive Behavior

Verisign, MSDRH’s selected back-end registry services provider, provides the following service to MSDRH for incorporation into its full-service registry operations.

Malware scanning service. Registrants are often unknowing victims of malware exploits. Verisign has developed proprietary code to help identify malware in the zones it manages, which in turn helps registrars by identifying malicious code hidden in their domain names.

Verisign’s malware scanning service helps prevent websites from infecting other websites by scanning web pages for embedded malicious content that will infect visitors’ websites. Verisign’s malware scanning technology uses a combination of in-depth malware behavioral analysis, anti-virus results, detailed malware patterns, and network analysis to discover known exploits for the particular scanned zone. If malware is detected, the service sends the registrar a report that contains the number of malicious domains found and details about malicious content within its TLD zones. Reports with remediation instructions are provided to help registrars and registrants eliminate the identified malware from the registrant’s website.

28.3.2.2 Policies and Procedures that Address the Abusive Use of Registered Names

Suspension processes: Any registrant which ceases to have a qualified ongoing legal relationship with MSDRH will immediately have their domain name suspended and/or cancelled. In addition, any registrant that fails to timely respond to a WHOIS accuracy complaint is subject to having their domain name suspended and/or cancelled. Prior to taking any affirmation action in connection with an WHOIS accuracy compliant, MSDRH will attempt to contact registrant through various electronic means (email, telephone...
Suspension processes conducted by back-end registry services provider: In the case of domain name abuse, MSDRH will determine whether to take down the subject domain name. Verisign, MSDRH’s selected back-end registry services provider, will follow the following auditable processes to comply with the suspension request.

Verisign Suspension Notification: MSDRH submits the suspension request to Verisign for processing, documented by:
- Threat domain name
- Registry incident number
- Incident narrative, threat analytics, screen shots to depict abuse, and/or other evidence
- Threat classification
- Threat urgency description
- Recommended timeframe for suspension/takedown
- Technical details (e.g., WHOIS records, IP addresses, hash values, anti-virus detection results/ nomenclature, name servers, domain name statuses that are relevant to the suspension)
- Incident response, including surge capacity

Verisign Notification Verification: When Verisign receives a suspension request from MSDRH, it performs the following verification procedures:
- Validate that all the required data appears in the notification.
- Validate that the request for suspension is for a registered domain name.
- Return a case number for tracking purposes.

Suspension Rejection: If required data is missing from the suspension request, or the domain name is not registered, the request will be rejected and returned to MSDRH with the following information:
- Threat domain name
- Registry incident number
- Verisign case number
- Error reason

Upon MSDRH request, Verisign can provide a process for registrants to protest the suspension.

Domain Suspension: Verisign places the domain to be suspended on the following statuses:
- serverUpdateProhibited
- serverDeleteProhibited
- serverTransferProhibited
- serverHold

Suspension Acknowledgement: Verisign notifies MSDRH that the suspension has been completed. Acknowledgement of the suspension includes the following information:
- Threat domain name
- Registry incident number
- Verisign case number
- Case number
- Domain name
- MSDRH abuse contact name and number, or registrar abuse contact name and number
- Suspension status

28.4 When executed in accordance with the Registry Agreement, plans will result in compliance with contractual requirements

As noted in the Question 18 business plan, the purpose of this gTLD registry is to provide MSDRH with a secure and trusted namespace that is the representation of its brand online. MSDRH intends to fully comply with the contractual requirements of the Registrant Agreement. Moreover, MSDRH has a vested interest to ensure that all qualified subsidiaries, affiliates, and potentially partners, licensees and other related third parties adhere to these legal requirements.

As noted, in the above referenced compliance section, failure for registrants to timely remedy any non-compliant activity will result in the suspension and/or deletion of the domain in question.
28.5 Technical plan scope/scale that is consistent with the overall business approach and planned size of the registry

28.5.1 Scope/Scale Consistency

As a branded gTLD Registry, the allocated registry staff will ensure that all registrations are in compliance with the requirements set forth in the Registrant Agreement. As this staff member(s) is proposed to be sourced from MSDRH’s legal department, this will facilitate compliance of affiliates, subsidiaries, licensees, Merck foundations and related parties with whom Merck has a pre-existing legal relationship. Unlike other registries that must oversee numerous registrars and untold number of registrants, the MERCKMSD gTLD will be a limited-universe of known entities with a pre-existing relationship with the Merck that will likely be registered through one registrar.

28.5.2 Scope/Scale Consistency Specific to Back-End Registry Activities

Verisign, MSDRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies. Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the MERCKMSD gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MSDRH fully accounts for cost related to this infrastructure, which is provided as “Other Operating Cost” (Template 1, Line I.L) within the Question 46 financial projections response.

29. Rights Protection Mechanisms

VeriSign, Inc. Response to Question 29 Rights Protection Mechanisms

29.1 Mechanisms Designed to Prevent Abusive Registrations

Rights protection is a core objective of MSD Registry Holdings, Inc. (“MSDRH”). MSDRH will implement and adhere to any rights protection mechanisms (RPMs) that may be mandated from time to time by ICANN, including each mandatory RPM set forth in the Trademark Clearinghouse model contained in the Registry Agreement, specifically Specification 7. MSDRH acknowledges that, at a minimum, ICANN requires a Sunrise period, a Trademark Claims period, and interaction with the Trademark Clearinghouse with respect to the registration of domain names for the MERCKMSD gTLD. It should be noted that because ICANN, as of the time of this application submission, has not issued final guidance with respect to the Trademark Clearinghouse, MSDRH cannot fully detail the specific implementation of the Trademark Clearinghouse within this application. MSDRH will adhere to all processes and procedures to comply with ICANN guidance once this guidance is finalized.

As described in this response, MSDRH will implement a Sunrise period and Trademark Claims service with respect to the registration of domain names within the MERCKMSD gTLD. Certain aspects of the Sunrise period and/or Trademark Claims service may be administered on behalf of MSDRH by MSDRH-approved registrars or by subcontractors of MSDRH, such as its selected back-end registry services provider, Verisign.

At the time of filing, ICANN has not yet released final details on the Trademark Clearinghouse service. However, the protection of intellectual property is of paramount importance to MSDRH. Given this and the fact that the initial proposed use of the
registry is for the exclusive use of Merck Sharp and Dohme Corp ("MSD"), all initial domain name registrations in the .MERCKMSD namespace will be made by MSD. Therefore, while MSDRH will implement a Sunrise period and Trademark Claims process, depending upon the cost to access the Trademark Clearinghouse, MSDRH may elect to forego the minimum one-month Sunrise period and register names in the gTLD following this mandatory period.

Sunrise Period: As provided by the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook, the Sunrise service pre-registration procedure for domain names continues for at least 30 days prior to the launch of the general registration of domain names in the gTLD (unless MSDRH decides to offer a longer Sunrise period).

During the Sunrise period, holders of marks that have been previously validated by the Trademark Clearinghouse receive notice of domain names that are an identical match (as defined in the ICANN Applicant Guidebook) to their mark(s). Such notice is in accordance with ICANN’s requirements and is provided by MSDRH either directly or through MSDRH-approved registrars.

MSDRH requires all registrants, either directly or through MSDRH-approved registrars, to i) affirm that said registrants meet the Sunrise Eligibility Requirements (SER), and ii) submit to the Sunrise Dispute Resolution Policy (SDRP) consistent with Section 6 of the Trademark Clearinghouse model. At a minimum MSDRH recognizes and honors all word marks for which a proof of use was submitted and validated by the Trademark Clearinghouse as well as any additional eligibility requirements as specified in Question 18.

During the Sunrise period, MSDRH and/or MSDRH-approved registrars, as applicable, are responsible for determining whether each domain name is eligible to be registered (including in accordance with the SERs).

Trademark Claims Service: As provided by the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook, all new gTLDs will have to provide a Trademark Claims service for a minimum of 60 days after the launch of the general registration of domain names in the gTLD (Trademark Claims period).

During the Trademark Claims period, in accordance with ICANN’s requirements, MSDRH or the MSDRH-approved registrar will send a Trademark Claims Notice to any prospective registrant of a domain name that is an identical match (as defined in the ICANN Applicant Guidebook) to any mark that is validated in the Trademark Clearinghouse. The Trademark Claims Notice will include links to the Trademark Claims as listed in the Trademark Clearinghouse and will be provided at no cost.

Prior to registration of said domain name, MSDRH or the MSDRH-approved registrar will require each prospective registrant to provide the warranties dictated in the Trademark Clearinghouse model set forth in the ICANN Applicant Guidebook. Those warranties will include receipt and understanding of the Trademark Claims Notice and confirmation that registration and use of said domain name will not infringe on the trademark rights of the mark holders listed. Without receipt of said warranties, the MSDRH or the MSDRH-approved registrar will not process the domain name registration.

Following the registration of a domain name, the MSDRH-approved registrar will provide a notice of domain name registration to the holders of marks that have been previously validated by the Trademark Clearinghouse and are an identical match. This notice will be as dictated by ICANN. At a minimum MSDRH will recognize and honor all word marks validated by the Trademark Clearinghouse.

29.2 Mechanisms Designed to Identify and address the abusive use of registered names on an ongoing basis

In addition to the Sunrise and Trademark Claims services described in Section 1 of this response, MSDRH implements and adheres to RPMs post-launch as mandated by ICANN, and confirms that registrars accredited for the .MERCKMSD gTLD are in compliance with these mechanisms. Certain aspects of these post-launch RPMs may be administered on behalf of MSDRH by MSDRH-approved registrars or by subcontractors of MSDRH, such as its selected
back-end registry services provider, Verisign.

These post-launch RPMs include the established Uniform Domain-Name Dispute-Resolution Policy (UDRP), as well as the newer Uniform Rapid Suspension System (URS) and Trademark Post-Delegation Dispute Resolution Procedure (PDDRP). Where applicable, MSDRH will implement all determinations and decisions issued under the corresponding RPM.

After a domain name is registered, trademark holders can object to the registration through the UDRP or URS. Objections to the operation of the gTLD can be made through the PDDRP.

The following descriptions provide implementation details of each post-launch RPM for the .MERCKMSD gTLD:

- **UDRP**: The UDRP provides a mechanism for complainants to object to domain name registrations. The complainant files its objection with a UDRP provider and the domain name registrant has an opportunity to respond. The UDRP provider makes a decision based on the papers filed. If the complainant is successful, ownership of the domain name registration is transferred to the complainant. If the complainant is not successful, ownership of the domain name remains with the domain name registrant. MSDRH and entities operating on its behalf adhere to all decisions rendered by UDRP providers.

- **URS**: As provided in the Applicant Guidebook, all registries are required to implement the URS. Similar to the UDRP, a complainant files its objection with a URS provider. The URS provider conducts an administrative review for compliance with filing requirements. If the complaint passes review, the URS provider notifies the registry operator and locks the domain. A lock means that the registry restricts all changes to the registration data, but the name will continue to resolve. After the domain is locked, the complaint is served to the domain name registrant, who has an opportunity to respond. If the complainant is successful, the registry operator is informed and the domain name is suspended for the balance of the registration period; the domain name will not resolve to the original website, but to an informational web page provided by the URS provider. If the complainant is not successful, the URS is terminated and full control of the domain name registration is returned to the domain name registrant.

- **PDDRP**: As provided in the Applicant Guidebook, all registries are required to implement the PDDRP. The PDDRP provides a mechanism for a complainant to object to the registry operator’s manner of operation or use of the gTLD. The complainant files its objection with a PDDRP provider, who performs a threshold review. The registry operator has the opportunity to respond and the provider issues its determination based on the papers filed, although there may be opportunity for further discovery and a hearing.

MSDRH participates in the PDDRP process as specified in the Applicant Guidebook.

Additional Measures Specific to Rights Protection: MSDRH provides additional measures against potentially abusive registrations. These measures help mitigate phishing, pharming, and other Internet security threats. The measures exceed the minimum requirements for RPMs defined by Specification 7 of the Registry Agreement and are available at the time of registration. These measures include:

- **Rapid Takedown or Suspension Based on Court Orders**: MSDRH complies promptly with any order from a court of competent jurisdiction that directs it to take any action on a domain name that is within its technical capabilities as a gTLD registry. These orders may be issued when abusive content, such as child pornography, counterfeit goods, or illegal pharmaceuticals, is associated with the domain name.

- **Anti-Abuse Process**: MSDRH implements an anti-abuse process that is executed based on the type of domain name takedown requested. The anti-abuse process is for malicious exploitation of the DNS infrastructure, such as phishing, botnets, and malware.

- **Authentication Procedures**: Verisign, MSDRH’s selected back-end registry services provider, uses two-factor authentication to augment security protocols for telephone, email, and chat communications.

- **Eligibility Requirements**: As discussed above, the initial proposed use of the registry is for the exclusive use of MSD. Thus, all initial domain name registrations in the .MERCKMSD namespace will be made by MSD. This is expected to significantly reduce and/or eliminate the chance of any abusive registrations.
29.3 Resourcing Plans

29.3.1 Resource Planning

MSDRH has included in its business plan staffing sufficient to implement and oversee the aforementioned Rights Protection Mechanism procedures. As previously noted in the application, this staffing resource will most likely be sourced from within MSDRH’s legal department. Should additional subject matter expertise be required, MSDRH may engage the services of outside specialists on an as-needed basis.

29.3.2 Resource Planning Specific to Back-End Registry Activities

Verisign, MSDRH’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for the .MERCKMSD gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MSDRH fully accounts for cost related to this infrastructure, which is provided as Line IIb.G, Total Critical Registry Function Cash Outflows, within the Question 46 financial projections response of this application.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel roles, which are described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support the implementation of RPMs:
- Customer Affairs Organization: 9
- Customer Support Personnel: 36
- Information Security Engineers: 11

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSDRH’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed .MERCKMSD gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes start-up learning curves and helps ensure that new staff members properly execute their duties.

30(a). Security Policy: Summary of the security policy for the proposed
Q.30A - Security Policy

30A.1 Detailed description of processes and solutions deployed to manage logical security across infrastructure and systems, monitoring and detecting threats and security vulnerabilities and taking appropriate steps to resolve them

MSD Registry Holdings, Inc.’s selected back-end registry services provider’s Verisign, Inc. (“Verisign”)’s comprehensive security policy has evolved over the years as part of managing some of the world’s most critical TLDs. Verisign’s Information Security Policy is the primary guideline that sets the baseline for all other policies, procedures, and standards that Verisign follows. This security policy addresses all of the critical components for the management of back-end registry services, including architecture, engineering, and operations.

Verisign’s general security policies and standards with respect to these areas are provided as follows:

Architecture
- Information Security Architecture Standard: This standard establishes the Verisign standard for application and network architecture. The document explains the methods for segmenting application tiers, using authentication mechanisms, and implementing application functions.
- Information Security Secure Linux Standard: This standard establishes the information security requirements for all systems that run Linux throughout the Verisign organization.
- Information Security Secure Oracle Standard: This standard establishes the information security requirements for all systems that run Oracle throughout the Verisign organization.
- Information Security Remote Access Standard: This standard establishes the information security requirements for remote access to terminal services throughout the Verisign organization.
- Information Security SSH Standard: This standard establishes the information security requirements for the application of Secure Shell (SSH) on all systems throughout the Verisign organization.

Engineering
- Secure SSL/TLS Configuration Standard: This standard establishes the information security requirements for the configuration of Secure Sockets Layer/Transport Layer Security (SSL/TLS) for all systems throughout the Verisign organization.
- Information Security C++ Standards: These standards explain how to use and implement the functions and application programming interfaces (APIs) within C++. The document also describes how to perform logging, authentication, and database connectivity.
- Information Security Java Standards: These standards explain how to use and implement the functions and APIs within Java. The document also describes how to perform logging, authentication, and database connectivity.

Operations
- Information Security DNS Standard: This standard establishes the information security requirements for all systems that run DNS systems throughout the Verisign organization.
- Information Security Cryptographic Key Management Standard: This standard provides detailed information on both technology and processes for the use of encryption on Verisign information security systems.
- Secure Apache Standard: Verisign has a multitude of Apache web servers, which are used in both production and development environments on the Verisign intranet and on the Internet. They provide a centralized, dynamic, and extensible interface to various other systems that deliver information to the end user. Because of their exposure and the confidential nature of the data that these systems host, adequate security measures must be in place. The Secure Apache Standard establishes the information security requirements for all systems that run Apache web servers throughout the Verisign organization.
- Secure Sendmail Standard: Verisign uses sendmail servers in both the production and development environments on the Verisign intranet and on the Internet. Sendmail allows
users to communicate with one another via email. The Secure Sendmail Standard establishes the information security requirements for all systems that run sendmail servers throughout the Verisign organization.

- Secure Logging Standard: This standard establishes the information security logging requirements for all systems and applications throughout the Verisign organization. Where specific standards documents have been created for operating systems or applications, the logging standards have been detailed. This document covers all technologies.
- Patch Management Standard: This standard establishes the information security patch and upgrade management requirements for all systems and applications throughout Verisign.

General
- Secure Password Standard: Because passwords are the most popular and, in many cases, the sole mechanism for authenticating a user to a system, great care must be taken to help ensure that passwords are "strong" and secure. The Secure Password Standard details requirements for the use and implementation of passwords.
- Secure Anti-Virus Standard: Verisign must be protected continuously from computer viruses and other forms of malicious code. These threats can cause significant damage to the overall operation and security of the Verisign network. The Secure Anti-Virus Standard describes the requirements for minimizing the occurrence and impact of these incidents.

Security processes and solutions for the .MERCKMSD gTLD are based on the standards defined above, each of which is derived from Verisign’s experience and industry best practice. These standards comprise the framework for the overall security solution and applicable processes implemented across all products under Verisign’s management. The security solution and applicable processes include, but are not limited to:
- System and network access control (e.g., monitoring, logging, and backup)
- Independent assessment and periodic independent assessment reports
- Denial of service (DoS) and distributed denial of service (DDoS) attack mitigation
- Computer and network incident response policies, plans, and processes
- Minimization of risk of unauthorized access to systems or tampering with registry data
- Intrusion detection mechanisms, threat analysis, defenses, and updates
- Auditing of network access
- Physical security

Further details of these processes and solutions are provided in Part B of this response.

30A.1.1 Security Policy and Procedures for the Proposed Registry

Specific security policy related details, requested as the bulleted items of Question 30 – Part A, are provided here.

Independent Assessment and Periodic Independent Assessment Reports.
To help ensure effective security controls are in place, MSD Registry Holdings, Inc., through its selected back-end registry services provider, Verisign, conducts a yearly American Institute of Certified Public Accountants (AICPA) and Canadian Institute of Chartered Accountants (CICA) SAS 70 audit on all of its data centers, hosted systems, and applications. During these SAS 70 audits, security controls at the operational, technical, and human level are rigorously tested. These audits are conducted by a certified and accredited third party and help ensure that Verisign’s in-place environments meet the security criteria specified in Verisign’s customer contractual agreements and are in accordance with commercially accepted security controls and practices. Verisign also performs numerous audits throughout the year to verify its security processes and activities. These audits cover many different environments and technologies and validate Verisign’s capability to protect its registry and DNS resolution environments. Figure 30A-1 lists a subset of the audits that Verisign conducts. For each audit program or certification listed in Figure 30A-1, Verisign has included, as attachments to the Part B component of this response, copies of the assessment reports conducted by the listed third-party auditor. From Verisign’s experience operating registries, it has determined that together these audit programs and certifications provide a reliable means to ensure effective security controls are in place and that these controls are sufficient to meet ICANN security requirements and
therefore are commensurate with the guidelines defined by ISO 27001.

(See: Figure 30A-1: Verisign Independent Assessment Activities)

Augmented Security Levels or Capabilities: See Section 5 of this response.

Commitments Made to Registrants Concerning Security Levels: See Section 4 of this response.

30A.2 Security capabilities are consistent with the overall business approach and planned size of the registry

MSD Registry Holdings, Inc. does not foresee the need for any enhanced security mechanisms beyond those currently provided by Verisign based upon the following factors; existing MSD Registry Holdings, Inc. IT security protocols; the restrictive nature of the .MERCKMSD registrant universe; validation procedures that MSD Registry Holdings, Inc. will be undertaking prior to allocating names in the gTLD; security features imposed at the registrar level; and, the limited number of registrars (likely a single registrar) that will be connecting to the registry.

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed and uses proprietary system scaling models to guide the growth of its TLD supporting infrastructure. These models direct Verisign’s infrastructure scaling to include, but not be limited to, server capacity, data storage volume, and network throughput that are aligned to projected demand and usage patterns. Verisign periodically updates these models to account for the adoption of more capable and cost-effective technologies.

Verisign’s scaling models are proven predictors of needed capacity and related cost. As such, they provide the means to link the projected infrastructure needs of the .MERCKMSD gTLD with necessary implementation and sustainment cost. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its scaling models, Verisign derived the necessary infrastructure required to implement and sustain this gTLD. Verisign’s pricing for the back-end registry services it provides to MSD Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

30A.3 Technical plan adequately resourced in the planned costs detailed in the financial section

30A.3.1 Resource Planning

It is anticipated that MSD Registry Holdings, Inc.’s existing IT personnel will provide security support services, as necessary, to operate the .MERCKMSD registry. In addition, MSD Registry Holdings, Inc. will engage the services of subject matter experts to provide consulting services on any DNS-specific matters that may be outside the skill set of its internal IT staff.

30A.3.2 Resource Planning Specific to Back-End Registry Activities

Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, is an experienced back-end registry provider that has developed a set of proprietary resourcing models to project the number and type of personnel resources necessary to operate a gTLD. Verisign routinely adjusts these staffing models to account for new tools and process innovations. These models enable Verisign to continually right-size its staff to accommodate projected demand and meet service level agreements as well as Internet security and stability requirements. Using the projected usage volume for the most likely scenario (defined in Question 46, Template 1 – Financial Projections: Most Likely) as an input to its staffing models, Verisign derived the necessary personnel levels required for this gTLD’s initial implementation and ongoing maintenance. Verisign’s pricing for the back-end registry services it provides to MSD Registry Holdings, Inc. fully accounts for cost related to this infrastructure, which is
provided as “Total Critical Registry Function Cash Outflows” (Template 1, Line IIb.G) within the Question 46 financial projections response.

Verisign employs more than 1,040 individuals of which more than 775 comprise its technical work force. (Current statistics are publicly available in Verisign’s quarterly filings.) Drawing from this pool of on-hand and fully committed technical resources, Verisign has maintained DNS operational accuracy and stability 100 percent of the time for more than 13 years for .COM, proving Verisign’s ability to align personnel resource growth to the scale increases of Verisign’s TLD service offerings.

Verisign projects it will use the following personnel role, which is described in Section 5 of the response to Question 31, Technical Overview of Proposed Registry, to support its security policy:

Information Security Engineers: 11

To implement and manage the .MERCKMSD gTLD as described in this application, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, scales, as needed, the size of each technical area now supporting its portfolio of TLDs. Consistent with its resource modeling, Verisign periodically reviews the level of work to be performed and adjusts staff levels for each technical area.

When usage projections indicate a need for additional staff, Verisign’s internal staffing group uses an in-place staffing process to identify qualified candidates. These candidates are then interviewed by the lead of the relevant technical area. By scaling one common team across all its TLDs instead of creating a new entity to manage only this proposed gTLD, Verisign realizes significant economies of scale and ensures its TLD best practices are followed consistently. This consistent application of best practices helps ensure the security and stability of both the Internet and this proposed gTLD, as Verisign holds all contributing staff members accountable to the same procedures that guide its execution of the Internet’s largest TLDs (i.e., .COM and .NET). Moreover, by augmenting existing teams, Verisign affords new employees the opportunity to be mentored by existing senior staff. This mentoring minimizes startup learning curves and helps ensure that new staff members properly execute their duties.

30A.4 Security measures are consistent with any commitments made to registrants regarding security levels

Verisign is MSD Registry Holdings, Inc.’s selected back-end registry services provider. For the .MERCKMSD gTLD, no unique security measures or commitments must be made by Verisign or MSD Registry Holdings, Inc. to any registrant.

30A.5 Security measures are appropriate for the applied-for gTLD string

No unique security measures are necessary to implement the .MERCKMSD gTLD. As defined in Section 1 of this response, Verisign, MSD Registry Holdings, Inc.’s selected back-end registry services provider, commits to providing back-end registry services in accordance with the following international and relevant security standards:

- American Institute of Certified Public Accountants (AICPA) and Canadian Institute of Chartered Accountants (CICA) SAS 70
- WebTrust⁄SysTrust for Certification Authorities (CA)

MSD Registry Holdings, Inc. does not foresee the need for any enhanced security mechanisms beyond those currently provided by Verisign based upon the following factors; existing MSD Registry Holdings, Inc. IT security protocols; the restrictive nature of the .MERCKMSD registrant universe; validation procedures that MSD Registry Holdings, Inc. will be undertaking prior to allocating names in the gTLD; security features imposed at the registrar level; and, the limited number of registrars (likely a single registrar) that will be connecting to the registry.
ANNEX 15
ARTICLES OF INCORPORATION
OF INTERNET CORPORATION
FOR ASSIGNED NAMES AND
NUMBERS

As Revised November 21, 1998

1. The name of this corporation is Internet Corporation for Assigned Names and Numbers (the "Corporation").

2. The name of the Corporation's initial agent for service of process in the State of California, United States of America is C T Corporation System.

3. This Corporation is a nonprofit public benefit corporation and is not organized for the private gain of any person. It is organized under the California Nonprofit Public Benefit Corporation Law for charitable and public purposes. The Corporation is organized, and will be operated, exclusively for charitable, educational, and scientific purposes within the meaning of § 501 (c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"), or the corresponding provision of any future United States tax code. Any reference in these Articles to the Code shall include the corresponding provisions of any further United States tax code. In furtherance of the foregoing purposes, and in recognition of the fact that the Internet is an international network of networks, owned by no single nation, individual or organization, the Corporation shall, except as limited by Article 5 hereof, pursue the charitable and public purposes of lessening the burdens of government and promoting the global public interest in the operational stability of the Internet by (i) coordinating the assignment of Internet technical parameters as needed to maintain universal connectivity on the Internet; (ii) performing and overseeing functions related to the coordination of the Internet Protocol ("IP") address space; (iii) performing and overseeing functions related to the coordination of the Internet domain name system ("DNS"), including the development of policies for determining the circumstances under which new top-level domains are added to the DNS root system; (iv) overseeing operation of the authoritative Internet DNS root
server system; and (v) engaging in any other related lawful activity in furtherance of items (i) through (iv).

4. The Corporation shall operate for the benefit of the Internet community as a whole, carrying out its activities in conformity with relevant principles of international law and applicable international conventions and local law and, to the extent appropriate and consistent with these Articles and its Bylaws, through open and transparent processes that enable competition and open entry in Internet-related markets. To this effect, the Corporation shall cooperate as appropriate with relevant international organizations.

5. Notwithstanding any other provision (other than Article 8) of these Articles:

   a. The Corporation shall not carry on any other activities not permitted to be carried on (i) by a corporation exempt from United States income tax under § 501 (c)(3) of the Code or (ii) by a corporation, contributions to which are deductible under § 170 (c)(2) of the Code.

   b. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Corporation shall be empowered to make the election under § 501 (h) of the Code.

   c. The Corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office.

   d. No part of the net earnings of the Corporation shall inure to the benefit of or be distributable to its members, directors, trustees, officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article 3 hereof.

   e. In no event shall the Corporation be controlled directly or indirectly by one or more "disqualified persons" (as
defined in § 4946 of the Code) other than foundation managers and other than one or more organizations described in paragraph (1) or (2) of § 509 (a) of the Code.

6. To the full extent permitted by the California Nonprofit Public Benefit Corporation Law or any other applicable laws presently or hereafter in effect, no director of the Corporation shall be personally liable to the Corporation or its members, should the Corporation elect to have members in the future, for or with respect to any acts or omissions in the performance of his or her duties as a director of the Corporation. Any repeal or modification of this Article 6 shall not adversely affect any right or protection of a director of the Corporation existing immediately prior to such repeal or modification.

7. Upon the dissolution of the Corporation, the Corporation's assets shall be distributed for one or more of the exempt purposes set forth in Article 3 hereof and, if possible, to a § 501 (c)(3) organization organized and operated exclusively to lessen the burdens of government and promote the global public interest in the operational stability of the Internet, or shall be distributed to a governmental entity for such purposes, or for such other charitable and public purposes that lessen the burdens of government by providing for the operational stability of the Internet. Any assets not so disposed of shall be disposed of by a court of competent jurisdiction of the county in which the principal office of the Corporation is then located, exclusively for such purposes or to such organization or organizations, as such court shall determine, that are organized and operated exclusively for such purposes, unless no such corporation exists, and in such case any assets not disposed of shall be distributed to a § 501(c)(3) corporation chosen by such court.

8. Notwithstanding anything to the contrary in these Articles, if the Corporation determines that it will not be treated as a corporation exempt from federal income tax under § 501(c)(3) of the Code, all references herein to § 501(c)(3) of the Code shall be deemed to refer to § 501(c) (6) of the Code and Article 5(a)(ii), (b), (c) and (e) shall be deemed not to be a part of these Articles.
9. These Articles may be amended by the affirmative vote of at least two-thirds of the directors of the Corporation. When the Corporation has members, any such amendment must be ratified by a two-thirds (2/3) majority of the members voting on any proposed amendment.
ANNEX 16
ARTICLE I: MISSION AND CORE VALUES

Section 1. MISSION

The mission of The Internet Corporation for Assigned Names and Numbers ("ICANN") is to coordinate, at the overall level, the global Internet's systems of unique identifiers, and in particular to ensure the stable and secure operation of the Internet's unique identifier systems. In particular, ICANN:
1. Coordinates the allocation and assignment of the three sets of unique identifiers for the Internet, which are
   
a. Domain names (forming a system referred to as "DNS");

b. Internet protocol ("IP") addresses and autonomous system ("AS") numbers; and

c. Protocol port and parameter numbers.

2. Coordinates the operation and evolution of the DNS root name server system.

3. Coordinates policy development reasonably and appropriately related to these technical functions.

Section 2. CORE VALUES

In performing its mission, the following core values should guide the decisions and actions of ICANN:

1. Preserving and enhancing the operational stability, reliability, security, and global interoperability of the Internet.

2. Respecting the creativity, innovation, and flow of information made possible by the Internet by limiting ICANN's activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination.

3. To the extent feasible and appropriate, delegating coordination functions to or recognizing the policy role of other responsible entities that reflect the interests of affected parties.

4. Seeking and supporting broad, informed participation reflecting the functional, geographic, and cultural diversity of the Internet at all levels of policy development and decision-making.

5. Where feasible and appropriate, depending on market mechanisms to promote and sustain a competitive environment.

6. Introducing and promoting competition in the registration of domain names where practicable and beneficial in the public interest.

7. Employing open and transparent policy development mechanisms that (i) promote well-informed decisions based
on expert advice, and (ii) ensure that those entities most affected can assist in the policy development process.

8. Making decisions by applying documented policies neutrally and objectively, with integrity and fairness.

9. Acting with a speed that is responsive to the needs of the Internet while, as part of the decision-making process, obtaining informed input from those entities most affected.

10. Remaining accountable to the Internet community through mechanisms that enhance ICANN's effectiveness.

11. While remaining rooted in the private sector, recognizing that governments and public authorities are responsible for public policy and duly taking into account governments' or public authorities' recommendations.

These core values are deliberately expressed in very general terms, so that they may provide useful and relevant guidance in the broadest possible range of circumstances. Because they are not narrowly prescriptive, the specific way in which they apply, individually and collectively, to each new situation will necessarily depend on many factors that cannot be fully anticipated or enumerated; and because they are statements of principle rather than practice, situations will inevitably arise in which perfect fidelity to all eleven core values simultaneously is not possible. Any ICANN body making a recommendation or decision shall exercise its judgment to determine which core values are most relevant and how they apply to the specific circumstances of the case at hand, and to determine, if necessary, an appropriate and defensible balance among competing values.

ARTICLE II: POWERS

Section 1. GENERAL POWERS

Except as otherwise provided in the Articles of Incorporation or these Bylaws, the powers of ICANN shall be exercised by, and its property controlled and its business and affairs conducted by or under the direction of, the Board. With respect to any matters that would fall within the provisions of Article III, Section 6, the Board may act only by a majority vote of all members of the Board. In all other matters, except as otherwise provided in these Bylaws or by law, the Board may act by majority vote of those present at any annual, regular, or special meeting of the Board. Any references in these Bylaws to a vote of the Board shall mean the vote of only those members present at the meeting where a quorum is present unless otherwise specifically provided in these Bylaws by reference to "all of the members of the Board."

Section 2. RESTRICTIONS
ICANN shall not act as a Domain Name System Registry or Registrar or Internet Protocol Address Registry in competition with entities affected by the policies of ICANN. Nothing in this Section is intended to prevent ICANN from taking whatever steps are necessary to protect the operational stability of the Internet in the event of financial failure of a Registry or Registrar or other emergency.

Section 3. NON-DISCRIMINATORY TREATMENT

ICANN shall not apply its standards, policies, procedures, or practices inequitably or single out any particular party for disparate treatment unless justified by substantial and reasonable cause, such as the promotion of effective competition.

ARTICLE III: TRANSPARENCY

Section 1. PURPOSE

ICANN and its constituent bodies shall operate to the maximum extent feasible in an open and transparent manner and consistent with procedures designed to ensure fairness.

Section 2. WEBSITE

ICANN shall maintain a publicly-accessible Internet World Wide Web site (the “Website”), which may include, among other things, (i) a calendar of scheduled meetings of the Board, Supporting Organizations, and Advisory Committees; (ii) a docket of all pending policy development matters, including their schedule and current status; (iii) specific meeting notices and agendas as described below; (iv) information on ICANN's budget, annual audit, financial contributors and the amount of their contributions, and related matters; (v) information about the availability of accountability mechanisms, including reconsideration, independent review, and Ombudsman activities, as well as information about the outcome of specific requests and complaints invoking these mechanisms; (vi) announcements about ICANN activities of interest to significant segments of the ICANN community; (vii) comments received from the community on policies being developed and other matters; (viii) information about ICANN’s physical meetings and public forums; and (ix) other information of interest to the ICANN community.

Section 3. MANAGER OF PUBLIC PARTICIPATION

There shall be a staff position designated as Manager of Public Participation, or such other title as shall be determined by the President, that shall be responsible, under the direction of the President, for coordinating the various aspects of public participation in ICANN, including the Website and various other means of communicating with and receiving input from the general community of Internet users.
Section 4. MEETING NOTICES AND AGENDAS

At least seven days in advance of each Board meeting (or if not practicable, as far in advance as is practicable), a notice of such meeting and, to the extent known, an agenda for the meeting shall be posted.

Section 5. MINUTES AND PRELIMINARY REPORTS

1. All minutes of meetings of the Board and Supporting Organizations (and any councils thereof) shall be approved promptly by the originating body and provided to the ICANN Secretary for posting on the Website.

2. No later than 11:59 p.m. on the second business days after the conclusion of each meeting (as calculated by local time at the location of ICANN's principal office), any resolutions passed by the Board of Directors at that meeting shall be made publicly available on the Website; provided, however, that any actions relating to personnel or employment matters, legal matters (to the extent the Board determines it is necessary or appropriate to protect the interests of ICANN), matters that ICANN is prohibited by law or contract from disclosing publicly, and other matters that the Board determines, by a three-quarters (3/4) vote of Directors present at the meeting and voting, are not appropriate for public distribution, shall not be included in the preliminary report made publicly available. The Secretary shall send notice to the Board of Directors and the Chairs of the Supporting Organizations (as set forth in Articles VIII - X of these Bylaws) and Advisory Committees (as set forth in Article XI of these Bylaws) informing them that the resolutions have been posted.

3. No later than 11:59 p.m. on the seventh business days after the conclusion of each meeting (as calculated by local time at the location of ICANN's principal office), any actions taken by the Board shall be made publicly available in a preliminary report on the Website, subject to the limitations on disclosure set forth in Section 5.2 above. For any matters that the Board determines not to disclose, the Board shall describe in general terms in the relevant preliminary report the reason for such nondisclosure.

4. No later than the day after the date on which they are formally approved by the Board (or, if such day is not a business day, as calculated by local time at the location of ICANN's principal office, then the next immediately following business day), the minutes shall be made publicly available on the Website; provided, however, that any minutes relating to personnel or employment matters, legal
matters (to the extent the Board determines it is necessary or appropriate to protect the interests of ICANN), matters that ICANN is prohibited by law or contract from disclosing publicly, and other matters that the Board determines, by a three-quarters (3/4) vote of Directors present at the meeting and voting, are not appropriate for public distribution, shall not be included in the minutes made publicly available. For any matters that the Board determines not to disclose, the Board shall describe in general terms in the relevant minutes the reason for such nondisclosure.

Section 6. NOTICE AND COMMENT ON POLICY ACTIONS

1. With respect to any policies that are being considered by the Board for adoption that substantially affect the operation of the Internet or third parties, including the imposition of any fees or charges, ICANN shall:

   a. provide public notice on the Website explaining what policies are being considered for adoption and why, at least twenty-one days (and if practical, earlier) prior to any action by the Board;

   b. provide a reasonable opportunity for parties to comment on the adoption of the proposed policies, to see the comments of others, and to reply to those comments, prior to any action by the Board; and

   c. in those cases where the policy action affects public policy concerns, to request the opinion of the Governmental Advisory Committee and take duly into account any advice timely presented by the Governmental Advisory Committee on its own initiative or at the Board’s request.

2. Where both practically feasible and consistent with the relevant policy development process, an in-person public forum shall also be held for discussion of any proposed policies as described in Section 6(1)(b) of this Article, prior to any final Board action.

3. After taking action on any policy subject to this Section, the Board shall publish in the meeting minutes the reasons for any action taken, the vote of each Director voting on the action, and the separate statement of any Director desiring publication of such a statement.

Section 7. TRANSLATION OF DOCUMENTS
As appropriate and to the extent provided in the ICANN budget, ICANN shall facilitate the translation of final published documents into various appropriate languages.

ARTICLE IV: ACCOUNTABILITY AND REVIEW

Section 1. PURPOSE

In carrying out its mission as set out in these Bylaws, ICANN should be accountable to the community for operating in a manner that is consistent with these Bylaws, and with due regard for the core values set forth in Article I of these Bylaws. The provisions of this Article, creating processes for reconsideration and independent review of ICANN actions and periodic review of ICANN's structure and procedures, are intended to reinforce the various accountability mechanisms otherwise set forth in these Bylaws, including the transparency provisions of Article III and the Board and other selection mechanisms set forth throughout these Bylaws.

Section 2. RECONSIDERATION

1. ICANN shall have in place a process by which any person or entity materially affected by an action of ICANN may request review or reconsideration of that action by the Board.

2. Any person or entity may submit a request for reconsideration or review of an ICANN action or inaction ("Reconsideration Request") to the extent that he, she, or it have been adversely affected by:

   a. one or more staff actions or inactions that contradict established ICANN policy(ies); or
   b. one or more actions or inactions of the ICANN Board that have been taken or refused to be taken without consideration of material information, except where the party submitting the request could have submitted, but did not submit, the information for the Board's consideration at the time of action or refusal to act; or
   c. one or more actions or inactions of the ICANN Board that are taken as a result of the Board's reliance on false or inaccurate material information.

3. The Board has designated the Board Governance Committee to review and consider any such Reconsideration Requests. The Board Governance Committee shall have the authority to:

   a. evaluate requests for review or reconsideration;
b. summarily dismiss insufficient requests;
c. evaluate requests for urgent consideration;
d. conduct whatever factual investigation is deemed appropriate;
e. request additional written submissions from the affected party, or from other parties;
f. make a final determination on Reconsideration Requests regarding staff action or inaction, without reference to the Board of Directors; and
g. make a recommendation to the Board of Directors on the merits of the request, as necessary.

4. ICANN shall absorb the normal administrative costs of the reconsideration process. It reserves the right to recover from a party requesting review or reconsideration any costs that are deemed to be extraordinary in nature. When such extraordinary costs can be foreseen, that fact and the reasons why such costs are necessary and appropriate to evaluating the Reconsideration Request shall be communicated to the party seeking reconsideration, who shall then have the option of withdrawing the request or agreeing to bear such costs.

5. All Reconsideration Requests must be submitted to an e-mail address designated by the Board Governance Committee within fifteen days after:

   a. for requests challenging Board actions, the date on which information about the challenged Board action is first published in a resolution, unless the posting of the resolution is not accompanied by a rationale. In that instance, the request must be submitted within 15 days from the initial posting of the rationale; or
   b. for requests challenging staff actions, the date on which the party submitting the request became aware of, or reasonably should have become aware of, the challenged staff action; or
   c. for requests challenging either Board or staff inaction, the date on which the affected person reasonably concluded, or reasonably should have concluded, that action would not be taken in a timely manner.

6. To properly initiate a Reconsideration process, all requestors must review and follow the Reconsideration Request form posted on the ICANN website.
Requestors must also acknowledge and agree to the terms and conditions set forth in the form when filing.

7. Requestors shall not provide more than 25 pages (double-spaced, 12-point font) of argument in support of a Reconsideration Request. Requestors may submit all documentary evidence necessary to demonstrate why the action or inaction should be reconsidered, without limitation.

8. The Board Governance Committee shall have authority to consider Reconsideration Requests from different parties in the same proceeding so long as: (i) the requests involve the same general action or inaction; and (ii) the parties submitting Reconsideration Requests are similarly affected by such action or inaction. In addition, consolidated filings may be appropriate if the alleged causal connection and the resulting harm is the same for all of the requestors. Every requestor must be able to demonstrate that it has been materially harmed and adversely impacted by the action or inaction giving rise to the request.

9. The Board Governance Committee shall review each Reconsideration Request upon its receipt to determine if it is sufficiently stated. The Board Governance Committee may summarily dismiss a Reconsideration Request if: (i) the requestor fails to meet the requirements for bringing a Reconsideration Request; (ii) it is frivolous, querulous or vexatious; or (iii) the requestor had notice and opportunity to, but did not, participate in the public comment period relating to the contested action, if applicable. The Board Governance Committee's summary dismissal of a Reconsideration Request shall be posted on the Website.

10. For all Reconsideration Requests that are not summarily dismissed, the Board Governance Committee shall promptly proceed to review and consideration.

11. The Board Governance Committee may ask the ICANN staff for its views on the matter, which comments shall be made publicly available on the Website.

12. The Board Governance Committee may request additional information or clarifications from the requestor, and may elect to conduct a meeting with the requestor by telephone, email or, if acceptable to the party requesting reconsideration, in person.
requestor may ask for an opportunity to be heard; the Board Governance Committee’s decision on any such request is final. To the extent any information gathered in such a meeting is relevant to any recommendation by the Board Governance Committee, it shall so state in its recommendation.

13. The Board Governance Committee may also request information relevant to the request from third parties. To the extent any information gathered is relevant to any recommendation by the Board Governance Committee, it shall so state in its recommendation. Any information collected from third parties shall be provided to the requestor.

14. The Board Governance Committee shall act on a Reconsideration Request on the basis of the public written record, including information submitted by the party seeking reconsideration or review, by the ICANN staff, and by any third party.

15. For all Reconsideration Requests brought regarding staff action or inaction, the Board Governance Committee shall be delegated the authority by the Board of Directors to make a final determination and recommendation on the matter. Board consideration of the recommendation is not required. As the Board Governance Committee deems necessary, it may make recommendation to the Board for consideration and action. The Board Governance Committee’s determination on staff action or inaction shall be posted on the Website. The Board Governance Committee’s determination is final and establishes precedential value.

16. The Board Governance Committee shall make a final determination or a recommendation to the Board with respect to a Reconsideration Request within thirty days following its receipt of the request, unless impractical, in which case it shall report to the Board the circumstances that prevented it from making a final recommendation and its best estimate of the time required to produce such a final determination or recommendation. The final recommendation shall be posted on ICANN’s website.

17. The Board shall not be bound to follow the recommendations of the Board Governance Committee. The final decision of the Board shall be made public as part of the preliminary report and minutes of the Board meeting at which action is taken. The Board shall issue its decision on the recommendation of the Board Governance Committee within 60 days of receipt of the
Reconsideration Request or as soon thereafter as feasible. Any circumstances that delay the Board from acting within this timeframe must be identified and posted on ICANN's website. The Board's decision on the recommendation is final.

18. If the requestor believes that the Board action or inaction posed for Reconsideration is so urgent that the timing requirements of the Reconsideration process are too long, the requestor may apply to the Board Governance Committee for urgent consideration. Any request for urgent consideration must be made within two business days (calculated at ICANN's headquarters in Los Angeles, California) of the posting of the resolution at issue. A request for urgent consideration must include a discussion of why the matter is urgent for reconsideration and must demonstrate a likelihood of success with the Reconsideration Request.

19. The Board Governance Committee shall respond to the request for urgent consideration within two business days after receipt of such request. If the Board Governance Committee agrees to consider the matter with urgency, it will cause notice to be provided to the requestor, who will have two business days after notification to complete the Reconsideration Request. The Board Governance Committee shall issue a recommendation on the urgent Reconsideration Request within seven days of the completion of the filing of the Request, or as soon thereafter as feasible. If the Board Governance Committee does not agree to consider the matter with urgency, the requestor may still file a Reconsideration Request within the regular time frame set forth within these Bylaws.

20. The Board Governance Committee shall submit a report to the Board on an annual basis containing at least the following information for the preceding calendar year:

   a. the number and general nature of Reconsideration Requests received, including an identification if the requests were acted upon, summarily dismissed, or remain pending;
   b. for any Reconsideration Requests that remained pending at the end of the calendar year, the average length of time for which such Reconsideration Requests have been pending, and a description of the reasons for
any request pending for more than ninety (90) days;
c. an explanation of any other mechanisms available to ensure that ICANN is accountable to persons materially affected by its decisions; and
d. whether or not, in the Board Governance Committee's view, the criteria for which reconsideration may be requested should be revised, or another process should be adopted or modified, to ensure that all persons materially affected by ICANN decisions have meaningful access to a review process that ensures fairness while limiting frivolous claims.

Section 3. INDEPENDENT REVIEW OF BOARD ACTIONS

1. In addition to the reconsideration process described in Section 2 of this Article, ICANN shall have in place a separate process for independent third-party review of Board actions alleged by an affected party to be inconsistent with the Articles of Incorporation or Bylaws.

2. Any person materially affected by a decision or action by the Board that he or she asserts is inconsistent with the Articles of Incorporation or Bylaws may submit a request for independent review of that decision or action. In order to be materially affected, the person must suffer injury or harm that is directly and causally connected to the Board's alleged violation of the Bylaws or the Articles of Incorporation, and not as a result of third parties acting in line with the Board's action.

3. A request for independent review must be filed within thirty days of the posting of the minutes of the Board meeting (and the accompanying Board Briefing Materials, if available) that the requesting party contends demonstrates that ICANN violated its Bylaws or Articles of Incorporation. Consolidated requests may be appropriate when the causal connection between the circumstances of the requests and the harm is the same for each of the requesting parties.

4. Requests for such independent review shall be referred to an Independent Review Process Panel ("IRP Panel"), which shall be charged with comparing contested actions of the Board to the Articles of Incorporation and Bylaws, and with declaring whether the Board has acted consistently with the provisions of those Articles of Incorporation.
and Bylaws. The IRP Panel must apply a defined standard of review to the IRP request, focusing on:

- did the Board act without conflict of interest in taking its decision?;
- did the Board exercise due diligence and care in having a reasonable amount of facts in front of them?; and
- did the Board members exercise independent judgment in taking the decision, believed to be in the best interests of the company?

5. Requests for independent review shall not exceed 25 pages (double-spaced, 12-point font) of argument. ICANN's response shall not exceed that same length. Parties may submit documentary evidence supporting their positions without limitation. In the event that parties submit expert evidence, such evidence must be provided in writing and there will be a right of reply to the expert evidence.

6. There shall be an omnibus standing panel of between six and nine members with a variety of expertise, including jurisprudence, judicial experience, alternative dispute resolution and knowledge of ICANN's mission and work from which each specific IRP Panel shall be selected. The panelists shall serve for terms that are staggered to allow for continued review of the size of the panel and the range of expertise. A Chair of the standing panel shall be appointed for a term not to exceed three years. Individuals holding an official position or office within the ICANN structure are not eligible to serve on the standing panel. In the event that an omnibus standing panel: (i) is not in place when an IRP Panel must be convened for a given proceeding, the IRP proceeding will be considered by a one- or three-member panel comprised in accordance with the rules of the IRP Provider; or (ii) is in place but does not have the requisite diversity of skill and experience needed for a particular proceeding, the IRP Provider shall identify one or more panelists, as required, from outside the omnibus standing panel to augment the panel members for that proceeding.

7. All IRP proceedings shall be administered by an international dispute resolution provider appointed from time to time by ICANN ("the IRP Provider"). The membership of the standing panel shall be
coordinated by the IRP Provider subject to approval by ICANN.

8. Subject to the approval of the Board, the IRP Provider shall establish operating rules and procedures, which shall implement and be consistent with this Section 3.

9. Either party may request that the IRP be considered by a one- or three-member panel; the Chair of the standing panel shall make the final determination of the size of each IRP panel, taking into account the wishes of the parties and the complexity of the issues presented.

10. The IRP Provider shall determine a procedure for assigning members from the standing panel to individual IRP panels.

11. The IRP Panel shall have the authority to:

   a. summarily dismiss requests brought without standing, lacking in substance, or that are frivolous or vexatious;
   b. request additional written submissions from the party seeking review, the Board, the Supporting Organizations, or from other parties;
   c. declare whether an action or inaction of the Board was inconsistent with the Articles of Incorporation or Bylaws; and
   d. recommend that the Board stay any action or decision, or that the Board take any interim action, until such time as the Board reviews and acts upon the opinion of the IRP;
   e. consolidate requests for independent review if the facts and circumstances are sufficiently similar; and
   f. determine the timing for each proceeding.

12. In order to keep the costs and burdens of independent review as low as possible, the IRP Panel should conduct its proceedings by email and otherwise via the Internet to the maximum extent feasible. Where necessary, the IRP Panel may hold meetings by telephone. In the unlikely event that a telephonic or in-person hearing is convened, the hearing shall be limited to argument only; all evidence, including witness statements, must be submitted in writing in advance.

13. All panel members shall adhere to conflicts-of-interest policy stated in the IRP Provider’s operating rules and procedures, as approved by the Board.

14. Prior to initiating a request for independent review, the complainant is urged to enter into a period of
cooperative engagement with ICANN for the purpose of resolving or narrowing the issues that are contemplated to be brought to the IRP. The cooperative engagement process is published on ICANN.org and is incorporated into this Section 3 of the Bylaws.

15. Upon the filing of a request for an independent review, the parties are urged to participate in a conciliation period for the purpose of narrowing the issues that are stated within the request for independent review. A conciliator will be appointed from the members of the omnibus standing panel by the Chair of that panel. The conciliator shall not be eligible to serve as one of the panelists presiding over that particular IRP. The Chair of the standing panel may deem conciliation unnecessary if cooperative engagement sufficiently narrowed the issues remaining in the independent review.

16. Cooperative engagement and conciliation are both voluntary. However, if the party requesting the independent review does not participate in good faith in the cooperative engagement and the conciliation processes, if applicable, and ICANN is the prevailing party in the request for independent review, the IRP Panel must award to ICANN all reasonable fees and costs incurred by ICANN in the proceeding, including legal fees.

17. All matters discussed during the cooperative engagement and conciliation phases are to remain confidential and not subject to discovery or as evidence for any purpose within the IRP, and are without prejudice to either party.

18. The IRP Panel should strive to issue its written declaration no later than six months after the filing of the request for independent review. The IRP Panel shall make its declaration based solely on the documentation, supporting materials, and arguments submitted by the parties, and in its declaration shall specifically designate the prevailing party. The party not prevailing shall ordinarily be responsible for bearing all costs of the IRP Provider, but in an extraordinary case the IRP Panel may in its declaration allocate up to half of the costs of the IRP Provider to the prevailing party based upon the circumstances, including a consideration of the reasonableness of the parties’ positions and their contribution to the public interest. Each party to the IRP proceedings shall bear its own expenses.
19. The IRP operating procedures, and all petitions, claims, and declarations, shall be posted on ICANN's website when they become available.

20. The IRP Panel may, in its discretion, grant a party's request to keep certain information confidential, such as trade secrets.

21. Where feasible, the Board shall consider the IRP Panel declaration at the Board's next meeting. The declarations of the IRP Panel, and the Board's subsequent action on those declarations, are final and have precedential value.

**Section 4. PERIODIC REVIEW OF ICANN STRUCTURE AND OPERATIONS**

1. The Board shall cause a periodic review of the performance and operation of each Supporting Organization, each Supporting Organization Council, each Advisory Committee (other than the Governmental Advisory Committee), and the Nominating Committee by an entity or entities independent of the organization under review. The goal of the review, to be undertaken pursuant to such criteria and standards as the Board shall direct, shall be to determine (i) whether that organization has a continuing purpose in the ICANN structure, and (ii) if so, whether any change in structure or operations is desirable to improve its effectiveness.

These periodic reviews shall be conducted no less frequently than every five years, based on feasibility as determined by the Board. Each five-year cycle will be computed from the moment of the reception by the Board of the final report of the relevant review Working Group.

The results of such reviews shall be posted on the Website for public review and comment, and shall be considered by the Board no later than the second scheduled meeting of the Board after such results have been posted for 30 days. The consideration by the Board includes the ability to revise the structure or operation of the parts of ICANN being reviewed by a two-thirds vote of all members of the Board.

2. The Governmental Advisory Committee shall provide its own review mechanisms.

**ARTICLE V: OMBUDSMAN**

**Section 1. OFFICE OF OMBUDSMAN**
1. There shall be an Office of Ombudsman, to be managed by an Ombudsman and to include such staff support as the Board determines is appropriate and feasible. The Ombudsman shall be a full-time position, with salary and benefits appropriate to the function, as determined by the Board.

2. The Ombudsman shall be appointed by the Board for an initial term of two years, subject to renewal by the Board.

3. The Ombudsman shall be subject to dismissal by the Board only upon a three-fourths (3/4) vote of the entire Board.

4. The annual budget for the Office of Ombudsman shall be established by the Board as part of the annual ICANN budget process. The Ombudsman shall submit a proposed budget to the President, and the President shall include that budget submission in its entirety and without change in the general ICANN budget recommended by the ICANN President to the Board. Nothing in this Article shall prevent the President from offering separate views on the substance, size, or other features of the Ombudsman's proposed budget to the Board.

Section 2. CHARTER

The charter of the Ombudsman shall be to act as a neutral dispute resolution practitioner for those matters for which the provisions of the Reconsideration Policy set forth in Section 2 of Article IV or the Independent Review Policy set forth in Section 3 of Article IV have not been invoked. The principal function of the Ombudsman shall be to provide an independent internal evaluation of complaints by members of the ICANN community who believe that the ICANN staff, Board or an ICANN constituent body has treated them unfairly. The Ombudsman shall serve as an objective advocate for fairness, and shall seek to evaluate and where possible resolve complaints about unfair or inappropriate treatment by ICANN staff, the Board, or ICANN constituent bodies, clarifying the issues and using conflict resolution tools such as negotiation, facilitation, and “shuttle diplomacy” to achieve these results.

Section 3. OPERATIONS

The Office of Ombudsman shall:

1. facilitate the fair, impartial, and timely resolution of problems and complaints that affected members of the ICANN community (excluding employees and vendors/suppliers of ICANN) may have with specific actions or failures to act by the Board or ICANN staff which
have not otherwise become the subject of either the Reconsideration or Independent Review Policies;

2. exercise discretion to accept or decline to act on a complaint or question, including by the development of procedures to dispose of complaints that are insufficiently concrete, substantive, or related to ICANN's interactions with the community so as to be inappropriate subject matters for the Ombudsman to act on. In addition, and without limiting the foregoing, the Ombudsman shall have no authority to act in any way with respect to internal administrative matters, personnel matters, issues relating to membership on the Board, or issues related to vendor/supplier relations;

3. have the right to have access to (but not to publish if otherwise confidential) all necessary information and records from ICANN staff and constituent bodies to enable an informed evaluation of the complaint and to assist in dispute resolution where feasible (subject only to such confidentiality obligations as are imposed by the complainant or any generally applicable confidentiality policies adopted by ICANN);

4. heighten awareness of the Ombudsman program and functions through routine interaction with the ICANN community and online availability;

5. maintain neutrality and independence, and have no bias or personal stake in an outcome; and

6. comply with all ICANN conflicts-of-interest and confidentiality policies.

Section 4. INTERACTION WITH ICANN AND OUTSIDE ENTITIES

1. No ICANN employee, Board member, or other participant in Supporting Organizations or Advisory Committees shall prevent or impede the Ombudsman's contact with the ICANN community (including employees of ICANN). ICANN employees and Board members shall direct members of the ICANN community who voice problems, concerns, or complaints about ICANN to the Ombudsman, who shall advise complainants about the various options available for review of such problems, concerns, or complaints.

2. ICANN staff and other ICANN participants shall observe and respect determinations made by the Office of Ombudsman concerning confidentiality of any complaints received by that Office.
3. Contact with the Ombudsman shall not constitute notice to ICANN of any particular action or cause of action.

4. The Ombudsman shall be specifically authorized to make such reports to the Board as he or she deems appropriate with respect to any particular matter and its resolution or the inability to resolve it. Absent a determination by the Ombudsman, in his or her sole discretion, that it would be inappropriate, such reports shall be posted on the Website.

5. The Ombudsman shall not take any actions not authorized in these Bylaws, and in particular shall not institute, join, or support in any way any legal actions challenging ICANN structure, procedures, processes, or any conduct by the ICANN Board, staff, or constituent bodies.

Section 5. ANNUAL REPORT

The Office of Ombudsman shall publish on an annual basis a consolidated analysis of the year's complaints and resolutions, appropriately dealing with confidentiality obligations and concerns. Such annual report should include a description of any trends or common elements of complaints received during the period in question, as well as recommendations for steps that could be taken to minimize future complaints. The annual report shall be posted on the Website.

ARTICLE VI: BOARD OF DIRECTORS

Section 1. COMPOSITION OF THE BOARD

The ICANN Board of Directors ("Board") shall consist of sixteen voting members ("Directors"). In addition, five non-voting liaisons ("Liaisons") shall be designated for the purposes set forth in Section 9 of this Article. Only Directors shall be included in determining the existence of quorums, and in establishing the validity of votes taken by the ICANN Board.

Section 2. DIRECTORS AND THEIR SELECTION; ELECTION OF CHAIRMAN AND VICE-CHAIRMAN

1. The Directors shall consist of:

   a. Eight voting members selected by the Nominating Committee established by Article VII of these Bylaws. These seats on the Board of Directors are referred to in these Bylaws as Seats 1 through 8.
b. Two voting members selected by the Address Supporting Organization according to the provisions of Article VIII of these Bylaws. These seats on the Board of Directors are referred to in these Bylaws as Seat 9 and Seat 10.

c. Two voting members selected by the Country-Code Names Supporting Organization according to the provisions of Article IX of these Bylaws. These seats on the Board of Directors are referred to in these Bylaws as Seat 11 and Seat 12.

d. Two voting members selected by the Generic Names Supporting Organization according to the provisions of Article X of these Bylaws. These seats on the Board of Directors are referred to in these Bylaws as Seat 13 and Seat 14.

e. One voting member selected by the At-Large Community according to the provisions of Article XI of these Bylaws. This seat on the Board of Directors is referred to in these Bylaws as Seat 15.

f. The President ex officio, who shall be a voting member.

2. In carrying out its responsibilities to fill Seats 1 through 8, the Nominating Committee shall seek to ensure that the ICANN Board is composed of members who in the aggregate display diversity in geography, culture, skills, experience, and perspective, by applying the criteria set forth in Section 3 of this Article. At no time when it makes its selection shall the Nominating Committee select a Director to fill any vacancy or expired term whose selection would cause the total number of Directors (not including the President) from countries in any one Geographic Region (as defined in Section 5 of this Article) to exceed five; and the Nominating Committee shall ensure when it makes its selections that the Board includes at least one Director who is from a country in each ICANN Geographic Region ("Diversity Calculation").

For purposes of this sub-section 2 of Article VI, Section 2 of the ICANN Bylaws, if any candidate for director maintains citizenship of more than one country, or has been domiciled for more than five years in a country of which the candidate does not maintain citizenship ("Domicile"), that candidate may be deemed to be from either country and
must select in his/her Statement of Interest the country of citizenship or Domicile that he/she wants the Nominating Committee to use for Diversity Calculation purposes. For purposes of this sub-section 2 of Article VI, Section 2 of the ICANN Bylaws, a person can only have one "Domicile," which shall be determined by where the candidate has a permanent residence and place of habitation.

3. In carrying out their responsibilities to fill Seats 9 through 15, the Supporting Organizations and the At-Large Community shall seek to ensure that the ICANN Board is composed of members that in the aggregate display diversity in geography, culture, skills, experience, and perspective, by applying the criteria set forth in Section 3 of this Article. At any given time, no two Directors selected by a Supporting Organization shall be citizens from the same country or of countries located in the same Geographic Region.

For purposes of this sub-section 3 of Article VI, Section 2 of the ICANN Bylaws, if any candidate for director maintains citizenship of more than one country, or has been domiciled for more than five years in a country of which the candidate does not maintain citizenship ("Domicile"), that candidate may be deemed to be from either country and must select in his/her Statement of Interest the country of citizenship or Domicile that he/she wants the Supporting Organization or the At-Large Community to use for selection purposes. For purposes of this sub-section 3 of Article VI, Section 2 of the ICANN Bylaws, a person can only have one "Domicile," which shall be determined by where the candidate has a permanent residence and place of habitation.

4. The Board shall annually elect a Chairman and a Vice-Chairman from among the Directors, not including the President.

Section 3. CRITERIA FOR SELECTION OF DIRECTORS

ICANN Directors shall be:

1. Accomplished persons of integrity, objectivity, and intelligence, with reputations for sound judgment and open minds, and a demonstrated capacity for thoughtful group decision-making;

2. Persons with an understanding of ICANN's mission and the potential impact of ICANN decisions on the global Internet community, and committed to the success of ICANN;
3. Persons who will produce the broadest cultural and geographic diversity on the Board consistent with meeting the other criteria set forth in this Section;

4. Persons who, in the aggregate, have personal familiarity with the operation of gTLD registries and registrars; with ccTLD registries; with IP address registries; with Internet technical standards and protocols; with policy-development procedures, legal traditions, and the public interest; and with the broad range of business, individual, academic, and non-commercial users of the Internet;

5. Persons who are willing to serve as volunteers, without compensation other than the reimbursement of certain expenses; and

6. Persons who are able to work and communicate in written and spoken English.

Section 4. ADDITIONAL QUALIFICATIONS

1. Notwithstanding anything herein to the contrary, no official of a national government or a multinational entity established by treaty or other agreement between national governments may serve as a Director. As used herein, the term "official" means a person (i) who holds an elective governmental office or (ii) who is employed by such government or multinational entity and whose primary function with such government or entity is to develop or influence governmental or public policies.

2. No person who serves in any capacity (including as a liaison) on any Supporting Organization Council shall simultaneously serve as a Director or liaison to the Board. If such a person accepts a nomination to be considered for selection by the Supporting Organization Council or the At-Large Community to be a Director, the person shall not, following such nomination, participate in any discussion of, or vote by, the Supporting Organization Council or the committee designated by the At-Large Community relating to the selection of Directors by the Council or Community, until the Council or committee(s) designated by the At-Large Community has selected the full complement of Directors it is responsible for selecting. In the event that a person serving in any capacity on a Supporting Organization Council accepts a nomination to be considered for selection as a Director, the constituency group or other group or entity that selected the person may select a replacement for purposes of the Council's selection process. In the event that a person serving in any capacity on the At-Large Advisory Committee accepts a nomination to be considered for selection as a Director, the constituency group or other group or entity that selected the person may select a replacement for purposes of the Council's selection process.
to be considered for selection by the At-Large Community as a Director, the Regional At-Large Organization or other group or entity that selected the person may select a replacement for purposes of the Community's selection process.

3. Persons serving in any capacity on the Nominating Committee shall be ineligible for selection to positions on the Board as provided by Article VII, Section 8.

Section 5. INTERNATIONAL REPRESENTATION

In order to ensure broad international representation on the Board, the selection of Directors by the Nominating Committee, each Supporting Organization and the At-Large Community shall comply with all applicable diversity provisions of these Bylaws or of any Memorandum of Understanding referred to in these Bylaws concerning the Supporting Organization. One intent of these diversity provisions is to ensure that at all times each Geographic Region shall have at least one Director, and at all times no region shall have more than five Directors on the Board (not including the President). As used in these Bylaws, each of the following is considered to be a "Geographic Region": Europe; Asia/Australia/Pacific; Latin America/Caribbean islands; Africa; and North America. The specific countries included in each Geographic Region shall be determined by the Board, and this Section shall be reviewed by the Board from time to time (but at least every three years) to determine whether any change is appropriate, taking account of the evolution of the Internet.

Section 6. DIRECTORS' CONFLICTS OF INTEREST

The Board, through the Board Governance Committee, shall require a statement from each Director not less frequently than once a year setting forth all business and other affiliations that relate in any way to the business and other affiliations of ICANN. Each Director shall be responsible for disclosing to ICANN any matter that could reasonably be considered to make such Director an "interested director" within the meaning of Section 5233 of the California Nonprofit Public Benefit Corporation Law ("CNPBCL"). In addition, each Director shall disclose to ICANN any relationship or other factor that could reasonably be considered to cause the Director to be considered to be an "interested person" within the meaning of Section 5227 of the CNPBCL. The Board shall adopt policies specifically addressing Director, Officer, and Supporting Organization conflicts of interest. No Director shall vote on any matter in which he or she has a material and direct financial interest that would be affected by the outcome of the vote.

Section 7. DUTIES OF DIRECTORS

Directors shall serve as individuals who have the duty to act in what they reasonably believe are the best interests of ICANN and not as
representatives of the entity that selected them, their employers, or any other organizations or constituencies.

Section 8. TERMS OF DIRECTORS

1. The regular term of office of Director Seats 1 through 15 shall begin as follows:

   a. The regular terms of Seats 1 through 3 shall begin at the conclusion of ICANN's annual meeting in 2003 and each ICANN annual meeting every third year after 2003;

   b. The regular terms of Seats 4 through 6 shall begin at the conclusion of ICANN's annual meeting in 2004 and each ICANN annual meeting every third year after 2004;

   c. The regular terms of Seats 7 and 8 shall begin at the conclusion of ICANN's annual meeting in 2005 and each ICANN annual meeting every third year after 2005;

   d. The terms of Seats 9 and 12 shall continue until the conclusion of ICANN's annual meeting in 2015. The next terms of Seats 9 and 12 shall begin at the conclusion of ICANN's annual meeting in 2015 and each ICANN annual meeting every third year after 2015;

   e. The terms of Seats 10 and 13 shall continue until the conclusion of ICANN's annual meeting in 2013. The next terms of Seats 10 and 13 shall begin at the conclusion of ICANN's annual meeting in 2013 and each ICANN annual meeting every third year after 2013; and

   f. The terms of Seats 11, 14 and 15 shall continue until the conclusion of ICANN's annual meeting in 2014. The next terms of Seats 11, 14 and 15 shall begin at the conclusion of ICANN's annual meeting in 2014 and each ICANN annual meeting every third year after 2014.

2. Each Director holding any of Seats 1 through 15, including a Director selected to fill a vacancy, shall hold office for a term that lasts until the next term for that Seat commences and until a successor has been selected and qualified or until that Director resigns or is removed in accordance with these Bylaws.
3. At least two months before the commencement of each annual meeting, the Nominating Committee shall give the Secretary of ICANN written notice of its selection of Directors for seats with terms beginning at the conclusion of the annual meeting.

4. At least six months before the date specified for the commencement of the term as specified in paragraphs 1.d-f above, any Supporting Organization or the At-Large community entitled to select a Director for a Seat with a term beginning that year shall give the Secretary of ICANN written notice of its selection.

5. Subject to the provisions of the Transition Article of these Bylaws, no Director may serve more than three consecutive terms. For these purposes, a person selected to fill a vacancy in a term shall not be deemed to have served that term. (Note: In the period prior to the beginning of the first regular term of Seat 15 in 2010, Seat 15 was deemed vacant for the purposes of calculation of terms of service.)

6. The term as Director of the person holding the office of President shall be for as long as, and only for as long as, such person holds the office of President.

Section 9. NON-VOTING LIAISONS

1. The non-voting liaisons shall include:

   a. One appointed by the Governmental Advisory Committee;

   b. One appointed by the Root Server System Advisory Committee established by Article XI of these Bylaws;

   c. One appointed by the Security and Stability Advisory Committee established by Article XI of these Bylaws;

   d. One appointed by the Internet Engineering Task Force.

2. Subject to the provisions of the Transition Article of these Bylaws, the non-voting liaisons shall serve terms that begin at the conclusion of each annual meeting. At least one month before the commencement of each annual meeting, each body entitled to appoint a non-voting liaison shall give the Secretary of ICANN written notice of its appointment.
3. Non-voting liaisons shall serve as volunteers, without compensation other than the reimbursement of certain expenses.

4. Each non-voting liaison may be reappointed, and shall remain in that position until a successor has been appointed or until the liaison resigns or is removed in accordance with these Bylaws.

5. The non-voting liaisons shall be entitled to attend Board meetings, participate in Board discussions and deliberations, and have access (under conditions established by the Board) to materials provided to Directors for use in Board discussions, deliberations and meetings, but shall otherwise not have any of the rights and privileges of Directors. Non-voting liaisons shall be entitled (under conditions established by the Board) to use any materials provided to them pursuant to this Section for the purpose of consulting with their respective committee or organization.

Section 10. RESIGNATION OF A DIRECTOR OR NON-VOTING LIAISON

Subject to Section 5226 of the CNPBCCL, any Director or non-voting liaison may resign at any time, either by oral tender of resignation at any meeting of the Board (followed by prompt written notice to the Secretary of ICANN) or by giving written notice thereof to the President or the Secretary of ICANN. Such resignation shall take effect at the time specified, and, unless otherwise specified, the acceptance of such resignation shall not be necessary to make it effective. The successor shall be selected pursuant to Section 12 of this Article.

Section 11. REMOVAL OF A DIRECTOR OR NON-VOTING LIAISON

1. Any Director may be removed, following notice to that Director, by a three-fourths (3/4) majority vote of all Directors; provided, however, that the Director who is the subject of the removal action shall not be entitled to vote on such an action or be counted as a voting member of the Board when calculating the required three-fourths (3/4) vote; and provided further, that each vote to remove a Director shall be a separate vote on the sole question of the removal of that particular Director. If the Director was selected by a Supporting Organization, notice must be provided to that Supporting Organization at the same time notice is provided to the Director. If the Director was selected by the At-Large Community, notice must be provided to the At-Large Advisory Committee at the same time notice is provided to the Director.
2. With the exception of the non-voting liaison appointed by the Governmental Advisory Committee, any non-voting liaison may be removed, following notice to that liaison and to the organization by which that liaison was selected, by a three-fourths (3/4) majority vote of all Directors if the selecting organization fails to promptly remove that liaison following such notice. The Board may request the Governmental Advisory Committee to consider the replacement of the non-voting liaison appointed by that Committee if the Board, by a three-fourths (3/4) majority vote of all Directors, determines that such an action is appropriate.

Section 12. VACANCIES

1. A vacancy or vacancies in the Board of Directors shall be deemed to exist in the case of the death, resignation, or removal of any Director; if the authorized number of Directors is increased; or if a Director has been declared of unsound mind by a final order of court or convicted of a felony or incarcerated for more than 90 days as a result of a criminal conviction or has been found by final order or judgment of any court to have breached a duty under Sections 5230 et seq. of the CNPBCL. Any vacancy occurring on the Board of Directors shall be filled by the Nominating Committee, unless (a) that Director was selected by a Supporting Organization, in which case that vacancy shall be filled by that Supporting Organization, or (b) that Director was the President, in which case the vacancy shall be filled in accordance with the provisions of Article XIII of these Bylaws. The selecting body shall give written notice to the Secretary of ICANN of their appointments to fill vacancies. A Director selected to fill a vacancy on the Board shall serve for the unexpired term of his or her predecessor in office and until a successor has been selected and qualified. No reduction of the authorized number of Directors shall have the effect of removing a Director prior to the expiration of the Director's term of office.

2. The organizations selecting the non-voting liaisons identified in Section 9 of this Article are responsible for determining the existence of, and filling, any vacancies in those positions. They shall give the Secretary of ICANN written notice of their appointments to fill vacancies.

Section 13. ANNUAL MEETINGS

Annual meetings of ICANN shall be held for the purpose of electing Officers and for the transaction of such other business as may come before the meeting. Each annual meeting for ICANN shall be held at
the principal office of ICANN, or any other appropriate place of the Board’s time and choosing, provided such annual meeting is held within 14 months of the immediately preceding annual meeting. If the Board determines that it is practical, the annual meeting should be distributed in real-time and archived video and audio formats on the Internet.

Section 14. REGULAR MEETINGS

Regular meetings of the Board shall be held on dates to be determined by the Board. In the absence of other designation, regular meetings shall be held at the principal office of ICANN.

Section 15. SPECIAL MEETINGS

Special meetings of the Board may be called by or at the request of one-quarter (1/4) of the members of the Board or by the Chairman of the Board or the President. A call for a special meeting shall be made by the Secretary of ICANN. In the absence of designation, special meetings shall be held at the principal office of ICANN.

Section 16. NOTICE OF MEETINGS

Notice of time and place of all meetings shall be delivered personally or by telephone or by electronic mail to each Director and non-voting liaison, or sent by first-class mail (air mail for addresses outside the United States) or facsimile, charges prepaid, addressed to each Director and non-voting liaison at the Director's or non-voting liaison's address as it is shown on the records of ICANN. In case the notice is mailed, it shall be deposited in the United States mail at least fourteen (14) days before the time of the holding of the meeting. In case the notice is delivered personally or by telephone or facsimile or electronic mail it shall be delivered personally or by telephone or facsimile or electronic mail at least forty-eight (48) hours before the time of the holding of the meeting. Notwithstanding anything in this Section to the contrary, notice of a meeting need not be given to any Director who signed a waiver of notice or a written consent to holding the meeting or an approval of the minutes thereof, whether before or after the meeting, or who attends the meeting without protesting, prior thereto or at its commencement, the lack of notice to such Director. All such waivers, consents and approvals shall be filed with the corporate records or made a part of the minutes of the meetings.

Section 17. QUORUM

At all annual, regular, and special meetings of the Board, a majority of the total number of Directors then in office shall constitute a quorum for the transaction of business, and the act of a majority of the Directors present at any meeting at which there is a quorum shall be the act of the Board, unless otherwise provided herein or by law. If a quorum shall not be present at any meeting of the Board, the Directors
present thereat may adjourn the meeting from time to time to another
place, time, or date. If the meeting is adjourned for more than twenty-
four (24) hours, notice shall be given to those Directors not at the
meeting at the time of the adjournment.

Section 18. ACTION BY TELEPHONE MEETING OR BY OTHER
COMMUNICATIONS EQUIPMENT

Members of the Board or any Committee of the Board may participate
in a meeting of the Board or Committee of the Board through use of (i)
conference telephone or similar communications equipment, provided
that all Directors participating in such a meeting can speak to and hear
one another or (ii) electronic video screen communication or other
communication equipment; provided that (a) all Directors participating
in such a meeting can speak to and hear one another, (b) all Directors
are provided the means of fully participating in all matters before the
Board or Committee of the Board, and (c) ICANN adopts and
implies means of verifying that (x) a person participating in such a
meeting is a Director or other person entitled to participate in the
meeting and (y) all actions of, or votes by, the Board or Committee of
the Board are taken or cast only by the members of the Board or
Committee and not persons who are not members. Participation in a
meeting pursuant to this Section constitutes presence in person at
such meeting. ICANN shall make available at the place of any meeting
of the Board the telecommunications equipment necessary to permit
members of the Board to participate by telephone.

Section 19. ACTION WITHOUT MEETING

Any action required or permitted to be taken by the Board or a
Committee of the Board may be taken without a meeting if all of the
Directors entitled to vote thereat shall individually or collectively
consent in writing to such action. Such written consent shall have the
same force and effect as the unanimous vote of such Directors. Such
written consent or consents shall be filed with the minutes of the
proceedings of the Board.

Section 20. ELECTRONIC MAIL

If permitted under applicable law, communication by electronic mail
shall be considered equivalent to any communication otherwise
required to be in writing. ICANN shall take such steps as it deems
appropriate under the circumstances to assure itself that
communications by electronic mail are authentic.

Section 21. RIGHTS OF INSPECTION

Every Director shall have the right at any reasonable time to inspect
and copy all books, records and documents of every kind, and to
inspect the physical properties of ICANN. ICANN shall establish
reasonable procedures to protect against the inappropriate disclosure of confidential information.

**Section 22. COMPENSATION**

1. Except for the President of ICANN, who serves ex officio as a voting member of the Board, each of the Directors shall be entitled to receive compensation for his/her services as a Director. The President shall receive only his/her compensation for service as President and shall not receive additional compensation for service as a Director.

2. If the Board determines to offer a compensation arrangement to one or more Directors other than the President of ICANN for services to ICANN as Directors, the Board shall follow a process that is calculated to pay an amount for service as a Director that is in its entirety Reasonable Compensation for such service under the standards set forth in §53.4958-4(b) of the Treasury Regulations.

3. As part of the process, the Board shall retain an Independent Valuation Expert to consult with and to advise the Board regarding Director compensation arrangements and to issue to the Board a Reasoned Written Opinion from such expert regarding the ranges of Reasonable Compensation for any such services by a Director. The expert's opinion shall address all relevant factors affecting the level of compensation to be paid a Director, including offices held on the Board, attendance at Board and Committee meetings, the nature of service on the Board and on Board Committees, and appropriate data as to comparability regarding director compensation arrangements for U.S.-based, nonprofit, tax-exempt organizations possessing a global employee base.

4. After having reviewed the expert's written opinion, the Board shall meet with the expert to discuss the expert's opinion and to ask questions of the expert regarding the expert's opinion, the comparability data obtained and relied upon, and the conclusions reached by the expert.

5. The Board shall adequately document the basis for any determination the Board makes regarding a Director compensation arrangement concurrently with making that determination.

6. In addition to authorizing payment of compensation for services as Directors as set forth in this Section 22, the Board may also authorize the reimbursement of actual and necessary reasonable expenses incurred by any Director.
and by non-voting liaisons performing their duties as Directors or non-voting liaisons.

7. As used in this Section 22, the following terms shall have the following meanings:

(a) An "Independent Valuation Expert" means a person retained by ICANN to value compensation arrangements that: (i) holds itself out to the public as a compensation consultant; (ii) performs valuations regarding compensation arrangements on a regular basis, with a majority of its compensation consulting services performed for persons other than ICANN; (iii) is qualified to make valuations of the type of services involved in any engagement by and for ICANN; (iv) issues to ICANN a Reasoned Written Opinion regarding a particular compensation arrangement; and (v) includes in its Reasoned Written Opinion a certification that it meets the requirements set forth in (i) through (iv) of this definition.

(b) A "Reasoned Written Opinion" means a written opinion of a valuation expert who meets the requirements of subparagraph 7(a) (i) through (iv) of this Section. To be reasoned, the opinion must be based upon a full disclosure by ICANN to the valuation expert of the factual situation regarding the compensation arrangement that is the subject of the opinion, the opinion must articulate the applicable valuation standards relevant in valuing such compensation arrangement, and the opinion must apply those standards to such compensation arrangement, and the opinion must arrive at a conclusion regarding the whether the compensation arrangement is within the range of Reasonable Compensation for the services covered by the arrangement. A written opinion is reasoned even though it reaches a conclusion that is subsequently determined to be incorrect so long as the opinion addresses itself to the facts and the applicable standards. However, a written opinion is not reasoned if it does nothing more than recite the facts and express a conclusion.

(c) "Reasonable Compensation" shall have the meaning set forth in §53.4958-4(b)(1)(ii) of the Regulations issued under §4958 of the Code.
Section 23. PRESUMPTION OF ASSENT

A Director present at a Board meeting at which action on any corporate matter is taken shall be presumed to have assented to the action taken unless his or her dissent or abstention is entered in the minutes of the meeting, or unless such Director files a written dissent or abstention to such action with the person acting as the secretary of the meeting before the adjournment thereof, or forwards such dissent or abstention by registered mail to the Secretary of ICANN immediately after the adjournment of the meeting. Such right to dissent or abstain shall not apply to a Director who voted in favor of such action.

ARTICLE VII: NOMINATING COMMITTEE

Section 1. DESCRIPTION

There shall be a Nominating Committee of ICANN, responsible for the selection of all ICANN Directors except the President and those Directors selected by ICANN's Supporting Organizations, and for such other selections as are set forth in these Bylaws.

Section 2. COMPOSITION

The Nominating Committee shall be composed of the following persons:

1. A non-voting Chair, appointed by the ICANN Board;

2. A non-voting Chair-Elect, appointed by the ICANN Board as a non-voting advisor;

3. A non-voting liaison appointed by the ICANN Root Server System Advisory Committee established by Article XI of these Bylaws;

4. A non-voting liaison appointed by the ICANN Security and Stability Advisory Committee established by Article XI of these Bylaws;

5. A non-voting liaison appointed by the Governmental Advisory Committee;

6. Subject to the provisions of the Transition Article of these Bylaws, five voting delegates selected by the At-Large Advisory Committee established by Article XI of these Bylaws;

7. Voting delegates to the Nominating Committee shall be selected from the Generic Names Supporting Organization, established by Article X of these Bylaws, as follows:
a. One delegate from the Registries Stakeholder Group;

b. One delegate from the Registrars Stakeholder Group;

c. Two delegates from the Business Constituency, one representing small business users and one representing large business users;

d. One delegate from the Internet Service Providers Constituency;

e. One delegate from the Intellectual Property Constituency; and

f. One delegate from consumer and civil society groups, selected by the Non-Commercial Users Constituency.

8. One voting delegate each selected by the following entities:

a. The Council of the Country Code Names Supporting Organization established by Article IX of these Bylaws;

b. The Council of the Address Supporting Organization established by Article VIII of these Bylaws; and

c. The Internet Engineering Task Force.

9. A non-voting Associate Chair, who may be appointed by the Chair, at his or her sole discretion, to serve during all or part of the term of the Chair. The Associate Chair may not be a person who is otherwise a member of the same Nominating Committee. The Associate Chair shall assist the Chair in carrying out the duties of the Chair, but shall not serve, temporarily or otherwise, in the place of the Chair.

Section 3. TERMS

Subject to the provisions of the Transition Article of these Bylaws:

1. Each voting delegate shall serve a one-year term. A delegate may serve at most two successive one-year terms, after which at least two years must elapse before the individual is eligible to serve another term.
2. The regular term of each voting delegate shall begin at the conclusion of an ICANN annual meeting and shall end at the conclusion of the immediately following ICANN annual meeting.

3. Non-voting liaisons shall serve during the term designated by the entity that appoints them. The Chair, the Chair-Elect, and any Associate Chair shall serve as such until the conclusion of the next ICANN annual meeting.

4. It is anticipated that upon the conclusion of the term of the Chair-Elect, the Chair-Elect will be appointed by the Board to the position of Chair. However, the Board retains the discretion to appoint any other person to the position of Chair. At the time of appointing a Chair-Elect, if the Board determines that the person identified to serve as Chair shall be appointed as Chair for a successive term, the Chair-Elect position shall remain vacant for the term designated by the Board.

5. Vacancies in the positions of delegate, non-voting liaison, Chair or Chair-Elect shall be filled by the entity entitled to select the delegate, non-voting liaison, Chair or Chair-Elect involved. For any term that the Chair-Elect position is vacant pursuant to paragraph 4 of this Article, or until any other vacancy in the position of Chair-Elect can be filled, a non-voting advisor to the Chair may be appointed by the Board from among persons with prior service on the Board or a Nominating Committee, including the immediately previous Chair of the Nominating Committee. A vacancy in the position of Associate Chair may be filled by the Chair in accordance with the criteria established by Section 2(9) of this Article.

6. The existence of any vacancies shall not affect the obligation of the Nominating Committee to carry out the responsibilities assigned to it in these Bylaws.

Section 4. CRITERIA FOR SELECTION OF NOMINATING COMMITTEE DELEGATES

Delegates to the ICANN Nominating Committee shall be:

1. Accomplished persons of integrity, objectivity, and intelligence, with reputations for sound judgment and open minds, and with experience and competence with collegial large group decision-making;

2. Persons with wide contacts, broad experience in the Internet community, and a commitment to the success of ICANN;
3. Persons whom the selecting body is confident will consult widely and accept input in carrying out their responsibilities;

4. Persons who are neutral and objective, without any fixed personal commitments to particular individuals, organizations, or commercial objectives in carrying out their Nominating Committee responsibilities;

5. Persons with an understanding of ICANN’s mission and the potential impact of ICANN’s activities on the broader Internet community who are willing to serve as volunteers, without compensation other than the reimbursement of certain expenses; and

6. Persons who are able to work and communicate in written and spoken English.

Section 5. DIVERSITY

In carrying out its responsibilities to select members of the ICANN Board (and selections to any other ICANN bodies as the Nominating Committee is responsible for under these Bylaws), the Nominating Committee shall take into account the continuing membership of the ICANN Board (and such other bodies), and seek to ensure that the persons selected to fill vacancies on the ICANN Board (and each such other body) shall, to the extent feasible and consistent with the other criteria required to be applied by Section 4 of this Article, make selections guided by Core Value 4 in Article I, Section 2.

Section 6. ADMINISTRATIVE AND OPERATIONAL SUPPORT

ICANN shall provide administrative and operational support necessary for the Nominating Committee to carry out its responsibilities.

Section 7. PROCEDURES

The Nominating Committee shall adopt such operating procedures as it deems necessary, which shall be published on the Website.

Section 8. INELIGIBILITY FOR SELECTION BY NOMINATING COMMITTEE

No person who serves on the Nominating Committee in any capacity shall be eligible for selection by any means to any position on the Board or any other ICANN body having one or more membership positions that the Nominating Committee is responsible for filling, until the conclusion of an ICANN annual meeting that coincides with, or is after, the conclusion of that person’s service on the Nominating Committee.
Section 9. INELIGIBILITY FOR SERVICE ON NOMINATING COMMITTEE

No person who is an employee of or paid consultant to ICANN (including the Ombudsman) shall simultaneously serve in any of the Nominating Committee positions described in Section 2 of this Article.

ARTICLE VIII: ADDRESS SUPPORTING ORGANIZATION

Section 1. DESCRIPTION

1. The Address Supporting Organization (ASO) shall advise the Board with respect to policy issues relating to the operation, assignment, and management of Internet addresses.

2. The ASO shall be the entity established by the Memorandum of Understanding entered on 21 October 2004 between ICANN and the Number Resource Organization (NRO), an organization of the existing regional Internet registries (RIRs).

Section 2. ADDRESS COUNCIL

1. The ASO shall have an Address Council, consisting of the members of the NRO Number Council.

2. The Address Council shall select Directors to those seats on the Board designated to be filled by the ASO.

ARTICLE IX: COUNTRY-CODE NAMES SUPPORTING ORGANIZATION

Section 1. DESCRIPTION

There shall be a policy-development body known as the Country-Code Names Supporting Organization (ccNSO), which shall be responsible for:

1. developing and recommending to the Board global policies relating to country-code top-level domains;

2. Nurturing consensus across the ccNSO's community, including the name-related activities of ccTLDs; and

3. Coordinating with other ICANN Supporting Organizations, committees, and constituencies under ICANN.
Policies that apply to ccNSO members by virtue of their membership are only those policies developed according to section 4.10 and 4.11 of this Article. However, the ccNSO may also engage in other activities authorized by its members. Adherence to the results of these activities will be voluntary and such activities may include: seeking to develop voluntary best practices for ccTLD managers, assisting in skills building within the global community of ccTLD managers, and enhancing operational and technical cooperation among ccTLD managers.

Section 2. ORGANIZATION

The ccNSO shall consist of (i) ccTLD managers that have agreed in writing to be members of the ccNSO (see Section 4(2) of this Article) and (ii) a ccNSO Council responsible for managing the policy-development process of the ccNSO.

Section 3. ccNSO COUNCIL

1. The ccNSO Council shall consist of (a) three ccNSO Council members selected by the ccNSO members within each of ICANN's Geographic Regions in the manner described in Section 4(7) through (9) of this Article; (b) three ccNSO Council members selected by the ICANN Nominating Committee; (c) liaisons as described in paragraph 2 of this Section; and (iv) observers as described in paragraph 3 of this Section.

2. There shall also be one liaison to the ccNSO Council from each of the following organizations, to the extent they choose to appoint such a liaison: (a) the Governmental Advisory Committee; (b) the At-Large Advisory Committee; and (c) each of the Regional Organizations described in Section 5 of this Article. These liaisons shall not be members of or entitled to vote on the ccNSO Council, but otherwise shall be entitled to participate on equal footing with members of the ccNSO Council. Appointments of liaisons shall be made by providing written notice to the ICANN Secretary, with a notification copy to the ccNSO Council Chair, and shall be for the term designated by the appointing organization as stated in the written notice. The appointing organization may recall from office or replace its liaison at any time by providing written notice of the recall or replacement to the ICANN Secretary, with a notification copy to the ccNSO Council Chair.

3. The ccNSO Council may agree with the Council of any other ICANN Supporting Organization to exchange observers. Such observers shall not be members of or entitled to vote on the ccNSO Council, but otherwise shall be entitled to participate on equal footing with members of
the ccNSO Council. The appointing Council may designate its observer (or revoke or change the designation of its observer) on the ccNSO Council at any time by providing written notice to the ICANN Secretary, with a notification copy to the ccNSO Council Chair.

4. Subject to the provisions of the Transition Article of these Bylaws: (a) the regular term of each ccNSO Council member shall begin at the conclusion of an ICANN annual meeting and shall end at the conclusion of the third ICANN annual meeting thereafter; (b) the regular terms of the three ccNSO Council members selected by the ccNSO members within each ICANN Geographic Region shall be staggered so that one member's term begins in a year divisible by three, a second member's term begins in the first year following a year divisible by three, and the third member’s term begins in the second year following a year divisible by three; and (c) the regular terms of the three ccNSO Council members selected by the Nominating Committee shall be staggered in the same manner. Each ccNSO Council member shall hold office during his or her regular term and until a successor has been selected and qualified or until that member resigns or is removed in accordance with these Bylaws.

5. A ccNSO Council member may resign at any time by giving written notice to the ICANN Secretary, with a notification copy to the ccNSO Council Chair.

6. ccNSO Council members may be removed for not attending three consecutive meetings of the ccNSO Council without sufficient cause or for grossly inappropriate behavior, both as determined by at least a 66% vote of all of the members of the ccNSO Council.

7. A vacancy on the ccNSO Council shall be deemed to exist in the case of the death, resignation, or removal of any ccNSO Council member. Vacancies in the positions of the three members selected by the Nominating Committee shall be filled for the unexpired term involved by the Nominating Committee giving the ICANN Secretary written notice of its selection, with a notification copy to the ccNSO Council Chair. Vacancies in the positions of the ccNSO Council members selected by ccNSO members shall be filled for the unexpired term by the procedure described in Section 4(7) through (9) of this Article.

8. The role of the ccNSO Council is to administer and coordinate the affairs of the ccNSO (including coordinating meetings, including an annual meeting, of ccNSO members as described in Section 4(6) of this Article) and to manage
the development of policy recommendations in accordance with Section 6 of this Article. The ccNSO Council shall also undertake such other roles as the members of the ccNSO shall decide from time to time.

9. The ccNSO Council shall make selections to fill Seats 11 and 12 on the Board by written ballot or by action at a meeting; any such selection must have affirmative votes of a majority of all the members of the ccNSO Council then in office. Notification of the ccNSO Council's selections shall be given by the ccNSO Council Chair in writing to the ICANN Secretary, consistent with Article VI, Sections 8(4) and 12(1).

10. The ccNSO Council shall select from among its members the ccNSO Council Chair and such Vice Chair(s) as it deems appropriate. Selections of the ccNSO Council Chair and Vice Chair(s) shall be by written ballot or by action at a meeting; any such selection must have affirmative votes of a majority of all the members of the ccNSO Council then in office. The term of office of the ccNSO Council Chair and any Vice Chair(s) shall be as specified by the ccNSO Council at or before the time the selection is made. The ccNSO Council Chair or any Vice Chair(s) may be recalled from office by the same procedure as used for selection.

11. The ccNSO Council, subject to direction by the ccNSO members, shall adopt such rules and procedures for the ccNSO as it deems necessary, provided they are consistent with these Bylaws. Rules for ccNSO membership and operating procedures adopted by the ccNSO Council shall be published on the Website.

12. Except as provided by paragraphs 9 and 10 of this Section, the ccNSO Council shall act at meetings. The ccNSO Council shall meet regularly on a schedule it determines, but not fewer than four times each calendar year. At the discretion of the ccNSO Council, meetings may be held in person or by other means, provided that all ccNSO Council members are permitted to participate by at least one means described in paragraph 14 of this Section. Except where determined by a majority vote of the members of the ccNSO Council present that a closed session is appropriate, physical meetings shall be open to attendance by all interested persons. To the extent practicable, ccNSO Council meetings should be held in conjunction with meetings of the Board, or of one or more of ICANN's other Supporting Organizations.
13. Notice of time and place (and information about means of participation other than personal attendance) of all meetings of the ccNSO Council shall be provided to each ccNSO Council member, liaison, and observer by e-mail, telephone, facsimile, or a paper notice delivered personally or by postal mail. In case the notice is sent by postal mail, it shall be sent at least 21 days before the day of the meeting. In case the notice is delivered personally or by telephone, facsimile, or e-mail it shall be provided at least seven days before the day of the meeting. At least seven days in advance of each ccNSO Council meeting (or if not practicable, as far in advance as is practicable), a notice of such meeting and, to the extent known, an agenda for the meeting shall be posted.

14. Members of the ccNSO Council may participate in a meeting of the ccNSO Council through personal attendance or use of electronic communication (such as telephone or video conference), provided that (a) all ccNSO Council members participating in the meeting can speak to and hear one another, (b) all ccNSO Council members participating in the meeting are provided the means of fully participating in all matters before the ccNSO Council, and (c) there is a reasonable means of verifying the identity of ccNSO Council members participating in the meeting and their votes. A majority of the ccNSO Council members (i.e. those entitled to vote) then in office shall constitute a quorum for the transaction of business, and actions by a majority vote of the ccNSO Council members present at any meeting at which there is a quorum shall be actions of the ccNSO Council, unless otherwise provided in these Bylaws. The ccNSO Council shall transmit minutes of its meetings to the ICANN Secretary, who shall cause those minutes to be posted to the Website as soon as practicable following the meeting, and no later than 21 days following the meeting.

Section 4. MEMBERSHIP

1. The ccNSO shall have a membership consisting of ccTLD managers. Any ccTLD manager that meets the membership qualifications stated in paragraph 2 of this Section shall be entitled to be members of the ccNSO. For purposes of this Article, a ccTLD manager is the organization or entity responsible for managing an ISO 3166 country-code top-level domain and referred to in the IANA database under the current heading of "Sponsoring Organization", or under any later variant, for that country-code top-level domain.
2. Any ccTLD manager may become a ccNSO member by submitting an application to a person designated by the ccNSO Council to receive applications. Subject to the provisions of the Transition Article of these Bylaws, the application shall be in writing in a form designated by the ccNSO Council. The application shall include the ccTLD manager's recognition of the role of the ccNSO within the ICANN structure as well as the ccTLD manager's agreement, for the duration of its membership in the ccNSO, (a) to adhere to rules of the ccNSO, including membership rules, (b) to abide by policies developed and recommended by the ccNSO and adopted by the Board in the manner described by paragraphs 10 and 11 of this Section, and (c) to pay ccNSO membership fees established by the ccNSO Council under Section 7(3) of this Article. A ccNSO member may resign from membership at any time by giving written notice to a person designated by the ccNSO Council to receive notices of resignation. Upon resignation the ccTLD manager ceases to agree to (a) adhere to rules of the ccNSO, including membership rules, (b) to abide by policies developed and recommended by the ccNSO and adopted by the Board in the manner described by paragraphs 10 and 11 of this Section, and (c) to pay ccNSO membership fees established by the ccNSO Council under Section 7(3) of this Article. In the absence of designation by the ccNSO Council of a person to receive applications and notices of resignation, they shall be sent to the ICANN Secretary, who shall notify the ccNSO Council of receipt of any such applications and notices.

3. Neither membership in the ccNSO nor membership in any Regional Organization described in Section 5 of this Article shall be a condition for access to or registration in the IANA database. Any individual relationship a ccTLD manager has with ICANN or the ccTLD manager's receipt of IANA services is not in any way contingent upon membership in the ccNSO.

4. The Geographic Regions of ccTLDs shall be as described in Article VI, Section 5 of these Bylaws. For purposes of this Article, managers of ccTLDs within a Geographic Region that are members of the ccNSO are referred to as ccNSO members "within" the Geographic Region, regardless of the physical location of the ccTLD manager. In cases where the Geographic Region of a ccNSO member is unclear, the ccTLD member should self-select according to procedures adopted by the ccNSO Council.
5. Each ccTLD manager may designate in writing a person, organization, or entity to represent the ccTLD manager. In the absence of such a designation, the ccTLD manager shall be represented by the person, organization, or entity listed as the administrative contact in the IANA database.

6. There shall be an annual meeting of ccNSO members, which shall be coordinated by the ccNSO Council. Annual meetings should be open for all to attend, and a reasonable opportunity shall be provided for ccTLD managers that are not members of the ccNSO as well as other non-members of the ccNSO to address the meeting. To the extent practicable, annual meetings of the ccNSO members shall be held in person and should be held in conjunction with meetings of the Board, or of one or more of ICANN's other Supporting Organizations.

7. The ccNSO Council members selected by the ccNSO members from each Geographic Region (see Section 3(1) (a) of this Article) shall be selected through nomination, and if necessary election, by the ccNSO members within that Geographic Region. At least 90 days before the end of the regular term of any ccNSO-member-selected member of the ccNSO Council, or upon the occurrence of a vacancy in the seat of such a ccNSO Council member, the ccNSO Council shall establish a nomination and election schedule, which shall be sent to all ccNSO members within the Geographic Region and posted on the Website.

8. Any ccNSO member may nominate an individual to serve as a ccNSO Council member representing the ccNSO member's Geographic Region. Nominations must be seconded by another ccNSO member from the same Geographic Region. By accepting their nomination, individuals nominated to the ccNSO Council agree to support the policies committed to by ccNSO members.

9. If at the close of nominations there are no more candidates nominated (with seconds and acceptances) in a particular Geographic Region than there are seats on the ccNSO Council available for that Geographic Region, then the nominated candidates shall be selected to serve on the ccNSO Council. Otherwise, an election by written ballot (which may be by e-mail) shall be held to select the ccNSO Council members from among those nominated (with seconds and acceptances), with ccNSO members from the Geographic Region being entitled to vote in the election through their designated representatives. In such an election, a majority of all ccNSO members in the Geographic Region entitled to vote shall constitute a quorum, and the selected candidate must receive the votes...
of a majority of those cast by ccNSO members within the Geographic Region. The ccNSO Council Chair shall provide the ICANN Secretary prompt written notice of the selection of ccNSO Council members under this paragraph.

10. Subject to clause 4(11), ICANN policies shall apply to ccNSO members by virtue of their membership to the extent, and only to the extent, that the policies (a) only address issues that are within scope of the ccNSO according to Article IX, Section 6 and Annex C; (b) have been developed through the ccPDP as described in Section 6 of this Article, and (c) have been recommended as such by the ccNSO to the Board, and (d) are adopted by the Board as policies, provided that such policies do not conflict with the law applicable to the ccTLD manager which shall, at all times, remain paramount. In addition, such policies shall apply to ICANN in its activities concerning ccTLDs.

11. A ccNSO member shall not be bound if it provides a declaration to the ccNSO Council stating that (a) implementation of the policy would require the member to breach custom, religion, or public policy (not embodied in the applicable law described in paragraph 10 of this Section), and (b) failure to implement the policy would not impair DNS operations or interoperability, giving detailed reasons supporting its statements. After investigation, the ccNSO Council will provide a response to the ccNSO member's declaration. If there is a ccNSO Council consensus disagreeing with the declaration, which may be demonstrated by a vote of 14 or more members of the ccNSO Council, the response shall state the ccNSO Council's disagreement with the declaration and the reasons for disagreement. Otherwise, the response shall state the ccNSO Council's agreement with the declaration. If the ccNSO Council disagrees, the ccNSO Council shall review the situation after a six-month period. At the end of that period, the ccNSO Council shall make findings as to (a) whether the ccNSO members' implementation of the policy would require the member to breach custom, religion, or public policy (not embodied in the applicable law described in paragraph 10 of this Section) and (b) whether failure to implement the policy would impair DNS operations or interoperability. In making any findings disagreeing with the declaration, the ccNSO Council shall proceed by consensus, which may be demonstrated by a vote of 14 or more members of the ccNSO Council.

Section 5. REGIONAL ORGANIZATIONS
The ccNSO Council may designate a Regional Organization for each ICANN Geographic Region, provided that the Regional Organization is open to full membership by all ccNSO members within the Geographic Region. Decisions to designate or de-designate a Regional Organization shall require a 66% vote of all of the members of the ccNSO Council and shall be subject to review according to procedures established by the Board.

Section 6. ccNSO POLICY-DEVELOPMENT PROCESS AND SCOPE

1. The scope of the ccNSO's policy-development role shall be as stated in Annex C to these Bylaws; any modifications to the scope shall be recommended to the Board by the ccNSO by use of the procedures of the ccPDP, and shall be subject to approval by the Board.

2. In developing global policies within the scope of the ccNSO and recommending them to the Board, the ccNSO shall follow the ccNSO Policy-Development Process (ccPDP). The ccPDP shall be as stated in Annex B to these Bylaws; modifications shall be recommended to the Board by the ccNSO by use of the procedures of the ccPDP, and shall be subject to approval by the Board.

Section 7. STAFF SUPPORT AND FUNDING

1. Upon request of the ccNSO Council, a member of the ICANN staff may be assigned to support the ccNSO and shall be designated as the ccNSO Staff Manager. Alternatively, the ccNSO Council may designate, at ccNSO expense, another person to serve as ccNSO Staff Manager. The work of the ccNSO Staff Manager on substantive matters shall be assigned by the Chair of the ccNSO Council, and may include the duties of ccPDP Issue Manager.

2. Upon request of the ccNSO Council, ICANN shall provide administrative and operational support necessary for the ccNSO to carry out its responsibilities. Such support shall not include an obligation for ICANN to fund travel expenses incurred by ccNSO participants for travel to any meeting of the ccNSO or for any other purpose. The ccNSO Council may make provision, at ccNSO expense, for administrative and operational support in addition or as an alternative to support provided by ICANN.

3. The ccNSO Council shall establish fees to be paid by ccNSO members to defray ccNSO expenses as described in paragraphs 1 and 2 of this Section, as approved by the ccNSO members.
4. Written notices given to the ICANN Secretary under this Article shall be permanently retained, and shall be made available for review by the ccNSO Council on request. The ICANN Secretary shall also maintain the roll of members of the ccNSO, which shall include the name of each ccTLD manager’s designated representative, and which shall be posted on the Website.

ARTICLE X: GENERIC NAMES SUPPORTING ORGANIZATION

Section 1. DESCRIPTION

There shall be a policy-development body known as the Generic Names Supporting Organization (GNSO), which shall be responsible for developing and recommending to the ICANN Board substantive policies relating to generic top-level domains.

Section 2. ORGANIZATION

The GNSO shall consist of:

(i) A number of Constituencies, where applicable, organized within the Stakeholder Groups as described in Section 5 of this Article;

(ii) Four Stakeholder Groups organized within Houses as described in Section 5 of this Article;

(iii) Two Houses within the GNSO Council as described in Section 3(8) of this Article; and

(iv) a GNSO Council responsible for managing the policy development process of the GNSO, as described in Section 3 of this Article.

Except as otherwise defined in these Bylaws, the four Stakeholder Groups and the Constituencies will be responsible for defining their own charters with the approval of their members and of the ICANN Board of Directors.

Section 3. GNSO COUNCIL

1. Subject to the provisions of Transition Article XX, Section 5 of these Bylaws and as described in Section 5 of Article X, the GNSO Council shall consist of:

   a. three representatives selected from the Registries Stakeholder Group;

   b. three representatives selected from the Registrars Stakeholder Group;
c. six representatives selected from the Commercial Stakeholder Group;

d. six representatives selected from the Non-Commercial Stakeholder Group; and

e. three representatives selected by the ICANN Nominating Committee, one of which shall be non-voting, but otherwise entitled to participate on equal footing with other members of the GNSO Council including, e.g. the making and seconding of motions and of serving as Chair if elected. One Nominating Committee Appointee voting representative shall be assigned to each House (as described in Section 3(8) of this Article) by the Nominating Committee.

No individual representative may hold more than one seat on the GNSO Council at the same time.

Stakeholder Groups should, in their charters, ensure their representation on the GNSO Council is as diverse as possible and practicable, including considerations of geography, GNSO Constituency, sector, ability and gender.

There may also be liaisons to the GNSO Council from other ICANN Supporting Organizations and/or Advisory Committees, from time to time. The appointing organization shall designate, revoke, or change its liaison on the GNSO Council by providing written notice to the Chair of the GNSO Council and to the ICANN Secretary. Liaisons shall not be members of or entitled to vote, to make or second motions, or to serve as an officer on the GNSO Council, but otherwise liaisons shall be entitled to participate on equal footing with members of the GNSO Council.

2. Subject to the provisions of the Transition Article XX, and Section 5 of these Bylaws, the regular term of each GNSO Council member shall begin at the conclusion of an ICANN annual meeting and shall end at the conclusion of the second ICANN annual meeting thereafter. The regular term of two representatives selected from Stakeholder Groups with three Council seats shall begin in even-numbered years and the regular term of the other representative selected from that Stakeholder Group shall begin in odd-numbered years. The regular term of three representatives selected from Stakeholder Groups with six Council seats shall begin in even-numbered years and the regular term of the other three representatives selected from that Stakeholder Group shall begin in odd-numbered years. The regular term of one of the three members selected by the
Nominating Committee shall begin in even-numbered years and the regular term of the other two of the three members selected by the Nominating Committee shall begin in odd-numbered years. Each GNSO Council member shall hold office during his or her regular term and until a successor has been selected and qualified or until that member resigns or is removed in accordance with these Bylaws.

Except in a “special circumstance,” such as, but not limited to, meeting geographic or other diversity requirements defined in the Stakeholder Group charters, where no alternative representative is available to serve, no Council member may be selected to serve more than two consecutive terms, in such a special circumstance a Council member may serve one additional term. For these purposes, a person selected to fill a vacancy in a term shall not be deemed to have served that term. A former Council member who has served two consecutive terms must remain out of office for one full term prior to serving any subsequent term as Council member. A “special circumstance” is defined in the GNSO Operating Procedures.

3. A vacancy on the GNSO Council shall be deemed to exist in the case of the death, resignation, or removal of any member. Vacancies shall be filled for the unexpired term by the appropriate Nominating Committee or Stakeholder Group that selected the member holding the position before the vacancy occurred by giving the GNSO Secretariat written notice of its selection. Procedures for handling Stakeholder Group-appointed GNSO Council member vacancies, resignations, and removals are prescribed in the applicable Stakeholder Group Charter.

A GNSO Council member selected by the Nominating Committee may be removed for cause: i) stated by a three-fourths (3/4) vote of all members of the applicable House to which the Nominating Committee appointee is assigned; or ii) stated by a three-fourths (3/4) vote of all members of each House in the case of the non-voting Nominating Committee appointee (see Section 3(8) of this Article). Such removal shall be subject to reversal by the ICANN Board on appeal by the affected GNSO Council member.

4. The GNSO Council is responsible for managing the policy development process of the GNSO. It shall adopt such procedures (the “GNSO Operating Procedures”) as it sees fit to carry out that responsibility, provided that such procedures are approved by a majority vote of each House. The GNSO Operating Procedures shall be effective upon the expiration of a twenty-one (21) day public comment period, and shall be subject to Board oversight and review. Until any modifications are recommended by the GNSO.
Council, the applicable procedures shall be as set forth in Section 6 of this Article.

5. No more than one officer, director or employee of any particular corporation or other organization (including its subsidiaries and affiliates) shall serve on the GNSO Council at any given time.

6. The GNSO shall make selections to fill Seats 13 and 14 on the ICANN Board by written ballot or by action at a meeting. Each of the two voting Houses of the GNSO, as described in Section 3(8) of this Article, shall make a selection to fill one of two ICANN Board seats, as outlined below; any such selection must have affirmative votes compromising sixty percent (60%) of all the respective voting House members:

   a. the Contracted Party House shall select a representative to fill Seat 13; and

   b. the Non-Contracted Party House shall select a representative to fill Seat 14

Election procedures are defined in the GNSO Operating Procedures.

Notification of the Board seat selections shall be given by the GNSO Chair in writing to the ICANN Secretary, consistent with Article VI, Sections 8(4) and 12(1).

7. The GNSO Council shall select the GNSO Chair for a term the GNSO Council specifies, but not longer than one year. Each House (as described in Section 3.8 of this Article) shall select a Vice-Chair, who will be a Vice-Chair of the whole of the GNSO Council, for a term the GNSO Council specifies, but not longer than one year. The procedures for selecting the Chair and any other officers are contained in the GNSO Operating Procedures. In the event that the GNSO Council has not elected a GNSO Chair by the end of the previous Chair's term, the Vice-Chairs will serve as Interim GNSO Co-Chairs until a successful election can be held.

8. Except as otherwise required in these Bylaws, for voting purposes, the GNSO Council (see Section 3(1) of this Article) shall be organized into a bicameral House structure as described below:

   a. the Contracted Parties House includes the Registries Stakeholder Group (three members), the Registrars Stakeholder Group (three
members), and one voting member appointed by the ICANN Nominating Committee for a total of seven voting members; and

b. the Non Contracted Parties House includes the Commercial Stakeholder Group (six members), the Non-Commercial Stakeholder Group (six members), and one voting member appointed by the ICANN Nominating Committee to that House for a total of thirteen voting members.

Except as otherwise specified in these Bylaws, each member of a voting House is entitled to cast one vote in each separate matter before the GNSO Council.

9. Except as otherwise specified in these Bylaws, Annex A hereto, or the GNSO Operating Procedures, the default threshold to pass a GNSO Council motion or other voting action requires a simple majority vote of each House. The voting thresholds described below shall apply to the following GNSO actions:

a. Create an Issues Report: requires an affirmative vote of more than one-fourth (1/4) of each House or majority of one House.

b. Initiate a Policy Development Process (“PDP”) Within Scope (as described in Annex A): requires an affirmative vote of more than one-third (1/3) of each House or more than two-thirds (2/3) of one House.

c. Initiate a PDP Not Within Scope: requires an affirmative vote of GNSO Supermajority.

d. Approve a PDP Team Charter for a PDP Within Scope: requires an affirmative vote of more than one-third (1/3) of each House or more than two-thirds (2/3) of one House.

e. Approve a PDP Team Charter for a PDP Not Within Scope: requires an affirmative vote of a GNSO Supermajority.

f. Changes to an Approved PDP Team Charter: For any PDP Team Charter approved under d. or e. above, the GNSO Council may approve an amendment to the Charter through a simple majority vote of each House.
g. Terminate a PDP: Once initiated, and prior to the publication of a Final Report, the GNSO Council may terminate a PDP only for significant cause, upon a motion that passes with a GNSO Supermajority Vote in favor of termination.

h. Approve a PDP Recommendation Without a GNSO Supermajority: requires an affirmative vote of a majority of each House and further requires that one GNSO Council member representative of at least 3 of the 4 Stakeholder Groups supports the Recommendation.

i. Approve a PDP Recommendation With a GNSO Supermajority: requires an affirmative vote of a GNSO Supermajority,

j. Approve a PDP Recommendation Imposing New Obligations on Certain Contracting Parties: where an ICANN contract provision specifies that "a two-thirds vote of the council" demonstrates the presence of a consensus, the GNSO Supermajority vote threshold will have to be met or exceeded.

k. Modification of Approved PDP Recommendation: Prior to Final Approval by the ICANN Board, an Approved PDP Recommendation may be modified or amended by the GNSO Council with a GNSO Supermajority vote.

l. A "GNSO Supermajority" shall mean: (a) two-thirds (2/3) of the Council members of each House, or (b) three-fourths (3/4) of one House and a majority of the other House.

Section 4. STAFF SUPPORT AND FUNDING

1. A member of the ICANN staff shall be assigned to support the GNSO, whose work on substantive matters shall be assigned by the Chair of the GNSO Council, and shall be designated as the GNSO Staff Manager (Staff Manager).

2. ICANN shall provide administrative and operational support necessary for the GNSO to carry out its responsibilities. Such support shall not include an obligation for ICANN to fund travel expenses incurred by GNSO participants for travel to any meeting of the GNSO.
or for any other purpose. ICANN may, at its discretion, fund travel expenses for GNSO participants under any travel support procedures or guidelines that it may adopt from time to time.

Section 5. STAKEHOLDER GROUPS

1. The following Stakeholder Groups are hereby recognized as representative of a specific group of one or more Constituencies or interest groups and subject to the provisions of the Transition Article XX, Section 5 of these Bylaws:

   a. Registries Stakeholder Group representing all gTLD registries under contract to ICANN;
   
   b. Registrars Stakeholder Group representing all registrars accredited by and under contract to ICANN;
   
   c. Commercial Stakeholder Group representing the full range of large and small commercial entities of the Internet; and
   
   d. Non-Commercial Stakeholder Group representing the full range of non-commercial entities of the Internet.

2. Each Stakeholder Group is assigned a specific number of Council seats in accordance with Section 3(1) of this Article.

3. Each Stakeholder Group identified in paragraph 1 of this Section and each of its associated Constituencies, where applicable, shall maintain recognition with the ICANN Board. Recognition is granted by the Board based upon the extent to which, in fact, the entity represents the global interests of the stakeholder communities it purports to represent and operates to the maximum extent feasible in an open and transparent manner consistent with procedures designed to ensure fairness. Stakeholder Group and Constituency Charters may be reviewed periodically as prescribed by the Board.

4. Any group of individuals or entities may petition the Board for recognition as a new or separate Constituency in the Non-Contracted Parties House. Any such petition shall contain:

   a. A detailed explanation of why the addition of such a Constituency will improve the ability of
the GNSO to carry out its policy-development responsibilities;

b. A detailed explanation of why the proposed new Constituency adequately represents, on a global basis, the stakeholders it seeks to represent;

c. A recommendation for organizational placement within a particular Stakeholder Group; and

d. A proposed charter that adheres to the principles and procedures contained in these Bylaws.

Any petition for the recognition of a new Constituency and the associated charter shall be posted for public comment.

5. The Board may create new Constituencies as described in Section 5(3) in response to such a petition, or on its own motion, if the Board determines that such action would serve the purposes of ICANN. In the event the Board is considering acting on its own motion it shall post a detailed explanation of why such action is necessary or desirable, set a reasonable time for public comment, and not make a final decision on whether to create such new Constituency until after reviewing all comments received. Whenever the Board posts a petition or recommendation for a new Constituency for public comment, the Board shall notify the GNSO Council and the appropriate Stakeholder Group affected and shall consider any response to that notification prior to taking action.

Section 6. POLICY DEVELOPMENT PROCESS

The policy-development procedures to be followed by the GNSO shall be as stated in Annex A to these Bylaws. These procedures may be supplemented or revised in the manner stated in Section 3(4) of this Article.

ARTICLE XI: ADVISORY COMMITTEES

Section 1. GENERAL

The Board may create one or more Advisory Committees in addition to those set forth in this Article. Advisory Committee membership may consist of Directors only, Directors and non-directors, or non-directors only, and may also include non-voting or alternate members. Advisory Committees shall have no legal authority to act for ICANN, but shall report their findings and recommendations to the Board.
Section 2. SPECIFIC ADVISORY COMMITTEES

There shall be at least the following Advisory Committees:

1. Governmental Advisory Committee

   a. The Governmental Advisory Committee should consider and provide advice on the activities of ICANN as they relate to concerns of governments, particularly matters where there may be an interaction between ICANN's policies and various laws and international agreements or where they may affect public policy issues.

   b. Membership in the Governmental Advisory Committee shall be open to all national governments. Membership shall also be open to Distinct Economies as recognized in international fora, and multinational governmental organizations and treaty organizations, on the invitation of the Governmental Advisory Committee through its Chair.

   c. The Governmental Advisory Committee may adopt its own charter and internal operating principles or procedures to guide its operations, to be published on the Website.

   d. The chair of the Governmental Advisory Committee shall be elected by the members of the Governmental Advisory Committee pursuant to procedures adopted by such members.

   e. Each member of the Governmental Advisory Committee shall appoint one accredited representative to the Committee. The accredited representative of a member must hold a formal official position with the member's public administration. The term "official" includes a holder of an elected governmental office, or a person who is employed by such government, public authority, or multinational governmental or treaty organization and whose primary function with such government, public authority, or organization is to develop or influence governmental or public policies.

   f. The Governmental Advisory Committee shall annually appoint one non-voting liaison to the ICANN Board of Directors, without limitation on
reappointment, and shall annually appoint one non-voting liaison to the ICANN Nominating Committee.

g. The Governmental Advisory Committee may designate a non-voting liaison to each of the Supporting Organization Councils and Advisory Committees, to the extent the Governmental Advisory Committee deems it appropriate and useful to do so.

h. The Board shall notify the Chair of the Governmental Advisory Committee in a timely manner of any proposal raising public policy issues on which it or any of ICANN's supporting organizations or advisory committees seeks public comment, and shall take duly into account any timely response to that notification prior to taking action.

i. The Governmental Advisory Committee may put issues to the Board directly, either by way of comment or prior advice, or by way of specifically recommending action or new policy development or revision to existing policies.

j. The advice of the Governmental Advisory Committee on public policy matters shall be duly taken into account, both in the formulation and adoption of policies. In the event that the ICANN Board determines to take an action that is not consistent with the Governmental Advisory Committee advice, it shall so inform the Committee and state the reasons why it decided not to follow that advice. The Governmental Advisory Committee and the ICANN Board will then try, in good faith and in a timely and efficient manner, to find a mutually acceptable solution.

k. If no such solution can be found, the ICANN Board will state in its final decision the reasons why the Governmental Advisory Committee advice was not followed, and such statement will be without prejudice to the rights or obligations of Governmental Advisory Committee members with regard to public policy issues falling within their responsibilities.

2. Security and Stability Advisory Committee
a. The role of the Security and Stability Advisory Committee ("SSAC") is to advise the ICANN community and Board on matters relating to the security and integrity of the Internet's naming and address allocation systems. It shall have the following responsibilities:

1. To communicate on security matters with the Internet technical community and the operators and managers of critical DNS infrastructure services, to include the root name server operator community, the top-level domain registries and registrars, the operators of the reverse delegation trees such as in-addr.arpa and ip6.arpa, and others as events and developments dictate. The Committee shall gather and articulate requirements to offer to those engaged in technical revision of the protocols related to DNS and address allocation and those engaged in operations planning.

2. To engage in ongoing threat assessment and risk analysis of the Internet naming and address allocation services to assess where the principal threats to stability and security lie, and to advise the ICANN community accordingly. The Committee shall recommend any necessary audit activity to assess the current status of DNS and address allocation security in relation to identified risks and threats.

3. To communicate with those who have direct responsibility for Internet naming and address allocation security matters (IETF, RSSAC, RIRs, name registries, etc.), to ensure that its advice on security risks, issues, and priorities is properly synchronized with existing standardization, deployment, operational, and coordination activities. The Committee shall
monitor these activities and inform
the ICANN community and Board on
their progress, as appropriate.

4. To report periodically to the Board
on its activities.

5. To make policy recommendations
to the ICANN community and Board.

b. The SSAC’s chair and members shall be
appointed by the Board. SSAC membership
appointment shall be for a three-year term,
commencing on 1 January and ending the
second year thereafter on 31 December. The
chair and members may be re-appointed, and
there are no limits to the number of terms the
chair or members may serve. The SSAC chair
may provide recommendations to the Board
regarding appointments to the SSAC. The
SSAC chair shall stagger appointment
recommendations so that approximately one-
third (1/3) of the membership of the SSAC is
considered for appointment or re-appointment
each year. The Board shall also have to power
to remove SSAC appointees as recommended
by or in consultation with the SSAC. (Note: The
first full term under this paragraph shall
commence on 1 January 2011 and end on 31
December 2013. Prior to 1 January 2011, the
SSAC shall be comprised as stated in the
Bylaws as amended 25 June 2010, and the
SSAC chair shall recommend the re-
appointment of all current SSAC members to
full or partial terms as appropriate to implement
the provisions of this paragraph.)

c. The SSAC shall annually appoint a non-
voting liaison to the ICANN Board according to
Section 9 of Article VI.

3. Root Server System Advisory Committee

a. The role of the Root Server System Advisory
Committee ("RSSAC") is to advise the ICANN
community and Board on matters relating to the
operation, administration, security, and integrity
of the Internet's Root Server System. It shall
have the following responsibilities:
1. Communicate on matters relating to the operation of the Root Servers and their multiple instances with the Internet technical community and the ICANN community. The Committee shall gather and articulate requirements to offer to those engaged in technical revision of the protocols and best common practices related to the operation of DNS servers.

2. Communicate on matters relating to the administration of the Root Zone with those who have direct responsibility for that administration. These matters include the processes and procedures for the production of the Root Zone File.


4. Respond to requests for information or opinions from the ICANN Board of Directors.

5. Report periodically to the Board on its activities.

6. Make policy recommendations to the ICANN community and Board.

b. The RSSAC shall be led by two co-chairs. The RSSAC’s chairs and members shall be appointed by the Board.

1. RSSAC membership appointment shall be for a three-year term, commencing on 1 January and ending the second year thereafter on 31 December. Members may be re-appointed, and there are no limits to the number of terms the members may serve. The RSSAC chairs shall provide recommendations to the Board regarding appointments to the
RSSAC. If the board declines to appoint a person nominated by the RSSAC then it will provide the rationale for its decision. The RSSAC chairs shall stagger appointment recommendations so that approximately one-third (1/3) of the membership of the RSSAC is considered for appointment or re-appointment each year. The Board shall also have to power to remove RSSAC appointees as recommended by or in consultation with the RSSAC. (Note: The first term under this paragraph shall commence on 1 July 2013 and end on 31 December 2015, and shall be considered a full term for all purposes. All other full terms under this paragraph shall begin on 1 January of the corresponding year. Prior to 1 July 2013, the RSSAC shall be comprised as stated in the Bylaws as amended 16 March 2012, and the RSSAC chairs shall recommend the re-appointment of all current RSSAC members to full or partial terms as appropriate to implement the provisions of this paragraph.)

2. The RSSAC shall recommend the appointment of the chairs to the board following a nomination process that it devises and documents.

c. The RSSAC shall annually appoint a non-voting liaison to the ICANN Board according to Section 9 of Article VI.

4. At-Large Advisory Committee

a. The At-Large Advisory Committee (ALAC) is the primary organizational home within ICANN for individual Internet users. The role of the ALAC shall be to consider and provide advice on the activities of ICANN, insofar as they relate to the interests of individual Internet users. This includes policies created through ICANN’s Supporting Organizations, as well as the many
other issues for which community input and advice is appropriate. The ALAC, which plays an important role in ICANN’s accountability mechanisms, also coordinates some of ICANN’s outreach to individual Internet users.

b. The ALAC shall consist of (i) two members selected by each of the Regional At-Large Organizations (“RALOs”) established according to paragraph 4(g) of this Section, and (ii) five members selected by the Nominating Committee. The five members selected by the Nominating Committee shall include one citizen of a country within each of the five Geographic Regions established according to Section 5 of Article VI.

c. Subject to the provisions of the Transition Article of these Bylaws, the regular terms of members of the ALAC shall be as follows:

1. The term of one member selected by each RALO shall begin at the conclusion of an ICANN annual meeting in an even-numbered year.

2. The term of the other member selected by each RALO shall begin at the conclusion of an ICANN annual meeting in an odd-numbered year.

3. The terms of three of the members selected by the Nominating Committee shall begin at the conclusion of an annual meeting in an odd-numbered year and the terms of the other two members selected by the Nominating Committee shall begin at the conclusion of an annual meeting in an even-numbered year.

4. The regular term of each member shall end at the conclusion of the second ICANN annual meeting after the term began.

d. The Chair of the ALAC shall be elected by the members of the ALAC pursuant to procedures adopted by the Committee.
e. The ALAC shall, after consultation with each RALO, annually appoint five voting delegates (no two of whom shall be citizens of countries in the same Geographic Region, as defined according to Section 5 of Article VI) to the Nominating Committee.

f. Subject to the provisions of the Transition Article of these Bylaws, the At-Large Advisory Committee may designate non-voting liaisons to each of the ccNSO Council and the GNSO Council.

g. There shall be one RALO for each Geographic Region established according to Section 5 of Article VI. Each RALO shall serve as the main forum and coordination point for public input to ICANN in its Geographic Region and shall be a non-profit organization certified by ICANN according to criteria and standards established by the Board based on recommendations of the At-Large Advisory Committee. An organization shall become the recognized RALO for its Geographic Region upon entering a Memorandum of Understanding with ICANN addressing the respective roles and responsibilities of ICANN and the RALO regarding the process for selecting ALAC members and requirements of openness, participatory opportunities, transparency, accountability, and diversity in the RALO’s structure and procedures, as well as criteria and standards for the RALO’s constituent At-Large Structures.

h. Each RALO shall be comprised of self-supporting At-Large Structures within its Geographic Region that have been certified to meet the requirements of the RALO’s Memorandum of Understanding with ICANN according to paragraph 4(i) of this Section. If so provided by its Memorandum of Understanding with ICANN, a RALO may also include individual Internet users who are citizens or residents of countries within the RALO’s Geographic Region.

i. Membership in the At-Large Community

1. The criteria and standards for the certification of At-Large Structures within
each Geographic Region shall be established by the Board based on recommendations from the ALAC and shall be stated in the Memorandum of Understanding between ICANN and the RALO for each Geographic Region.

2. The criteria and standards for the certification of At-Large Structures shall be established in such a way that participation by individual Internet users who are citizens or residents of countries within the Geographic Region (as defined in Section 5 of Article VI) of the RALO will predominate in the operation of each At-Large Structure within the RALO, while not necessarily excluding additional participation, compatible with the interests of the individual Internet users within the region, by others.

3. Each RALO's Memorandum of Understanding shall also include provisions designed to allow, to the greatest extent possible, every individual Internet user who is a citizen of a country within the RALO's Geographic Region to participate in at least one of the RALO's At-Large Structures.

4. To the extent compatible with these objectives, the criteria and standards should also afford to each RALO the type of structure that best fits the customs and character of its Geographic Region.

5. Once the criteria and standards have been established as provided in this Clause i, the ALAC, with the advice and participation of the RALO where the applicant is based, shall be responsible for certifying organizations as meeting the criteria and standards for At-Large Structure accreditation.

6. Decisions to certify or decertify an At-Large Structure shall be made as decided by the ALAC in its Rules of Procedure, save always that any changes made to the Rules of Procedure in respect of ALS applications shall be subject to review by the RALOs and by the ICANN Board.
7. Decisions as to whether to accredit, not to accredit, or disaccredit an At-Large Structure shall be subject to review according to procedures established by the Board.

8. On an ongoing basis, the ALAC may also give advice as to whether a prospective At-Large Structure meets the applicable criteria and standards.

j. The ALAC is also responsible, working in conjunction with the RALOs, for coordinating the following activities:

1. Making a selection by the At-Large Community to fill Seat 15 on the Board. Notification of the At-Large Community’s selection shall be given by the ALAC Chair in writing to the ICANN Secretary, consistent with Article VI, Sections 8 (4) and 12(1).

2. Keeping the community of individual Internet users informed about the significant news from ICANN;

3. Distributing (through posting or otherwise) an updated agenda, news about ICANN, and information about items in the ICANN policy-development process;

4. Promoting outreach activities in the community of individual Internet users;

5. Developing and maintaining ongoing information and education programs, regarding ICANN and its work;

6. Establishing an outreach strategy about ICANN issues in each RALO’s Region;

7. Participating in the ICANN policy development processes and providing input and advice that accurately reflects the views of individual Internet users;
8. Making public, and analyzing, ICANN's proposed policies and its decisions and their (potential) regional impact and (potential) effect on individuals in the region;

9. Offering Internet-based mechanisms that enable discussions among members of At-Large structures; and

10. Establishing mechanisms and processes that enable two-way communication between members of At-Large Structures and those involved in ICANN decision-making, so interested individuals can share their views on pending ICANN issues.

Section 3. PROCEDURES

Each Advisory Committee shall determine its own rules of procedure and quorum requirements.

Section 4. TERM OF OFFICE

The chair and each member of a committee shall serve until his or her successor is appointed, or until such committee is sooner terminated, or until he or she is removed, resigns, or otherwise ceases to qualify as a member of the committee.

Section 5. VACANCIES

Vacancies on any committee shall be filled in the same manner as provided in the case of original appointments.

Section 6. COMPENSATION

Committee members shall receive no compensation for their services as a member of a committee. The Board may, however, authorize the reimbursement of actual and necessary expenses incurred by committee members, including Directors, performing their duties as committee members.

ARTICLE XI-A: OTHER ADVISORY MECHANISMS

Section 1. EXTERNAL EXPERT ADVICE

1. Purpose. The purpose of seeking external expert advice is to allow the policy-development process within ICANN to take advantage of existing expertise that resides in the
public or private sector but outside of ICANN. In those cases where there are relevant public bodies with expertise, or where access to private expertise could be helpful, the Board and constituent bodies should be encouraged to seek advice from such expert bodies or individuals.

2. Types of Expert Advisory Panels.

   a. On its own initiative or at the suggestion of any ICANN body, the Board may appoint, or authorize the President to appoint, Expert Advisory Panels consisting of public or private sector individuals or entities. If the advice sought from such Panels concerns issues of public policy, the provisions of Section 1(3)(b) of this Article shall apply.

   b. In addition, in accordance with Section 1(3) of this Article, the Board may refer issues of public policy pertinent to matters within ICANN's mission to a multinational governmental or treaty organization.


   a. The Governmental Advisory Committee may at any time recommend that the Board seek advice concerning one or more issues of public policy from an external source, as set out above.

   b. In the event that the Board determines, upon such a recommendation or otherwise, that external advice should be sought concerning one or more issues of public policy, the Board shall, as appropriate, consult with the Governmental Advisory Committee regarding the appropriate source from which to seek the advice and the arrangements, including definition of scope and process, for requesting and obtaining that advice.

   c. The Board shall, as appropriate, transmit any request for advice from a multinational governmental or treaty organization, including specific terms of reference, to the Governmental Advisory Committee, with the suggestion that the request be transmitted by the Governmental Advisory Committee to the multinational governmental or treaty organization.
4. Process for Seeking and Advice-Other Matters. Any reference of issues not concerning public policy to an Expert Advisory Panel by the Board or President in accordance with Section 1(2)(a) of this Article shall be made pursuant to terms of reference describing the issues on which input and advice is sought and the procedures and schedule to be followed.

5. Receipt of Expert Advice and its Effect. External advice pursuant to this Section shall be provided in written form. Such advice is advisory and not binding, and is intended to augment the information available to the Board or other ICANN body in carrying out its responsibilities.

6. Opportunity to Comment. The Governmental Advisory Committee, in addition to the Supporting Organizations and other Advisory Committees, shall have an opportunity to comment upon any external advice received prior to any decision by the Board.

Section 2. TECHNICAL LIAISON GROUP

1. Purpose. The quality of ICANN's work depends on access to complete and authoritative information concerning the technical standards that underlie ICANN's activities. ICANN's relationship to the organizations that produce these standards is therefore particularly important. The Technical Liaison Group (TLG) shall connect the Board with appropriate sources of technical advice on specific matters pertinent to ICANN's activities.

2. TLG Organizations. The TLG shall consist of four organizations: the European Telecommunications Standards Institute (ETSI), the International Telecommunications Union's Telecommunication Standardization Sector (ITU-T), the World Wide Web Consortium (W3C), and the Internet Architecture Board (IAB).

3. Role. The role of the TLG organizations shall be to channel technical information and guidance to the Board and to other ICANN entities. This role has both a responsive component and an active "watchdog" component, which involve the following responsibilities:

   a. In response to a request for information, to connect the Board or other ICANN body with appropriate sources of technical expertise. This component of the TLG role covers circumstances in which ICANN seeks an authoritative answer to a specific technical
question. Where information is requested regarding a particular technical standard for which a TLG organization is responsible, that request shall be directed to that TLG organization.

b. As an ongoing "watchdog" activity, to advise the Board of the relevance and progress of technical developments in the areas covered by each organization's scope that could affect Board decisions or other ICANN actions, and to draw attention to global technical standards issues that affect policy development within the scope of ICANN's mission. This component of the TLG role covers circumstances in which ICANN is unaware of a new development, and would therefore otherwise not realize that a question should be asked.

4. TLG Procedures. The TLG shall not have officers or hold meetings, nor shall it provide policy advice to the Board as a committee (although TLG organizations may individually be asked by the Board to do so as the need arises in areas relevant to their individual charters). Neither shall the TLG debate or otherwise coordinate technical issues across the TLG organizations; establish or attempt to establish unified positions; or create or attempt to create additional layers or structures within the TLG for the development of technical standards or for any other purpose.

5. Technical Work with the IETF. The TLG shall have no involvement with the ICANN's work for the Internet Engineering Task Force (IETF), Internet Research Task Force, or the Internet Architecture Board (IAB), as described in the IETF-ICANN Memorandum of Understanding Concerning the Technical Work of the Internet Assigned Numbers Authority ratified by the Board on 10 March 2000.

6. Individual Technical Experts. Each TLG organization shall designate two individual technical experts who are familiar with the technical standards issues that are relevant to ICANN's activities. These 8 experts shall be available as necessary to determine, through an exchange of e-mail messages, where to direct a technical question from ICANN when ICANN does not ask a specific TLG organization directly.

ARTICLE XII: BOARD AND TEMPORARY COMMITTEES
Section 1. BOARD COMMITTEES

The Board may establish one or more committees of the Board, which shall continue to exist until otherwise determined by the Board. Only Directors may be appointed to a Committee of the Board. If a person appointed to a Committee of the Board ceases to be a Director, such person shall also cease to be a member of any Committee of the Board. Each Committee of the Board shall consist of two or more Directors. The Board may designate one or more Directors as alternate members of any such committee, who may replace any absent member at any meeting of the committee. Committee members may be removed from a committee at any time by a two-thirds (2/3) majority vote of all members of the Board; provided, however, that any Director or Directors which are the subject of the removal action shall not be entitled to vote on such an action or be counted as a member of the Board when calculating the required two-thirds (2/3) vote; and, provided further, however, that in no event shall a Director be removed from a committee unless such removal is approved by not less than a majority of all members of the Board.

Section 2. POWERS OF BOARD COMMITTEES

1. The Board may delegate to Committees of the Board all legal authority of the Board except with respect to:

   a. The filing of vacancies on the Board or on any committee;

   b. The amendment or repeal of Bylaws or the Articles of Incorporation or the adoption of new Bylaws or Articles of Incorporation;

   c. The amendment or repeal of any resolution of the Board which by its express terms is not so amendable or repealable;

   d. The appointment of committees of the Board or the members thereof;

   e. The approval of any self-dealing transaction, as such transactions are defined in Section 5233(a) of the CNPBCL;

   f. The approval of the annual budget required by Article XVI; or

   g. The compensation of any officer described in Article XIII.

2. The Board shall have the power to prescribe the manner in which proceedings of any Committee of the Board shall
be conducted. In the absence of any such prescription, such committee shall have the power to prescribe the manner in which its proceedings shall be conducted. Unless these Bylaws, the Board or such committee shall otherwise provide, the regular and special meetings shall be governed by the provisions of Article VI applicable to meetings and actions of the Board. Each committee shall keep regular minutes of its proceedings and shall report the same to the Board from time to time, as the Board may require.

Section 3. TEMPORARY COMMITTEES

The Board may establish such temporary committees as it sees fit, with membership, duties, and responsibilities as set forth in the resolutions or charters adopted by the Board in establishing such committees.

ARTICLE XIII: OFFICERS

Section 1. OFFICERS

The officers of ICANN shall be a President (who shall serve as Chief Executive Officer), a Secretary, and a Chief Financial Officer. ICANN may also have, at the discretion of the Board, any additional officers that it deems appropriate. Any person, other than the President, may hold more than one office, except that no member of the Board (other than the President) shall simultaneously serve as an officer of ICANN.

Section 2. ELECTION OF OFFICERS

The officers of ICANN shall be elected annually by the Board, pursuant to the recommendation of the President or, in the case of the President, of the Chairman of the ICANN Board. Each such officer shall hold his or her office until he or she resigns, is removed, is otherwise disqualified to serve, or his or her successor is elected.

Section 3. REMOVAL OF OFFICERS

Any Officer may be removed, either with or without cause, by a two-thirds (2/3) majority vote of all the members of the Board. Should any vacancy occur in any office as a result of death, resignation, removal, disqualification, or any other cause, the Board may delegate the powers and duties of such office to any Officer or to any Director until such time as a successor for the office has been elected.

Section 4. PRESIDENT

The President shall be the Chief Executive Officer (CEO) of ICANN in charge of all of its activities and business. All other officers and staff shall report to the President or his or her delegate, unless stated
otherwise in these Bylaws. The President shall serve as an ex officio member of the Board, and shall have all the same rights and privileges of any Board member. The President shall be empowered to call special meetings of the Board as set forth herein, and shall discharge all other duties as may be required by these Bylaws and from time to time may be assigned by the Board.

Section 5. SECRETARY

The Secretary shall keep or cause to be kept the minutes of the Board in one or more books provided for that purpose, shall see that all notices are duly given in accordance with the provisions of these Bylaws or as required by law, and in general shall perform all duties as from time to time may be prescribed by the President or the Board.

Section 6. CHIEF FINANCIAL OFFICER

The Chief Financial Officer ("CFO") shall be the chief financial officer of ICANN. If required by the Board, the CFO shall give a bond for the faithful discharge of his or her duties in such form and with such surety or sureties as the Board shall determine. The CFO shall have charge and custody of all the funds of ICANN and shall keep or cause to be kept, in books belonging to ICANN, full and accurate amounts of all receipts and disbursements, and shall deposit all money and other valuable effects in the name of ICANN in such depositories as may be designated for that purpose by the Board. The CFO shall disburse the funds of ICANN as may be ordered by the Board or the President and, whenever requested by them, shall deliver to the Board and the President an account of all his or her transactions as CFO and of the financial condition of ICANN. The CFO shall be responsible for ICANN's financial planning and forecasting and shall assist the President in the preparation of ICANN's annual budget. The CFO shall coordinate and oversee ICANN's funding, including any audits or other reviews of ICANN or its Supporting Organizations. The CFO shall be responsible for all other matters relating to the financial operation of ICANN.

Section 7. ADDITIONAL OFFICERS

In addition to the officers described above, any additional or assistant officers who are elected or appointed by the Board shall perform such duties as may be assigned to them by the President or the Board.

Section 8. COMPENSATION AND EXPENSES

The compensation of any Officer of ICANN shall be approved by the Board. Expenses incurred in connection with performance of their officer duties may be reimbursed to Officers upon approval of the President (in the case of Officers other than the President), by another Officer designated by the Board (in the case of the President), or the Board.
Section 9. CONFLICTS OF INTEREST

The Board, through the Board Governance Committee, shall establish a policy requiring a statement from each Officer not less frequently than once a year setting forth all business and other affiliations that relate in any way to the business and other affiliations of ICANN.

ARTICLE XIV: INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES, AND OTHER AGENTS

ICANN shall, to maximum extent permitted by the CNP, indemnify each of its agents against expenses, judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding arising by reason of the fact that any such person is or was an agent of ICANN, provided that the indemnified person's acts were done in good faith and in a manner that the indemnified person reasonably believed to be in ICANN's best interests and not criminal. For purposes of this Article, an "agent" of ICANN includes any person who is or was a Director, Officer, employee, or any other agent of ICANN (including a member of any Supporting Organization, any Advisory Committee, the Nominating Committee, any other ICANN committee, or the Technical Liaison Group) acting within the scope of his or her responsibility; or is or was serving at the request of ICANN as a Director, Officer, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise. The Board may adopt a resolution authorizing the purchase and maintenance of insurance on behalf of any agent of ICANN against any liability asserted against or incurred by the agent in such capacity or arising out of the agent's status as such, whether or not ICANN would have the power to indemnify the agent against that liability under the provisions of this Article.

ARTICLE XV: GENERAL PROVISIONS

Section 1. CONTRACTS

The Board may authorize any Officer or Officers, agent or agents, to enter into any contract or execute or deliver any instrument in the name of and on behalf of ICANN, and such authority may be general or confined to specific instances. In the absence of a contrary Board authorization, contracts and instruments may only be executed by the following Officers: President, any Vice President, or the CFO. Unless authorized or ratified by the Board, no other Officer, agent, or employee shall have any power or authority to bind ICANN or to render it liable for any debts or obligations.

Section 2. DEPOSITS

All funds of ICANN not otherwise employed shall be deposited from time to time to the credit of ICANN in such banks, trust companies, or
other depositories as the Board, or the President under its delegation, may select.

Section 3. CHECKS

All checks, drafts, or other orders for the payment of money, notes, or other evidences of indebtedness issued in the name of ICANN shall be signed by such Officer or Officers, agent or agents, of ICANN and in such a manner as shall from time to time be determined by resolution of the Board.

Section 4. LOANS

No loans shall be made by or to ICANN and no evidences of indebtedness shall be issued in its name unless authorized by a resolution of the Board. Such authority may be general or confined to specific instances; provided, however, that no loans shall be made by ICANN to its Directors or Officers.

ARTICLE XVI: FISCAL MATTERS

Section 1. ACCOUNTING

The fiscal year end of ICANN shall be determined by the Board.

Section 2. AUDIT

At the end of the fiscal year, the books of ICANN shall be closed and audited by certified public accountants. The appointment of the fiscal auditors shall be the responsibility of the Board.

Section 3. ANNUAL REPORT AND ANNUAL STATEMENT

The Board shall publish, at least annually, a report describing its activities, including an audited financial statement and a description of any payments made by ICANN to Directors (including reimbursements of expenses). ICANN shall cause the annual report and the annual statement of certain transactions as required by the CNP BCL to be prepared and sent to each member of the Board and to such other persons as the Board may designate, no later than one hundred twenty (120) days after the close of ICANN's fiscal year.

Section 4. ANNUAL BUDGET

At least forty-five (45) days prior to the commencement of each fiscal year, the President shall prepare and submit to the Board, a proposed annual budget of ICANN for the next fiscal year, which shall be posted on the Website. The proposed budget shall identify anticipated revenue sources and levels and shall, to the extent practical, identify anticipated material expense items by line item. The Board shall adopt an annual budget and shall publish the adopted Budget on the Website.
Section 5. FEES AND CHARGES

The Board may set fees and charges for the services and benefits provided by ICANN, with the goal of fully recovering the reasonable costs of the operation of ICANN and establishing reasonable reserves for future expenses and contingencies reasonably related to the legitimate activities of ICANN. Such fees and charges shall be fair and equitable, shall be published for public comment prior to adoption, and once adopted shall be published on the Website in a sufficiently detailed manner so as to be readily accessible.

ARTICLE XVII: MEMBERS

ICANN shall not have members, as defined in the California Nonprofit Public Benefit Corporation Law (“CNPBCL”), notwithstanding the use of the term "Member" in these Bylaws, in any ICANN document, or in any action of the ICANN Board or staff.

ARTICLE XVIII: OFFICES AND SEAL

Section 1. OFFICES

The principal office for the transaction of the business of ICANN shall be in the County of Los Angeles, State of California, United States of America. ICANN may also have an additional office or offices within or outside the United States of America as it may from time to time establish.

Section 2. SEAL

The Board may adopt a corporate seal and use the same by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE XIX: AMENDMENTS

Except as otherwise provided in the Articles of Incorporation or these Bylaws, the Articles of Incorporation or Bylaws of ICANN may be altered, amended, or repealed and new Articles of Incorporation or Bylaws adopted only upon action by a two-thirds (2/3) vote of all members of the Board.

ARTICLE XX: TRANSITION ARTICLE

Section 1. PURPOSE

This Transition Article sets forth the provisions for the transition from the processes and structures defined by the ICANN Bylaws, as amended and restated on 29 October 1999 and amended through 12 February 2002 (the "Old Bylaws"), to the processes and structures defined by the Bylaws of which this Article is a part (the "New
Section 2. BOARD OF DIRECTORS

1. For the period beginning on the adoption of this Transition Article and ending on the Effective Date and Time of the New Board, as defined in paragraph 5 of this Section 2, the Board of Directors of the Corporation ("Transition Board") shall consist of the members of the Board who would have been Directors under the Old Bylaws immediately after the conclusion of the annual meeting in 2002, except that those At-Large members of the Board under the Old Bylaws who elect to do so by notifying the Secretary of the Board on 15 December 2002 or in writing or by e-mail no later than 23 December 2002 shall also serve as members of the Transition Board. Notwithstanding the provisions of Article VI, Section 12 of the New Bylaws, vacancies on the Transition Board shall not be filled. The Transition Board shall not have liaisons as provided by Article VI, Section 9 of the New Bylaws. The Board Committees existing on the date of adoption of this Transition Article shall continue in existence, subject to any change in Board Committees or their membership that the Transition Board may adopt by resolution.

2. The Transition Board shall elect a Chair and Vice-Chair to serve until the Effective Date and Time of the New Board.

3. The "New Board" is that Board described in Article VI, Section 2(1) of the New Bylaws.

4. Promptly after the adoption of this Transition Article, a Nominating Committee shall be formed including, to the extent feasible, the delegates and liaisons described in Article VII, Section 2 of the New Bylaws, with terms to end at the conclusion of the ICANN annual meeting in 2003. The Nominating Committee shall proceed without delay to select Directors to fill Seats 1 through 8 on the New Board, with terms to conclude upon the commencement of the first regular terms specified for those Seats in Article VI, Section 8(1)(a)-(c) of the New Bylaws, and shall give the ICANN Secretary written notice of that selection.

5. The Effective Date and Time of the New Board shall be a time, as designated by the Transition Board, during the first regular meeting of ICANN in 2003 that begins not less than seven calendar days after the ICANN Secretary has received written notice of the selection of Directors to fill at
least ten of Seats 1 through 14 on the New Board. As of the Effective Date and Time of the New Board, it shall assume from the Transition Board all the rights, duties, and obligations of the ICANN Board of Directors. Subject to Section 4 of this Article, the Directors (Article VI, Section 2 (1)(a)-(d)) and non-voting liaisons (Article VI, Section 9) as to which the ICANN Secretary has received notice of selection shall, along with the President (Article VI, Section 2(1)(e)), be seated upon the Effective Date and Time of the New Board, and thereafter any additional Directors and non-voting liaisons shall be seated upon the ICANN Secretary's receipt of notice of their selection.

6. The New Board shall elect a Chairman and Vice-Chairman as its first order of business. The terms of those Board offices shall expire at the end of the annual meeting in 2003.

7. Committees of the Board in existence as of the Effective Date and Time of the New Board shall continue in existence according to their existing charters, but the terms of all members of those committees shall conclude at the Effective Date and Time of the New Board. Temporary committees in existence as of the Effective Date and Time of the New Board shall continue in existence with their existing charters and membership, subject to any change the New Board may adopt by resolution.

8. In applying the term-limitation provision of Section 8(5) of Article VI, a Director's service on the Board before the Effective Date and Time of the New Board shall count as one term.

Section 3. ADDRESS SUPPORTING ORGANIZATION

The Address Supporting Organization shall continue in operation according to the provisions of the Memorandum of Understanding originally entered on 18 October 1999 between ICANN and a group of regional Internet registries (RIRs), and amended in October 2000, until a replacement Memorandum of Understanding becomes effective. Promptly after the adoption of this Transition Article, the Address Supporting Organization shall make selections, and give the ICANN Secretary written notice of those selections, of:

1. Directors to fill Seats 9 and 10 on the New Board, with terms to conclude upon the commencement of the first regular terms specified for each of those Seats in Article VI, Section 8(1)(d) and (e) of the New Bylaws; and
2. the delegate to the Nominating Committee selected by the Council of the Address Supporting Organization, as called for in Article VII, Section 2(8)(f) of the New Bylaws.

With respect to the ICANN Directors that it is entitled to select, and taking into account the need for rapid selection to ensure that the New Board becomes effective as soon as possible, the Address Supporting Organization may select those Directors from among the persons it previously selected as ICANN Directors pursuant to the Old Bylaws. To the extent the Address Supporting Organization does not provide the ICANN Secretary written notice, on or before 31 March 2003, of its selections for Seat 9 and Seat 10, the Address Supporting Organization shall be deemed to have selected for Seat 9 the person it selected as an ICANN Director pursuant to the Old Bylaws for a term beginning in 2001 and for Seat 10 the person it selected as an ICANN Director pursuant to the Old Bylaws for a term beginning in 2002.

Section 4. COUNTRY-CODE NAMES SUPPORTING ORGANIZATION

1. Upon the enrollment of thirty ccTLD managers (with at least four within each Geographic Region) as members of the ccNSO, written notice shall be posted on the Website. As soon as feasible after that notice, the members of the initial ccNSO Council to be selected by the ccNSO members shall be selected according to the procedures stated in Article IX, Section 4(8) and (9). Upon the completion of that selection process, a written notice that the ccNSO Council has been constituted shall be posted on the Website. Three ccNSO Council members shall be selected by the ccNSO members within each Geographic Region, with one member to serve a term that ends upon the conclusion of the first ICANN annual meeting after the ccNSO Council is constituted, a second member to serve a term that ends upon the conclusion of the second ICANN annual meeting after the ccNSO Council is constituted, and the third member to serve a term that ends upon the conclusion of the third ICANN annual meeting after the ccNSO Council is constituted. (The definition of “ccTLD manager” stated in Article IX, Section 4(1) and the definitions stated in Article IX, Section 4(4) shall apply within this Section 4 of Article XX.)

2. After the adoption of Article IX of these Bylaws, the Nominating Committee shall select the three members of the ccNSO Council described in Article IX, Section 3(1)(b). In selecting three individuals to serve on the ccNSO Council, the Nominating Committee shall designate one to serve a term that ends upon the conclusion of the first ICANN annual meeting after the ccNSO Council is constituted, a second member to serve a term that ends
upon the conclusion of the second ICANN annual meeting after the ccNSO Council is constituted, and the third member to serve a term that ends upon the conclusion of the third ICANN annual meeting after the ccNSO Council is constituted. The three members of the ccNSO Council selected by the Nominating Committee shall not take their seats before the ccNSO Council is constituted.

3. Upon the ccNSO Council being constituted, the At-Large Advisory Committee and the Governmental Advisory Committee may designate one liaison each to the ccNSO Council, as provided by Article IX, Section 3(2)(a) and (b).

4. Upon the ccNSO Council being constituted, the Council may designate Regional Organizations as provided in Article IX, Section 5. Upon its designation, a Regional Organization may appoint a liaison to the ccNSO Council.

5. Until the ccNSO Council is constituted, Seats 11 and 12 on the New Board shall remain vacant. Promptly after the ccNSO Council is constituted, the ccNSO shall, through the ccNSO Council, make selections of Directors to fill Seats 11 and 12 on the New Board, with terms to conclude upon the commencement of the next regular term specified for each of those Seats in Article VI, Section 8(1)(d) and (f) of the New Bylaws, and shall give the ICANN Secretary written notice of its selections.

6. Until the ccNSO Council is constituted, the delegate to the Nominating Committee established by the New Bylaws designated to be selected by the ccNSO shall be appointed by the Transition Board or New Board, depending on which is in existence at the time any particular appointment is required, after due consultation with members of the ccTLD community. Upon the ccNSO Council being constituted, the delegate to the Nominating Committee appointed by the Transition Board or New Board according to this Section 4 (9) then serving shall remain in office, except that the ccNSO Council may replace that delegate with one of its choosing within three months after the conclusion of ICANN's annual meeting, or in the event of a vacancy. Subsequent appointments of the Nominating Committee delegate described in Article VII, Section 2(8)(c) shall be made by the ccNSO Council.

Section 5. GENERIC NAMES SUPPORTING ORGANIZATION

1. The Generic Names Supporting Organization ("GNSO"), upon the adoption of this Transition Article, shall continue its operations; however, it shall be restructured into four new Stakeholder Groups which shall represent,
organizationally, the former Constituencies of the GNSO, subject to ICANN Board approval of each individual Stakeholder Group Charter:

a. The gTLD Registries Constituency shall be assigned to the Registries Stakeholder Group;

b. The Registrars Constituency shall be assigned to the Registrars Stakeholder Group;

c. The Business Constituency shall be assigned to the Commercial Stakeholder Group;

d. The Intellectual Property Constituency shall be assigned to the Commercial Stakeholder Group;

e. The Internet Services Providers Constituency shall be assigned to the Commercial Stakeholder Group; and

f. The Non-Commercial Users Constituency shall be assigned to the Non-Commercial Stakeholder Group.

2. Each GNSO Constituency described in paragraph 1 of this subsection shall continue operating substantially as before and no Constituency official, working group, or other activity shall be changed until further action of the Constituency, provided that each GNSO Constituency described in paragraph 1 (c-f) shall submit to the ICANN Secretary a new or revised Charter inclusive of its operating procedures, adopted according to the Constituency’s processes and consistent with these Bylaws Amendments, no later than the ICANN meeting in October 2009, or another date as the Board may designate by resolution.

3. Prior to the commencement of the ICANN meeting in October 2009, or another date the Board may designate by resolution, the GNSO Council shall consist of its current Constituency structure and officers as described in Article X, Section 3(1) of the Bylaws (as amended and restated on 29 October 1999 and amended through 20 March 2009 (the “Old Bylaws”)). Thereafter, the composition of the GNSO Council shall be as provided in these Bylaws, as they may be amended from time to time. All committees, task forces, working groups, drafting committees, and similar groups established by the GNSO Council and in existence immediately before the adoption of this Transition Article shall continue in existence with the same charters,
membership, and activities, subject to any change by action of the GNSO Council or ICANN Board.

4. Beginning with the commencement of the ICANN Meeting in October 2009, or another date the Board may designate by resolution (the "Effective Date of the Transition"), the GNSO Council seats shall be assigned as follows:

   a. The three seats currently assigned to the Registry Constituency shall be reassigned as three seats of the Registries Stakeholder Group;

   b. The three seats currently assigned to the Registrar Constituency shall be reassigned as three seats of the Registrars Stakeholder Group;

   c. The three seats currently assigned to each of the Business Constituency, the Intellectual Property Constituency, and the Internet Services Provider Constituency (nine total) shall be decreased to be six seats of the Commercial Stakeholder Group;

   d. The three seats currently assigned to the Non-Commercial Users Constituency shall be increased to be six seats of the Non-Commercial Stakeholder Group;

   e. The three seats currently selected by the Nominating Committee shall be assigned by the Nominating Committee as follows: one voting member to the Contracted Party House, one voting member to the Non-Contracted Party House, and one non-voting member assigned to the GNSO Council at large.

Representatives on the GNSO Council shall be appointed or elected consistent with the provisions in each applicable Stakeholder Group Charter, approved by the Board, and sufficiently in advance of the October 2009 ICANN Meeting that will permit those representatives to act in their official capacities at the start of said meeting.

5. The GNSO Council, as part of its Restructure Implementation Plan, will document: (a) how vacancies, if any, will be handled during the transition period; (b) for each Stakeholder Group, how each assigned Council seat to take effect at the 2009 ICANN annual meeting will be
filled, whether through a continuation of an existing term or a new election or appointment; (c) how it plans to address staggered terms such that the new GNSO Council preserves as much continuity as reasonably possible; and (d) the effect of Bylaws term limits on each Council member.

6. As soon as practical after the commencement of the ICANN meeting in October 2009, or another date the Board may designate by resolution, the GNSO Council shall, in accordance with Article X, Section 3(7) and its GNSO Operating Procedures, elect officers and give the ICANN Secretary written notice of its selections.

Section 6. PROTOCOL SUPPORTING ORGANIZATION

The Protocol Supporting Organization referred to in the Old Bylaws is discontinued.

Section 7. ADVISORY COMMITTEES AND TECHNICAL LIAISON GROUP

1. Upon the adoption of the New Bylaws, the Governmental Advisory Committee shall continue in operation according to its existing operating principles and practices, until further action of the committee. The Governmental Advisory Committee may designate liaisons to serve with other ICANN bodies as contemplated by the New Bylaws by providing written notice to the ICANN Secretary. Promptly upon the adoption of this Transition Article, the Governmental Advisory Committee shall notify the ICANN Secretary of the person selected as its delegate to the Nominating Committee, as set forth in Article VII, Section 2 of the New Bylaws.

2. The organizations designated as members of the Technical Liaison Group under Article XI-A, Section 2(2) of the New Bylaws shall each designate the two individual technical experts described in Article XI-A, Section 2(6) of the New Bylaws, by providing written notice to the ICANN Secretary. As soon as feasible, the delegate from the Technical Liaison Group to the Nominating Committee shall be selected according to Article XI-A, Section 2(7) of the New Bylaws.

3. Upon the adoption of the New Bylaws, the Security and Stability Advisory Committee shall continue in operation according to its existing operating principles and practices, until further action of the committee. Promptly upon the adoption of this Transition Article, the Security and Stability Advisory Committee shall notify the ICANN Secretary of the
person selected as its delegate to the Nominating Committee, as set forth in Article VII, Section 2(4) of the New Bylaws.

4. Upon the adoption of the New Bylaws, the Root Server System Advisory Committee shall continue in operation according to its existing operating principles and practices, until further action of the committee. Promptly upon the adoption of this Transition Article, the Root Server Advisory Committee shall notify the ICANN Secretary of the person selected as its delegate to the Nominating Committee, as set forth in Article VII, Section 2(3) of the New Bylaws.

5. At-Large Advisory Committee

a. There shall exist an Interim At-Large Advisory Committee until such time as ICANN recognizes, through the entry of a Memorandum of Understanding, all of the Regional At-Large Organizations (RALOs) identified in Article XI, Section 2(4) of the New Bylaws. The Interim At-Large Advisory Committee shall be composed of (i) ten individuals (two from each ICANN region) selected by the ICANN Board following nominations by the At-Large Organizing Committee and (ii) five additional individuals (one from each ICANN region) selected by the initial Nominating Committee as soon as feasible in accordance with the principles established in Article VII, Section 5 of the New Bylaws. The initial Nominating Committee shall designate two of these individuals to serve terms until the conclusion of the ICANN annual meeting in 2004 and three of these individuals to serve terms until the conclusion of the ICANN annual meeting in 2005.

b. Upon the entry of each RALO into such a Memorandum of Understanding, that entity shall be entitled to select two persons who are citizens and residents of that Region to be members of the At-Large Advisory Committee established by Article XI, Section 2(4) of the New Bylaws. Upon the entity’s written notification to the ICANN Secretary of such selections, those persons shall immediately assume the seats held until that notification by the Interim At-Large Advisory Committee members previously selected by the Board from the RALO’s region.
c. Upon the seating of persons selected by all five RALOs, the Interim At-Large Advisory Committee shall become the At-Large Advisory Committee, as established by Article XI, Section 2(4) of the New Bylaws. The five individuals selected to the Interim At-Large Advisory Committee by the Nominating Committee shall become members of the At-Large Advisory Committee for the remainder of the terms for which they were selected.

d. Promptly upon its creation, the Interim At-Large Advisory Committee shall notify the ICANN Secretary of the persons selected as its delegates to the Nominating Committee, as set forth in Article VII, Section 2(6) of the New Bylaws.

Section 8. OFFICERS

ICANN officers (as defined in Article XIII of the New Bylaws) shall be elected by the then-existing Board of ICANN at the annual meeting in 2002 to serve until the annual meeting in 2003.

Section 9. GROUPS APPOINTED BY THE PRESIDENT

Notwithstanding the adoption or effectiveness of the New Bylaws, task forces and other groups appointed by the ICANN President shall continue unchanged in membership, scope, and operation until changes are made by the President.

Section 10. CONTRACTS WITH ICANN

Notwithstanding the adoption or effectiveness of the New Bylaws, all agreements, including employment and consulting agreements, entered by ICANN shall continue in effect according to their terms.

Annex A: GNSO Policy Development Process

The following process shall govern the GNSO policy development process ("PDP") until such time as modifications are recommended to and approved by the ICANN Board of Directors ("Board"). The role of the GNSO is outlined in Article X of these Bylaws. If the GNSO is conducting activities that are not intended to result in a Consensus Policy, the Council may act through other processes.

Section 1. Required Elements of a Policy Development Process

The following elements are required at a minimum to form Consensus Policies as defined within ICANN contracts, and any other policies for which the GNSO Council requests application of this Annex A:
a. Final Issue Report requested by the Board, the GNSO Council ("Council") or Advisory Committee, which should include at a minimum a) the proposed issue raised for consideration, b) the identity of the party submitting the issue, and c) how that party is affected by the issue;

b. Formal initiation of the Policy Development Process by the Council;

c. Formation of a Working Group or other designated work method;

d. Initial Report produced by a Working Group or other designated work method;

e. Final Report produced by a Working Group, or other designated work method, and forwarded to the Council for deliberation;

f. Council approval of PDP Recommendations contained in the Final Report, by the required thresholds;

g. PDP Recommendations and Final Report shall be forwarded to the Board through a Recommendations Report approved by the Council; and

h. Board approval of PDP Recommendations.


The GNSO shall maintain a Policy Development Process Manual (PDP Manual) within the operating procedures of the GNSO maintained by the GNSO Council. The PDP Manual shall contain specific additional guidance on completion of all elements of a PDP, including those elements that are not otherwise defined in these Bylaws. The PDP Manual and any amendments thereto are subject to a twenty-one (21) day public comment period at minimum, as well as Board oversight and review, as specified at Article X, Section 3.6.

Section 3. Requesting an Issue Report

Board Request. The Board may request an Issue Report by instructing the GNSO Council ("Council") to begin the process outlined the PDP Manual. In the event the Board makes a request for an Issue Report, the Board should provide a mechanism by which the GNSO Council can consult with the Board to provide information on the scope, timing, and priority of the request for an Issue Report.

Council Request. The GNSO Council may request an Issue Report by a vote of at least one-fourth (1/4) of the members of the Council of each House or a majority of one House.
Advisory Committee Request. An Advisory Committee may raise an issue for policy development by action of such committee to request an Issue Report, and transmission of that request to the Staff Manager and GNSO Council.

Section 4. Creation of an Issue Report

Within forty-five (45) calendar days after receipt of either (i) an instruction from the Board; (ii) a properly supported motion from the GNSO Council; or (iii) a properly supported motion from an Advisory Committee, the Staff Manager will create a report (a "Preliminary Issue Report"). In the event the Staff Manager determines that more time is necessary to create the Preliminary Issue Report, the Staff Manager may request an extension of time for completion of the Preliminary Issue Report.

The following elements should be considered in the Issue Report:

a) The proposed issue raised for consideration;

b) The identity of the party submitting the request for the Issue Report;

c) How that party is affected by the issue, if known;

d) Support for the issue to initiate the PDP, if known;

e) The opinion of the ICANN General Counsel regarding whether the issue proposed for consideration within the Policy Development Process is properly within the scope of the ICANN's mission, policy process and more specifically the role of the GNSO as set forth in the Bylaws.

f) The opinion of ICANN Staff as to whether the Council should initiate the PDP on the issue

Upon completion of the Preliminary Issue Report, the Preliminary Issue Report shall be posted on the ICANN website for a public comment period that complies with the designated practice for public comment periods within ICANN.

The Staff Manager is responsible for drafting a summary and analysis of the public comments received on the Preliminary Issue Report and producing a Final Issue Report based upon the comments received. The Staff Manager should forward the Final Issue Report, along with any summary and analysis of the public comments received, to the Chair of the GNSO Council for consideration for initiation of a PDP.

Section 5. Initiation of the PDP

The Council may initiate the PDP as follows:
**Board Request:** If the Board requested an Issue Report, the Council, within the timeframe set forth in the PDP Manual, shall initiate a PDP. No vote is required for such action.

**GNSO Council or Advisory Committee Requests:** The Council may only initiate the PDP by a vote of the Council. Initiation of a PDP requires a vote as set forth in Article X, Section 3, paragraph 9(b) and (c) in favor of initiating the PDP.

**Section 6. Reports**

An Initial Report should be delivered to the GNSO Council and posted for a public comment period that complies with the designated practice for public comment periods within ICANN, which time may be extended in accordance with the PDP Manual. Following the review of the comments received and, if required, additional deliberations, a Final Report shall be produced for transmission to the Council.

**Section 7. Council Deliberation**

Upon receipt of a Final Report, whether as the result of a working group or otherwise, the Council chair will (i) distribute the Final Report to all Council members; and (ii) call for Council deliberation on the matter in accordance with the PDP Manual.

The Council approval process is set forth in Article X, Section 3, paragraph 9(d) through (g), as supplemented by the PDP Manual.

**Section 8. Preparation of the Board Report**

If the PDP recommendations contained in the Final Report are approved by the GNSO Council, a Recommendations Report shall be approved by the GNSO Council for delivery to the ICANN Board.

**Section 9. Board Approval Processes**

The Board will meet to discuss the GNSO Council recommendation as soon as feasible, but preferably not later than the second meeting after receipt of the Board Report from the Staff Manager. Board deliberation on the PDP Recommendations contained within the Recommendations Report shall proceed as follows:

a. Any PDP Recommendations approved by a GNSO Supermajority Vote shall be adopted by the Board unless, by a vote of more than two-thirds (2/3) of the Board, the Board determines that such policy is not in the best interests of the ICANN community or ICANN. If the GNSO Council recommendation was approved by less than a GNSO Supermajority Vote, a majority vote of the Board will be sufficient to determine that such policy is not in the best interests of the ICANN community or ICANN.
b. In the event that the Board determines, in accordance with paragraph a above, that the policy recommended by a GNSO Supermajority Vote or less than a GNSO Supermajority vote is not in the best interests of the ICANN community or ICANN (the Corporation), the Board shall (i) articulate the reasons for its determination in a report to the Council (the "Board Statement"); and (ii) submit the Board Statement to the Council.

c. The Council shall review the Board Statement for discussion with the Board as soon as feasible after the Council's receipt of the Board Statement. The Board shall determine the method (e.g., by teleconference, e-mail, or otherwise) by which the Council and Board will discuss the Board Statement.

d. At the conclusion of the Council and Board discussions, the Council shall meet to affirm or modify its recommendation, and communicate that conclusion (the "Supplemental Recommendation") to the Board, including an explanation for the then-current recommendation. In the event that the Council is able to reach a GNSO Supermajority Vote on the Supplemental Recommendation, the Board shall adopt the recommendation unless more than two-thirds (2/3) of the Board determines that such policy is not in the interests of the ICANN community or ICANN. For any Supplemental Recommendation approved by less than a GNSO Supermajority Vote, a majority vote of the Board shall be sufficient to determine that the policy in the Supplemental Recommendation is not in the best interest of the ICANN community or ICANN.

Section 10. Implementation of Approved Policies

Upon a final decision of the Board adopting the policy, the Board shall, as appropriate, give authorization or direction to ICANN staff to work with the GNSO Council to create an implementation plan based upon the implementation recommendations identified in the Final Report, and to implement the policy. The GNSO Council may, but is not required to, direct the creation of an implementation review team to assist in implementation of the policy.

Section 11. Maintenance of Records

Throughout the PDP, from policy suggestion to a final decision by the Board, ICANN will maintain on the Website, a status web page detailing the progress of each PDP issue. Such status page will outline the completed and upcoming steps in the PDP process, and contain links to key resources (e.g. Reports, Comments Fora, WG Discussions, etc.).
Section 12. Additional Definitions

"Comment Site", "Comment Forum", "Comments For a" and "Website" refer to one or more websites designated by ICANN on which notifications and comments regarding the PDP will be posted.

"Supermajority Vote" means a vote of more than sixty-six (66) percent of the members present at a meeting of the applicable body, with the exception of the GNSO Council.

"Staff Manager" means an ICANN staff person(s) who manages the PDP.

"GNSO Supermajority Vote" shall have the meaning set forth in the Bylaws.

Section 13. Applicability

The procedures of this Annex A shall be applicable to all requests for Issue Reports and PDPs initiated after 8 December 2011. For all ongoing PDPs initiated prior to 8 December 2011, the Council shall determine the feasibility of transitioning to the procedures set forth in this Annex A for all remaining steps within the PDP. If the Council determines that any ongoing PDP cannot be feasibly transitioned to these updated procedures, the PDP shall be concluded according to the procedures set forth in Annex A in force on 7 December 2011.

Annex B: ccNSO Policy-Development Process (ccPDP)

The following process shall govern the ccNSO policy-development process ("PDP").

1. Request for an Issue Report

An Issue Report may be requested by any of the following:

a. Council. The ccNSO Council (in this Annex B, the "Council") may call for the creation of an Issue Report by an affirmative vote of at least seven of the members of the Council present at any meeting or voting by e-mail.

b. Board. The ICANN Board may call for the creation of an Issue Report by requesting the Council to begin the policy-development process.

c. Regional Organization. One or more of the Regional Organizations representing ccTLDs in the ICANN recognized Regions may call for creation of an Issue Report by requesting the Council to begin the policy-development process.
d. **ICANN Supporting Organization or Advisory Committee.** An ICANN Supporting Organization or an ICANN Advisory Committee may call for creation of an Issue Report by requesting the Council to begin the policy-development process.

e. **Members of the ccNSO.** The members of the ccNSO may call for the creation of an Issue Report by an affirmative vote of at least ten members of the ccNSO present at any meeting or voting by e-mail.

Any request for an Issue Report must be in writing and must set out the issue upon which an Issue Report is requested in sufficient detail to enable the Issue Report to be prepared. It shall be open to the Council to request further information or undertake further research or investigation for the purpose of determining whether or not the requested Issue Report should be created.

2. **Creation of the Issue Report and Initiation Threshold**

Within seven days after an affirmative vote as outlined in Item 1(a) above or the receipt of a request as outlined in Items 1 (b), (c), or (d) above the Council shall appoint an Issue Manager. The Issue Manager may be a staff member of ICANN (in which case the costs of the Issue Manager shall be borne by ICANN) or such other person or persons selected by the Council (in which case the ccNSO shall be responsible for the costs of the Issue Manager).

Within fifteen (15) calendar days after appointment (or such other time as the Council shall, in consultation with the Issue Manager, deem to be appropriate), the Issue Manager shall create an Issue Report. Each Issue Report shall contain at least the following:

- a. The proposed issue raised for consideration;
- b. The identity of the party submitting the issue;
- c. How that party is affected by the issue;
- d. Support for the issue to initiate the PDP;
- e. A recommendation from the Issue Manager as to whether the Council should move to initiate the PDP for this issue (the "Manager Recommendation"). Each Manager Recommendation shall include, and be supported by, an opinion of the ICANN General Counsel regarding whether the issue is properly within the scope of the ICANN policy process and within the scope of the ccNSO. In coming to his or her opinion, the General Counsel shall examine whether:
1) The issue is within the scope of ICANN's mission statement;

2) Analysis of the relevant factors according to Article IX, Section 6(2) and Annex C affirmatively demonstrates that the issue is within the scope of the ccNSO;

In the event that the General Counsel reaches an opinion in the affirmative with respect to points 1 and 2 above then the General Counsel shall also consider whether the issue:

3) Implicates or affects an existing ICANN policy;

4) Is likely to have lasting value or applicability, albeit with the need for occasional updates, and to establish a guide or framework for future decision-making.

In all events, consideration of revisions to the ccPDP (this Annex B) or to the scope of the ccNSO (Annex C) shall be within the scope of ICANN and the ccNSO.

In the event that General Counsel is of the opinion the issue is not properly within the scope of the ccNSO Scope, the Issue Manager shall inform the Council of this opinion. If after an analysis of the relevant factors according to Article IX, Section 6 and Annex C a majority of 10 or more Council members is of the opinion the issue is within scope the Chair of the ccNSO shall inform the Issue Manager accordingly. General Counsel and the ccNSO Council shall engage in a dialogue according to agreed rules and procedures to resolve the matter. In the event no agreement is reached between General Counsel and the Council as to whether the issue is within or outside Scope of the ccNSO then by a vote of 15 or more members the Council may decide the issue is within scope. The Chair of the ccNSO shall inform General Counsel and the Issue Manager accordingly. The Issue Manager shall then proceed with a recommendation whether or not the Council should move to initiate the PDP including both the opinion and analysis of General Counsel and Council in the Issues Report.

f. In the event that the Manager Recommendation is in favor of initiating the PDP, a proposed time line for conducting each of the stages of PDP outlined herein (PDP Time Line).
g. If possible, the issue report shall indicate whether the resulting output is likely to result in a policy to be approved by the ICANN Board. In some circumstances, it will not be possible to do this until substantive discussions on the issue have taken place. In these cases, the issue report should indicate this uncertainty. Upon completion of the Issue Report, the Issue Manager shall distribute it to the full Council for a vote on whether to initiate the PDP.

3. Initiation of PDP

The Council shall decide whether to initiate the PDP as follows:

a. Within 21 days after receipt of an Issue Report from the Issue Manager, the Council shall vote on whether to initiate the PDP. Such vote should be taken at a meeting held in any manner deemed appropriate by the Council, including in person or by conference call, but if a meeting is not feasible the vote may occur by e-mail.

b. A vote of ten or more Council members in favor of initiating the PDP shall be required to initiate the PDP provided that the Issue Report states that the issue is properly within the scope of the ICANN mission statement and the ccNSO Scope.

4. Decision Whether to Appoint Task Force; Establishment of Time Line

At the meeting of the Council where the PDP has been initiated (or, where the Council employs a vote by e-mail, in that vote) pursuant to Item 3 above, the Council shall decide, by a majority vote of members present at the meeting (or voting by e-mail), whether or not to appoint a task force to address the issue. If the Council votes:

a. In favor of convening a task force, it shall do so in accordance with Item 7 below.

b. Against convening a task force, then it shall collect information on the policy issue in accordance with Item 8 below.

The Council shall also, by a majority vote of members present at the meeting or voting by e-mail, approve or amend and approve the PDP Time Lineset out in the Issue Report.

5. Composition and Selection of Task Forces

a. Upon voting to appoint a task force, the Council shall invite each of the Regional Organizations (see Article IX, Section 6) to appoint two individuals to participate in the
task force (the "Representatives"). Additionally, the Council may appoint up to three advisors (the "Advisors") from outside the ccNSO and, following formal request for GAC participation in the Task Force, accept up to two Representatives from the Governmental Advisory Committee to sit on the task force. The Council may increase the number of Representatives that may sit on a task force in its discretion in circumstances that it deems necessary or appropriate.

b. Any Regional Organization wishing to appoint Representatives to the task force must provide the names of the Representatives to the Issue Manager within ten (10) calendar days after such request so that they are included on the task force. Such Representatives need not be members of the Council, but each must be an individual who has an interest, and ideally knowledge and expertise, in the subject matter, coupled with the ability to devote a substantial amount of time to the task force's activities.

c. The Council may also pursue other actions that it deems appropriate to assist in the PDP, including appointing a particular individual or organization to gather information on the issue or scheduling meetings for deliberation or briefing. All such information shall be submitted to the Issue Manager in accordance with the PDP Time Line.

6. Public Notification of Initiation of the PDP and Comment Period

After initiation of the PDP, ICANN shall post a notification of such action to the Website and to the other ICANN Supporting Organizations and Advisory Committees. A comment period (in accordance with the PDP Time Line, and ordinarily at least 21 days long) shall be commenced for the issue. Comments shall be accepted from ccTLD managers, other Supporting Organizations, Advisory Committees, and from the public. The Issue Manager, or some other designated Council representative shall review the comments and incorporate them into a report (the "Comment Report") to be included in either the Preliminary Task Force Report or the Initial Report, as applicable.

7. Task Forces

a. Role of Task Force. If a task force is created, its role shall be responsible for (i) gathering information documenting the positions of the ccNSO members within the Geographic Regions and other parties and groups; and (ii) otherwise obtaining relevant information that shall enable the Task Force Report to be as complete and informative as possible to facilitate the Council's meaningful and informed deliberation.
The task force shall not have any formal decision-making authority. Rather, the role of the task force shall be to gather information that shall document the positions of various parties or groups as specifically and comprehensively as possible, thereby enabling the Council to have a meaningful and informed deliberation on the issue.

b. Task Force Charter or Terms of Reference. The Council, with the assistance of the Issue Manager, shall develop a charter or terms of reference for the task force (the "Charter") within the time designated in the PDP Time Line. Such Charter shall include:

1. The issue to be addressed by the task force, as such issue was articulated for the vote before the Council that initiated the PDP;

2. The specific time line that the task force must adhere to, as set forth below, unless the Council determines that there is a compelling reason to extend the timeline; and

3. Any specific instructions from the Council for the task force, including whether or not the task force should solicit the advice of outside advisors on the issue.

The task force shall prepare its report and otherwise conduct its activities in accordance with the Charter. Any request to deviate from the Charter must be formally presented to the Council and may only be undertaken by the task force upon a vote of a majority of the Council members present at a meeting or voting by e-mail. The quorum requirements of Article IX, Section 3(14) shall apply to Council actions under this Item 7(b).

c. Appointment of Task Force Chair. The Issue Manager shall convene the first meeting of the task force within the time designated in the PDP Time Line. At the initial meeting, the task force members shall, among other things, vote to appoint a task force chair. The chair shall be responsible for organizing the activities of the task force, including compiling the Task Force Report. The chair of a task force need not be a member of the Council.

d. Collection of Information.

1. Regional Organization Statements. The Representatives shall each be responsible for soliciting the position of the Regional
Organization for their Geographic Region, at a minimum, and may solicit other comments, as each Representative deems appropriate, including the comments of the ccNSO members in that region that are not members of the Regional Organization, regarding the issue under consideration. The position of the Regional Organization and any other comments gathered by the Representatives should be submitted in a formal statement to the task force chair (each, a "Regional Statement") within the time designated in the PDP Time Line. Every Regional Statement shall include at least the following:

(i) If a Supermajority Vote (as defined by the Regional Organization) was reached, a clear statement of the Regional Organization's position on the issue;

(ii) If a Supermajority Vote was not reached, a clear statement of all positions espoused by the members of the Regional Organization;

(iii) A clear statement of how the Regional Organization arrived at its position(s). Specifically, the statement should detail specific meetings, teleconferences, or other means of deliberating an issue, and a list of all members who participated or otherwise submitted their views;

(iv) A statement of the position on the issue of any ccNSO members that are not members of the Regional Organization;

(v) An analysis of how the issue would affect the Region, including any financial impact on the Region; and

(vi) An analysis of the period of time that would likely be necessary to implement the policy.
2. **Outside Advisors.** The task force may, in its discretion, solicit the opinions of outside advisors, experts, or other members of the public. Such opinions should be set forth in a report prepared by such outside advisors, and (i) clearly labeled as coming from outside advisors; (ii) accompanied by a detailed statement of the advisors’ (a) qualifications and relevant experience and (b) potential conflicts of interest. These reports should be submitted in a formal statement to the task force chair within the time designated in the PDP Time Line.

e. **Task Force Report.** The chair of the task force, working with the Issue Manager, shall compile the Regional Statements, the Comment Report, and other information or reports, as applicable, into a single document ("Preliminary Task Force Report") and distribute the Preliminary Task Force Report to the full task force within the time designated in the PDP Time Line. The task force shall have a final task force meeting to consider the issues and try and reach a Supermajority Vote. After the final task force meeting, the chair of the task force and the Issue Manager shall create the final task force report (the "Task Force Report") and post it on the Website and to the other ICANN Supporting Organizations and Advisory Committees. Each Task Force Report must include:

1. A clear statement of any Supermajority Vote (being 66% of the task force) position of the task force on the issue;

2. If a Supermajority Vote was not reached, a clear statement of all positions espoused by task force members submitted within the time line for submission of constituency reports. Each statement should clearly indicate (i) the reasons underlying the position and (ii) the Regional Organizations that held the position;

3. An analysis of how the issue would affect each Region, including any financial impact on the Region;

4. An analysis of the period of time that would likely be necessary to implement the policy; and

5. The advice of any outside advisors appointed to the task force by the Council, accompanied by a detailed statement of the advisors’ (i)
qualities and relevant experience and (ii) potential conflicts of interest.

8. Procedure if No Task Force is Formed

a. If the Council decides not to convene a task force, each Regional Organization shall, within the time designated in the PDP Time Line, appoint a representative to solicit the Region’s views on the issue. Each such representative shall be asked to submit a Regional Statement to the Issue Manager within the time designated in the PDP Time Line.

b. The Council may, in its discretion, take other steps to assist in the PDP, including, for example, appointing a particular individual or organization, to gather information on the issue or scheduling meetings for deliberation or briefing. All such information shall be submitted to the Issue Manager within the time designated in the PDP Time Line.

c. The Council shall formally request the Chair of the GAC to offer opinion or advice.

d. The Issue Manager shall take all Regional Statements, the Comment Report, and other information and compile (and post on the Website) an Initial Report within the time designated in the PDP Time Line. Thereafter, the Issue Manager shall, in accordance with Item 9 below, create a Final Report.

9. Comments to the Task Force Report or Initial Report

a. A comment period (in accordance with the PDP Time Line, and ordinarily at least 21 days long) shall be opened for comments on the Task Force Report or Initial Report. Comments shall be accepted from ccTLD managers, other Supporting Organizations, Advisory Committees, and from the public. All comments shall include the author’s name, relevant experience, and interest in the issue.

b. At the end of the comment period, the Issue Manager shall review the comments received and may, in the Issue Manager’s reasonable discretion, add appropriate comments to the Task Force Report or Initial Report, to prepare the “Final Report”. The Issue Manager shall not be obligated to include all comments made during the comment period, nor shall the Issue Manager be obligated to include all comments submitted by any one individual or organization.
c. The Issue Manager shall prepare the Final Report and submit it to the Council chair within the time designated in the PDP Time Line.

10. Council Deliberation

a. Upon receipt of a Final Report, whether as the result of a task force or otherwise, the Council chair shall (i) distribute the Final Report to all Council members; (ii) call for a Council meeting within the time designated in the PDP Time Line wherein the Council shall work towards achieving a recommendation to present to the Board; and (iii) formally send to the GAC Chair an invitation to the GAC to offer opinion or advice. Such meeting may be held in any manner deemed appropriate by the Council, including in person or by conference call. The Issue Manager shall be present at the meeting.

b. The Council may commence its deliberation on the issue prior to the formal meeting, including via in-person meetings, conference calls, e-mail discussions, or any other means the Council may choose.

c. The Council may, if it so chooses, solicit the opinions of outside advisors at its final meeting. The opinions of these advisors, if relied upon by the Council, shall be (i) embodied in the Council's report to the Board, (ii) specifically identified as coming from an outside advisor; and (iii) accompanied by a detailed statement of the advisor's (a) qualifications and relevant experience and (b) potential conflicts of interest.

11. Recommendation of the Council

In considering whether to make a recommendation on the issue (a "Council Recommendation"), the Council shall seek to act by consensus. If a minority opposes a consensus position, that minority shall prepare and circulate to the Council a statement explaining its reasons for opposition. If the Council's discussion of the statement does not result in consensus, then a recommendation supported by 14 or more of the Council members shall be deemed to reflect the view of the Council, and shall be conveyed to the Members as the Council's Recommendation. Notwithstanding the foregoing, as outlined below, all viewpoints expressed by Council members during the PDP must be included in the Members Report.

12. Council Report to the Members

In the event that a Council Recommendation is adopted pursuant to Item 11 then the Issue Manager shall, within seven days after the Council meeting, incorporate the Council's Recommendation together
with any other viewpoints of the Council members into a Members Report to be approved by the Council and then to be submitted to the Members (the "Members Report"). The Members Report must contain at least the following:

a. A clear statement of the Council's recommendation;

b. The Final Report submitted to the Council; and

c. A copy of the minutes of the Council's deliberation on the policy issue (see Item 10), including all the opinions expressed during such deliberation, accompanied by a description of who expressed such opinions.

13. Members Vote

Following the submission of the Members Report and within the time designated by the PDP Time Line, the ccNSO members shall be given an opportunity to vote on the Council Recommendation. The vote of members shall be electronic and members' votes shall be lodged over such a period of time as designated in the PDP Time Line (at least 21 days long).

In the event that at least 50% of the ccNSO members lodge votes within the voting period, the resulting vote will be employed without further process. In the event that fewer than 50% of the ccNSO members lodge votes in the first round of voting, the first round will not be employed and the results of a final, second round of voting, conducted after at least thirty days notice to the ccNSO members, will be employed if at least 50% of the ccNSO members lodge votes. In the event that more than 66% of the votes received at the end of the voting period shall be in favor of the Council Recommendation, then the recommendation shall be conveyed to the Board in accordance with Item 14 below as the ccNSO Recommendation.

14. Board Report

The Issue Manager shall within seven days after a ccNSO Recommendation being made in accordance with Item 13 incorporate the ccNSO Recommendation into a report to be approved by the Council and then to be submitted to the Board (the "Board Report"). The Board Report must contain at least the following:

a. A clear statement of the ccNSO recommendation;

b. The Final Report submitted to the Council; and

c. The Members' Report.

15. Board Vote
a. The Board shall meet to discuss the ccNSO Recommendation as soon as feasible after receipt of the Board Report from the Issue Manager, taking into account procedures for Board consideration.

b. The Board shall adopt the ccNSO Recommendation unless by a vote of more than 66% the Board determines that such policy is not in the best interest of the ICANN community or of ICANN.

1. In the event that the Board determines not to act in accordance with the ccNSO Recommendation, the Board shall (i) state its reasons for its determination not to act in accordance with the ccNSO Recommendation in a report to the Council (the “Board Statement”); and (ii) submit the Board Statement to the Council.

2. The Council shall discuss the Board Statement with the Board within thirty days after the Board Statement is submitted to the Council. The Board shall determine the method (e.g., by teleconference, e-mail, or otherwise) by which the Council and Board shall discuss the Board Statement. The discussions shall be held in good faith and in a timely and efficient manner, to find a mutually acceptable solution.

3. At the conclusion of the Council and Board discussions, the Council shall meet to affirm or modify its Council Recommendation. A recommendation supported by 14 or more of the Council members shall be deemed to reflect the view of the Council (the Council's "Supplemental Recommendation"). That Supplemental Recommendation shall be conveyed to the Members in a Supplemental Members Report, including an explanation for the Supplemental Recommendation. Members shall be given an opportunity to vote on the Supplemental Recommendation under the same conditions outlined in Item 13. In the event that more than 66% of the votes cast by ccNSO Members during the voting period are in favor of the Supplemental Recommendation then that recommendation shall be conveyed to Board as the ccNSO Supplemental Recommendation and the Board shall adopt the recommendation unless by a vote of more than 66% of the Board determines that acceptance
of such policy would constitute a breach of the fiduciary duties of the Board to the Company.

4. In the event that the Board does not accept the ccNSO Supplemental Recommendation, it shall state its reasons for doing so in its final decision ("Supplemental Board Statement").

5. In the event the Board determines not to accept a ccNSO Supplemental Recommendation, then the Board shall not be entitled to set policy on the issue addressed by the recommendation and the status quo shall be preserved until such time as the ccNSO shall, under the ccPDP, make a recommendation on the issue that is deemed acceptable by the Board.

16. Implementation of the Policy

Upon adoption by the Board of a ccNSO Recommendation or ccNSO Supplemental Recommendation, the Board shall, as appropriate, direct or authorize ICANN staff to implement the policy.

17. Maintenance of Records

With respect to each ccPDP for which an Issue Report is requested (see Item 1), ICANN shall maintain on the Website a status web page detailing the progress of each ccPDP, which shall provide a list of relevant dates for the ccPDP and shall also link to the following documents, to the extent they have been prepared pursuant to the ccPDP:

a. Issue Report;

b. PDP Time Line;

c. Comment Report;

d. Regional Statement(s);

e. Preliminary Task Force Report;

f. Task Force Report;

g. Initial Report;

h. Final Report;

i. Members' Report;

j. Board Report;
k. Board Statement;

l. Supplemental Members’ Report; and

m. Supplemental Board Statement.

In addition, ICANN shall post on the Website comments received in electronic written form specifically suggesting that a ccPDP be initiated.

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**Annex C: The Scope of the ccNSO**

This annex describes the scope and the principles and method of analysis to be used in any further development of the scope of the ccNSO’s policy-development role. As provided in Article IX, Section 6 (2) of the Bylaws, that scope shall be defined according to the procedures of the ccPDP.

The scope of the ccNSO’s authority and responsibilities must recognize the complex relation between ICANN and ccTLD managers/registries with regard to policy issues. This annex shall assist the ccNSO, the ccNSO Council, and the ICANN Board and staff in delineating relevant global policy issues.

**Policy areas**

The ccNSO’s policy role should be based on an analysis of the following functional model of the DNS:

1. Data is registered/maintained to generate a zone file,

2. A zone file is in turn used in TLD name servers.

Within a TLD two functions have to be performed (these are addressed in greater detail below):

1. Entering data into a database (Data Entry Function) and

2. Maintaining and ensuring upkeep of name-servers for the TLD (Name Server Function).

These two core functions must be performed at the ccTLD registry level as well as at a higher level (IANA function and root servers) and at lower levels of the DNS hierarchy. This mechanism, as RFC 1591 points out, is recursive:

There are no requirements on sub domains of top-level domains beyond the requirements on higher-level domains themselves. That is, the requirements in this memo are applied recursively. In particular, all sub domains shall be allowed to operate their own domain name
servers, providing in them whatever information the sub domain manager sees fit (as long as it is true and correct).

The Core Functions

1. Data Entry Function (DEF):

Looking at a more detailed level, the first function (entering and maintaining data in a database) should be fully defined by a naming policy. This naming policy must specify the rules and conditions:

(a) under which data will be collected and entered into a database or data changed (at the TLD level among others, data to reflect a transfer from registrant to registrant or changing registrar) in the database.

(b) for making certain data generally and publicly available (be it, for example, through Whois or nameservers).

2. The Name-Server Function (NSF)

The name-server function involves essential interoperability and stability issues at the heart of the domain name system. The importance of this function extends to nameservers at the ccTLD level, but also to the root servers (and root-server system) and nameservers at lower levels.

On its own merit and because of interoperability and stability considerations, properly functioning nameservers are of utmost importance to the individual, as well as to the local and the global Internet communities.

With regard to the nameserver function, therefore, policies need to be defined and established. Most parties involved, including the majority of ccTLD registries, have accepted the need for common policies in this area by adhering to the relevant RFCs, among others RFC 1591.

Respective Roles with Regard to Policy, Responsibilities, and Accountabilities

It is in the interest of ICANN and ccTLD managers to ensure the stable and proper functioning of the domain name system. ICANN and the ccTLD registries each have a distinctive role to play in this regard that can be defined by the relevant policies. The scope of the ccNSO cannot be established without reaching a common understanding of the allocation of authority between ICANN and ccTLD registries.

Three roles can be distinguished as to which responsibility must be assigned on any given issue:

• Policy role: i.e. the ability and power to define a policy;
• Executive role: i.e. the ability and power to act upon and implement the policy; and
• Accountability role: i.e. the ability and power to hold the responsible entity accountable for exercising its power.

Firstly, responsibility presupposes a policy and this delineates the policy role. Depending on the issue that needs to be addressed those who are involved in defining and setting the policy need to be determined and defined. Secondly, this presupposes an executive role defining the power to implement and act within the boundaries of a policy. Finally, as a counter-balance to the executive role, the accountability role needs to defined and determined.

The information below offers an aid to:

1. delineate and identify specific policy areas;

2. define and determine roles with regard to these specific policy areas.

This annex defines the scope of the ccNSO with regard to developing policies. The scope is limited to the policy role of the ccNSO policy-development process for functions and levels explicitly stated below. It is anticipated that the accuracy of the assignments of policy, executive, and accountability roles shown below will be considered during a scope-definition ccPDP process.

Name Server Function (as to ccTLDs)

Level 1: Root Name Servers
Policy role: IETF, RSSAC (ICANN)
Executive role: Root Server System Operators
Accountability role: RSSAC (ICANN), (US DoC-ICANN MoU)

Level 2: ccTLD Registry Name Servers in respect to interoperability
Policy role: ccNSO Policy Development Process (ICANN), for best practices a ccNSO process can be organized
Executive role: ccTLD Manager
Accountability role: part ICANN (IANA), part Local Internet Community, including local government

Level 3: User’s Name Servers
Policy role: ccTLD Manager, IETF (RFC)
Executive role: Registrant
Accountability role: ccTLD Manager

Data Entry Function (as to ccTLDs)

Level 1: Root Level Registry
Policy role: ccNSO Policy Development Process (ICANN)
Executive role: ICANN (IANA)
Accountability role: ICANN community, ccTLD Managers, US DoC, (national authorities in some cases)

Level 2: ccTLD Registry
Policy role: Local Internet Community, including local government, and/or ccTLD Manager according to local structure
Executive role: ccTLD Manager
Accountability role: Local Internet Community, including national authorities in some cases

Level 3: Second and Lower Levels
Policy role: Registrant
Executive role: Registrant
Accountability role: Registrant, users of lower-level domain names
ANNEX 17
AFFIRMATION OF COMMITMENTS
BY THE UNITED STATES
DEPARTMENT OF COMMERCE
AND THE INTERNET
CORPORATION FOR ASSIGNED
NAMES AND NUMBERS

1. This document constitutes an Affirmation of
Commitments (Affirmation) by the United States
Department of Commerce ("DOC") and the Internet
Corporation for Assigned Names and Numbers ("ICANN"),
a not-for-profit corporation. In recognition of the conclusion
of the Joint Project Agreement and to institutionalize and
memorialize the technical coordination of the Internet's
domain name and addressing system (DNS)\textsuperscript{1}, globally by a
private sector led organization, the parties agree as follows:

2. The Internet is a transformative technology that will
continue to empower people around the globe, spur
innovation, facilitate trade and commerce, and enable the
free and unfettered flow of information. One of the elements
of the Internet's success is a highly decentralized network
that enables and encourages decision-making at a local
level. Notwithstanding this decentralization, global technical
coordination of the Internet's underlying infrastructure - the
DNS - is required to ensure interoperability.

3. This document affirms key commitments by DOC and
ICANN, including commitments to: (a) ensure that decisions
made related to the global technical coordination of the
DNS are made in the public interest and are accountable
and transparent; (b) preserve the security, stability and
resiliency of the DNS; (c) promote competition, consumer
trust, and consumer choice in the DNS marketplace; and
(d) facilitate international participation in DNS technical
coordination.

4. DOC affirms its commitment to a multi-stakeholder,
private sector led, bottom-up policy development model for
DNS technical coordination that acts for the benefit of
global Internet users. A private coordinating process, the
outcomes of which reflect the public interest, is best able to
flexibly meet the changing needs of the Internet and of Internet users. ICANN and DOC recognize that there is a group of participants that engage in ICANN's processes to a greater extent than Internet users generally. To ensure that its decisions are in the public interest, and not just the interests of a particular set of stakeholders, ICANN commits to perform and publish analyses of the positive and negative effects of its decisions on the public, including any financial impact on the public, and the positive or negative impact (if any) on the systemic security, stability and resiliency of the DNS.

5. DOC recognizes the importance of global Internet users being able to use the Internet in their local languages and character sets, and endorses the rapid introduction of internationalized country code top level domain names (ccTLDs), provided related security, stability and resiliency issues are first addressed. Nothing in this document is an expression of support by DOC of any specific plan or proposal for the implementation of new generic top level domain names (gTLDs) or is an expression by DOC of a view that the potential consumer benefits of new gTLDs outweigh the potential costs.

6. DOC also affirms the United States Government's commitment to ongoing participation in ICANN's Governmental Advisory Committee (GAC). DOC recognizes the important role of the GAC with respect to ICANN decision-making and execution of tasks and of the effective consideration by ICANN of GAC input on the public policy aspects of the technical coordination of the Internet DNS.

7. ICANN commits to adhere to transparent and accountable budgeting processes, fact-based policy development, cross-community deliberations, and responsive consultation procedures that provide detailed explanations of the basis for decisions, including how comments have influenced the development of policy consideration, and to publish each year an annual report that sets out ICANN's progress against ICANN's bylaws, responsibilities, and strategic and operating plans. In addition, ICANN commits to provide a thorough and reasoned explanation of decisions taken, the rationale...
thereof and the sources of data and information on which ICANN relied.

8. ICANN affirms its commitments to: (a) maintain the capacity and ability to coordinate the Internet DNS at the overall level and to work for the maintenance of a single, interoperable Internet; (b) remain a non-profit corporation, headquartered in the United States of America with offices around the world to meet the needs of a global community; and (c) to operate as a multi-stakeholder, private sector led organization with input from the public, for whose benefit ICANN shall in all events act. ICANN is a private organization and nothing in this Affirmation should be construed as control by any one entity.

9. Recognizing that ICANN will evolve and adapt to fulfill its limited, but important technical mission of coordinating the DNS, ICANN further commits to take the following specific actions together with ongoing commitment reviews specified below:

9.1 Ensuring accountability, transparency and the interests of global Internet users: ICANN commits to maintain and improve robust mechanisms for public input, accountability, and transparency so as to ensure that the outcomes of its decision-making will reflect the public interest and be accountable to all stakeholders by: (a) continually assessing and improving ICANN Board of Directors (Board) governance which shall include an ongoing evaluation of Board performance, the Board selection process, the extent to which Board composition meets ICANN’s present and future needs, and the consideration of an appeal mechanism for Board decisions; (b) assessing the role and effectiveness of the GAC and its interaction with the Board and making recommendations for improvement to ensure effective consideration by ICANN of GAC input on the public policy aspects of the technical coordination of the DNS; (c) continually assessing and improving the processes by which ICANN receives public input (including adequate explanation of
decisions taken and the rationale thereof); (d) continually assessing the extent to which ICANN’s decisions are embraced, supported and accepted by the public and the Internet community; and (e) assessing the policy development process to facilitate enhanced cross community deliberations, and effective and timely policy development. ICANN will organize a review of its execution of the above commitments no less frequently than every three years, with the first such review concluding no later than December 31, 2010. The review will be performed by volunteer community members and the review team will be constituted and published for public comment, and will include the following (or their designated nominees): the Chair of the GAC, the Chair of the Board of ICANN, the Assistant Secretary for Communications and Information of the DOC, representatives of the relevant ICANN Advisory Committees and Supporting Organizations and independent experts. Composition of the review team will be agreed jointly by the Chair of the GAC (in consultation with GAC members) and the Chair of the Board of ICANN. Resulting recommendations of the reviews will be provided to the Board and posted for public comment. The Board will take action within six months of receipt of the recommendations. Each of the foregoing reviews shall consider the extent to which the assessments and actions undertaken by ICANN have been successful in ensuring that ICANN is acting transparently, is accountable for its decision-making, and acts in the public interest. Integral to the foregoing reviews will be assessments of the extent to which the Board and staff have implemented the recommendations arising out of the other commitment reviews enumerated below.

9.2 Preserving security, stability and resiliency: ICANN has developed a plan to enhance the
operational stability, reliability, resiliency, security, and global interoperability of the DNS, which will be regularly updated by ICANN to reflect emerging threats to the DNS. ICANN will organize a review of its execution of the above commitments no less frequently than every three years. The first such review shall commence one year from the effective date of this Affirmation. Particular attention will be paid to: (a) security, stability and resiliency matters, both physical and network, relating to the secure and stable coordination of the Internet DNS; (b) ensuring appropriate contingency planning; and (c) maintaining clear processes. Each of the reviews conducted under this section will assess the extent to which ICANN has successfully implemented the security plan, the effectiveness of the plan to deal with actual and potential challenges and threats, and the extent to which the security plan is sufficiently robust to meet future challenges and threats to the security, stability and resiliency of the Internet DNS, consistent with ICANN's limited technical mission. The review will be performed by volunteer community members and the review team will be constituted and published for public comment, and will include the following (or their designated nominees): the Chair of the GAC, the CEO of ICANN, representatives of the relevant Advisory Committees and Supporting Organizations, and independent experts. Composition of the review team will be agreed jointly by the Chair of the GAC (in consultation with GAC members) and the CEO of ICANN. Resulting recommendations of the reviews will be provided to the Board and posted for public comment. The Board will take action within six months of receipt of the recommendations.

9.3 Promoting competition, consumer trust, and consumer choice: ICANN will ensure that as it contemplates expanding the top-level domain space, the various issues that are involved
(including competition, consumer protection, security, stability and resiliency, malicious abuse issues, sovereignty concerns, and rights protection) will be adequately addressed prior to implementation. If and when new gTLDs (whether in ASCII or other language character sets) have been in operation for one year, ICANN will organize a review that will examine the extent to which the introduction or expansion of gTLDs has promoted competition, consumer trust and consumer choice, as well as effectiveness of (a) the application and evaluation process, and (b) safeguards put in place to mitigate issues involved in the introduction or expansion. ICANN will organize a further review of its execution of the above commitments two years after the first review, and then no less frequently than every four years. The reviews will be performed by volunteer community members and the review team will be constituted and published for public comment, and will include the following (or their designated nominees): the Chair of the GAC, the CEO of ICANN, representatives of the relevant Advisory Committees and Supporting Organizations, and independent experts. Composition of the review team will be agreed jointly by the Chair of the GAC (in consultation with GAC members) and the CEO of ICANN. Resulting recommendations of the reviews will be provided to the Board and posted for public comment. The Board will take action within six months of receipt of the recommendations.

9.3.1 ICANN additionally commits to enforcing its existing policy relating to WHOIS, subject to applicable laws. Such existing policy requires that ICANN implement measures to maintain timely, unrestricted and public access to accurate and complete WHOIS information, including registrant, technical, billing, and administrative contact information. One year from the effective date of this document and
then no less frequently than every three years thereafter, ICANN will organize a review of WHOIS policy and its implementation to assess the extent to which WHOIS policy is effective and its implementation meets the legitimate needs of law enforcement and promotes consumer trust. The review will be performed by volunteer community members and the review team will be constituted and published for public comment, and will include the following (or their designated nominees): the Chair of the GAC, the CEO of ICANN, representatives of the relevant Advisory Committees and Supporting Organizations, as well as experts, and representatives of the global law enforcement community, and global privacy experts. Composition of the review team will be agreed jointly by the Chair of the GAC (in consultation with GAC members) and the CEO of ICANN. Resulting recommendations of the reviews will be provided to the Board and posted for public comment. The Board will take action within six months of receipt of the recommendations.

10. To facilitate transparency and openness in ICANN’s deliberations and operations, the terms and output of each of the reviews will be published for public comment. Each review team will consider such public comment and amend the review as it deems appropriate before it issues its final report to the Board.

11. The DOC enters into this Affirmation of Commitments pursuant to its authority under 15 U.S.C. 1512 and 47 U.S.C. 902. ICANN commits to this Affirmation according to its Articles of Incorporation and its Bylaws. This agreement will become effective October 1, 2009. The agreement is intended to be long-standing, but may be amended at any time by mutual consent of the parties. Any party may terminate this Affirmation of Commitments by providing 120 days written notice to the other party. This Affirmation contemplates no transfer of funds between the parties. In the event this Affirmation of Commitments is terminated, each party shall be solely responsible for the payment of
any expenses it has incurred. All obligations of the DOC under this Affirmation of Commitments are subject to the availability of funds.

FOR THE NATIONAL TELECOMMUNICATIONS INFORMATION ADMINISTRATION:

Name: Lawrence E. Strickling
Title: Assistant Secretary for Communications and Information

Date: September 30, 2009

FOR THE INTERNET CORPORATION AND FOR ASSIGNED NAMES AND NUMBERS:

Name: Rod Beckstrom
Title: President and CEO

Date: September 30, 2009

For the purposes of this Affirmation the Internet's domain name and addressing system (DNS) is defined as: domain names; Internet protocol addresses and autonomous system numbers; protocol port and parameter numbers. ICANN coordinates these identifiers at the overall level, consistent with its mission.
ANNEX 18
ICANN Generic Names Supporting Organisation

Board Report

Introduction of New Generic Top-Level Domains

11 September 2007
ABSTRACT

This is the Board Report for the Generic Names Supporting Organization (GNSO) Council’s policy development process on the Introduction of New Top-Level Domains. The Report is in two parts. Part A includes the requirements for a Board Report in addition to the GNSO Council’s Final Report which includes their substantive discussion of the Principles, Policy Recommendations and Implementation Guidelines. Part B of the Final Report contains a range of supplementary materials that have been used by the Committee during the course of the Policy Development Process, most notably detailed Constituency Statements, Expert Papers and other reference materials.

The process for the introduction of new generic top-level domains (gTLDs) is central to fostering choice and competition in domain registration services, and as such is significant to the promotion of ICANN’s core values. The evolution of the namespace toward enhanced diversity of services and service providers must be planned and managed effectively to ensure that the security, stability, reliability, and global interoperability of the Internet is maintained.

The proposed policy that would guide the introduction of new gTLDs was created by the GNSO over the last two years through its bottom-up, multi-stakeholder policy development process. The GNSO received assistance from ICANN staff to help ensure that their final recommendations and guidelines are implementable. The questions that have been addressed by the GNSO in the development of new gTLD policy are complex and involve technical, economic, operational, legal, public policy, and other considerations. The intended result is a straightforward process that awards new gTLDs if they satisfy the criteria and no objections are sustained.

Readers wishing immediate access the core substance of the suggested approach are advised to focus first on the Recommendations (click to get).
there), which give the fundamentals, in part based on the agreed Principles. Next, implementation advice is provided in the Implementation Guidelines. Reading of the documents in full will provide the comprehensive advice and discussions regarding the GNSO's new gTLD’s policy recommendations.
BOARD REPORT REQUIREMENTS

1.1 This is the Board Report for the *Introduction of New Top-Level Domains*. According to the GNSO’s policy development process, the Board Report must contain the following elements.


The GNSO Council considered the *Final Report* and the results of the 20 day public comment period at its meeting on 6 September 2007.

The GNSO Council voted on the package of recommendations as follows, as quoted from the minutes, [insert after minutes and MP3 recording completed]

[The motion carried with a supermajority vote as defined in the ICANN bylaws, section 16 (http://www.icann.org/general/archive-bylaws/bylaws-28feb06.htm#AnnexA)]

b. If a Supermajority Vote was not reached, a clear statement of all positions held by Council members. Each statement should clearly indicate (i) the reasons underlying each position and (ii) the constituency(ies) that held the position;

c. An analysis of how the issue would affect each constituency, including any financial impact on the constituency; [this is included in full in the Constituency Statements found in Part B of the *Final Report* in addition to the supplementary Minority Statements submitted by the NCUC and the personal comments made by Ms Avri Doria which are found in the Part A Annexes]

d. An analysis of the period of time that would likely be necessary to implement the policy; [this is found in the Implementation Team Discussion Points document along with the draft RFP, the draft base contract and the instructions to applicants]

e. The advice of any outside advisors relied upon, which should be accompanied by a detailed statement of the advisor's (i) qualifications and relevant experience; and (ii) potential conflicts of interest; [these are found in full in Part B in the Supplementary Materials]

f. The Final Report submitted to the Council; [the Final Report is included in full in the sections below]

g. A copy of the minutes of the Council deliberation on the policy issue, including the all opinions expressed during such deliberation,
accompanied by a description of who expressed such opinions. [insert the minutes of the meeting are found in full below once complete. The MP3 recording of the meeting can be found here insert URL]
BACKGROUND

Following a succession of activities relating to the introduction of new gTLDs, since the inception of ICANN (for a complete history see the Final Report), the initial step for a PDP on new gTLDs was taken on 22 September 2005 when the GNSO Council requested ICANN staff to produce an Issues Report on the topic of new TLDs. The requested report covered four issue areas:

- Whether to continue to introduce new gTLDs
- Criteria for approving applications for new gTLDs
- Allocation methods
- Contractual conditions.

The Issues Report was discussed at the GNSO Council meeting on 28 November 2005 and the GNSO Council voted unanimously to initiate a formal PDP on this matter. Notice of the new PDP, along with draft terms of reference for the new initiative and a call for public reactions and substantive papers were published on 6 December 2005, with a 31 January 2006 deadline for all submissions. Formal terms of reference for the PDP were approved at the 2 December 2005 GNSO Council meeting, with a separate motion confirming that the PDP would be undertaken as a “committee of the whole” chaired by the GNSO Council chair Bruce Tonkin, who eventually was succeeded in both these respects by Avri Doria in May 2007.

A mailing list for the New gTLD Committee was established on 17 January 2006, and a draft Initial report was published on 19 February 2006, with a public comment period ending on 3 March 2006. The final Initial Report was published on 15 March 2006. The first Draft Final Report was publicly circulated on 14 November 2006, along with a Staff memo recommending additional considerations in several areas. Further Draft Final Report versions were released during 2007 and the last draft version was subject to public comments from 10 to 30 August 2007. The ultimate Final Report, dated 29 August, was adopted with a supermajority vote by the GNSO Council on 6 September 2007.
FINAL REPORT

Background

1. The Internet Corporation for Assigned Names and Numbers (ICANN) is responsible for the overall coordination of “the global Internet's system of unique identifiers” and ensuring the “stable and secure operation of the Internet's unique identifier systems. In particular, ICANN coordinates the “allocation and assignment of the three sets of unique identifiers for the Internet”. These are “domain names” (forming a system called the DNS); Internet protocol (IP) addresses and autonomous system (AS) numbers and Protocol port and parameter numbers”. ICANN is also responsible for the “operation and evolution of the DNS root name server system and policy development reasonably and appropriately related to these technical functions”. These elements are all contained in ICANN’s Mission and Core Values ¹ in addition to provisions which enable policy development work that, once approved by the ICANN Board, become binding on the organization. The results of the policy development process found here relate to the introduction of new generic top-level domains.

2. This document is the Final Report of the Generic Names Supporting Organisation’s (GNSO) Policy Development Process (PDP) that has been conducted using ICANN’s Bylaws and policy development guidelines that relate to the work of the GNSO. This Report reflects a comprehensive examination of four Terms of Reference designed to establish a stable and ongoing process that facilitates the introduction of new top-level domains. The policy development process (PDP) is part of the Generic Names Supporting Organisation’s (GNSO) mandate within the ICANN structure. However, close consultation with other ICANN Supporting Organisations and Advisory Committees has been an integral part of the process. The

¹ http://www.icann.org/general/archive-bylaws/bylaws-28feb06.htm#I
consultations and negotiations have also included a wide range of
interested stakeholders from within and outside the ICANN community².

3. The Final Report is in two parts. This document is Part A and contains the
full explanation of each of the Principles, Recommendations and
Implementation Guidelines that the Committee has developed since
December 2005³. Part B of the Report contains a wide range of
supplementary materials which have been used in the policy development
process including Constituency Impact Statements (CIS), a series of
Working Group Reports on important sub-elements of the Committee’s
deliberations, a collection of external reference materials, and the
procedural documentation of the policy development process⁴.

4. The finalisation of the policy for the introduction of new top-level domains
is part of a long series of events that have dramatically changed the nature
of the Internet. The 1969 ARPANET diagram shows the initial design of a
network that is now global in its reach and an integral part of many lives
and businesses. The policy recommendations found here illustrate the
complexity of the Internet of 2007 and, as a package, propose a system to
add new top-level domains in an orderly and transparent way. The ICANN
Staff Implementation Team, consisting of policy, operational and legal staff
members, has worked closely with the Committee on all aspects of the
policy development process⁵. The ICANN Board has received regular
information and updates about the process and the substantive results of
the Committee’s work.

² The ICANN “community” is a complex matrix of intersecting organizations and which are
represented graphically here. http://www.icann.org/structure/
³ The Final Report is Step 9 in the GNSO’s policy development process which is set out in full
at http://www.icann.org/general/archive-bylaws/bylaws-28feb06.html#AnnexA.
⁴ Found here http://gnso.icann.org/issues/new-gtlds/.
⁵ The ICANN Staff Discussion Points documents can be found at
http://gnso.icann.org/drafts/GNSO-PDP-Dec05-StaffMemo-14Nov06.pdf and
5. The majority of the early work on the introduction of new top-level domains is found in the IETF’s Request for Comment series. RFC 1034\(^6\) is a fundamental resource that explains key concepts of the naming system. Read in conjunction with RFC920\(^7\), an historical picture emerges of how and why the domain name system hierarchy has been organised. Postel & Reynolds set out in their RFC920 introduction about the “General Purpose Domains” that …"While the initial domain name "ARPA" arises from the history of the development of this system and environment, in the future most of the top level names will be very general categories like "government", "education", or "commercial". The motivation is to provide an organization name that is free of undesirable semantics."

6. In 2007, the Internet is multi-dimensional and its development is driven by widespread access to inexpensive communications technologies in many

\(^6\) Authored in 1987 by Paul Mockapetris and found at http://www.ietf.org/rfc/rfc1034
\(^7\) Authored in October 1984 by Jon Postel and J Reynolds and found at http://www.ietf.org/rfc/rfc920
parts of the world. In addition, global travel is now relatively inexpensive, efficient and readily available to a diverse range of travellers. As a consequence, citizens no longer automatically associate themselves with countries but with international communities of linguistic, cultural or professional interests independent of physical location. Many people now exercise multiple citizenship rights, speak many different languages and quite often live far from where they were born or educated. The 2007 OECD Factbook provides comprehensive statistics about the impact of migration on OECD member countries. In essence, many populations are fluid and changing due in part to easing labour movement restrictions but also because technology enables workers to live in one place and work in another relatively easily. As a result, companies and organizations are now global and operate across many geographic borders and jurisdictions. The following illustration shows how rapidly the number of domain names under registration has increased and one could expect that trend to continue with the introduction of new top-level domains.

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9 From Verisign’s June 2007 Domain Name Industry Brief.
7. A key driver of change has been the introduction of competition in the registration of domain names through ICANN Accredited Registrars\textsuperscript{10}. In June 2007, there were more than 800 accredited registrars who register names for end users with ongoing downward pressure on the prices end-users pay for domain name registration.

8. ICANN’s work on the introduction of new top-level domains has been underway since 1999. By mid-1999, Working Group C\textsuperscript{11} had quickly reached consensus on two issues, namely that “…ICANN should add new

\textsuperscript{10} The full list is available here http://www.icann.org/registrars/accredited-list.html
\textsuperscript{11} Report found at http://www.icann.org/dnso/wgc-report-21mar00.htm
gTLDs to the root. The second is that ICANN should begin the deployment of new gTLDs with an initial rollout of six to ten new gTLDs, followed by an evaluation period”. This work was undertaken throughout 2000 and saw the introduction of, for example, .coop, .aero and .biz.

9. After an evaluation period, a further round of sponsored TLDs was introduced during 2003 and 2004 which included, amongst others, .mobi and .travel\(^\text{12}\).

10. The July 2007 zone file survey statistics from www.registrarstats.com\(^\text{13}\) shows that there are slightly more than 96,000,000 top level domains registered across a selection of seven top-level domains including .com, .net and .info. Evidence from potential new applicants provides more impetus to implement a system that enables the ongoing introduction of new top level domains\(^\text{14}\). In addition, interest from Internet users who could use Internationalised Domain Names (IDNs) in a wide variety of scripts beyond ASCII is growing rapidly.

11. To arrive at the full set of policy recommendations which are found here, the Committee considered the responses to a Call for Expert Papers issued at the beginning of the policy development process\(^\text{15}\), and which was augmented by a full set of GNSO Constituency Statements\(^\text{16}\). These are all found in Part B of the Final Report and should be read in conjunction with this document. In addition, the Committee received detailed responses from the Implementation Team about proposed policy recommendations and the implementation of the recommendations package as an on-line application process that could be used by a wide array of potential applicants.

12. The Committee reviewed and analysed a wide variety of materials including Working Group C’s findings, the evaluation reports from the 2003

\(^\text{12}\) Found at http://www.icann.org/announcements/announcement-31aug04.htm
\(^\text{13}\) http://www.registrarstats.com/Public/ZoneFileSurvey.aspx
\(^\text{14}\) Verisign produce a regular report on the domain name industry. http://www.verisign.com/Resources/Naming_Services_Resources/Domain_Name_Industry_Brief/index.html
\(^\text{15}\) The announcement is here http://icann.org/announcements/announcement-03jan06.htm and the results are here http://gnso.icann.org/issues/new-gtlds/new-gtld-pdp-input.htm
\(^\text{16}\) Found here http://gnso.icann.org/issues/new-gtlds/new-gtld-pdp-input.htm
& 2004 round of sponsored top-level domains and a full range of other historic materials.  

13. In the past, a number of different approaches to new top level domains have been considered including the formulation of a structured taxonomy of names, for example, .auto, .books, .travel and .music. The Committee has opted to enable potential applicants to self-select strings that are either the most appropriate for their customers or potentially the most marketable. It is expected that applicants will apply for targeted community strings such as .travel for the travel industry and .cat for the Catalan community as well as some generic strings. The Committee identified five key drivers for the introduction of new top-level domains.

(i) It is consistent with the reasons articulated in 1999 when the first proof-of-concept round was initiated

(ii) There are no technical impediments to the introduction of new top-level domains as evidenced by the two previous rounds

(iii) Expanding the domain name space to accommodate the introduction of both new ASCII and internationalised domain name (IDN) top-level domains will give end users more choice about the nature of their presence on the Internet. In addition, users will be able to use domain names in their language of choice.

(iv) There is demand for additional top-level domains as a business opportunity. The GNSO Committee expects that this business opportunity will stimulate competition at the registry service level which is consistent with ICANN’s Core Value 6.

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17 http://gnso.icann.org/issues/new-gtlds/
18 For example, see the GA List discussion thread found at http://gnso.icann.org/mailing-lists/archives/ga/msg03337.html & earlier discussion on IANA lists http://www.iana.org/comments/26sep1998-02oct1998/msg00016.html. The 13 June 2002 paper regarding a taxonomy for non-ASCII TLDs is also illuminating http://www.icann.org/committees/idn/registry-selection-paper-13jun02.htm
(v) No compelling reason has been articulated to not proceed with accepting applications for new top-level domains.

14. The remainder of this Report is structured around the four Terms of Reference. This includes an explanation of the Principles that have guided the work taking into account the Governmental Advisory Committee's March 2007 Public Policy Principles for New gTLDs; a comprehensive set of Recommendations which has majority Committee support and a set of Implementation Guidelines which has been discussed in great detail with the ICANN Staff Implementation Team. The Implementation Team has released two ICANN Staff Discussion Points documents (in November 2006 and June 2007). Version 2 provides detailed analysis of the proposed recommendations from an implementation standpoint and provides suggestions about the way in which the implementation plan may come together. The ICANN Board will make the final decision about the actual structure of the application and evaluation process.

15. In each of the sections below the Committee’s recommendations are discussed in more detail with an explanation of the rationale for the decisions. The recommendations have been the subject of numerous public comment periods and intensive discussion across a range of stakeholders including ICANN’s GNSO Constituencies, ICANN Supporting Organisations and Advisory Committees and members of the broader Internet-using public that is interested in ICANN’s work. In particular, detailed work has been conducted through the Internationalised Domain Names Working Group (IDN-WG), the Reserved Names Working Group (RN-WG) and the Protecting the Rights of Others Working Group (PRO-WG). The Working Group Reports are found in full in Part B of the Final Report along with the March 2007 GAC Public Principles.

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19 Found here http://gac.icann.org/web/home/gTLD_principles.pdf
20 A list of the working materials of the new TLDs Committee can be found at http://gnso.icann.org/issues/new-gtlds/
21 The Outcomes Report for the IDN-WG is found http://gnso.icann.org/drafts/idn-wg-fr-22mar07.htm. A full set of resources which the WG is using is found at http://gnso.icann.org/issues/idn-tlds/
23 The Final Report of the PRO-WG is found at http://gnso.icann.org/drafts/GNSO-PRO-WG-final-01Jun07.pdf
Policy Principles for New Top-Level Domains, Constituency Impact

Statements. A minority statement from the NCUC about Recommendations 6 & 20 are found Annexes for this document along with individual comments from Nominating Committee appointee Ms Avri Doria.
SUMMARY -- PRINCIPLES, RECOMMENDATIONS & IMPLEMENTATION GUIDELINES

1. This section sets out, in table form, the set of Principles, proposed Policy Recommendations and Guidelines that the Committee has derived through its work. The addition of new gTLDs will be done in accordance with ICANN’s primary mission which is to ensure the security and stability of the DNS and, in particular, the Internet’s root server system\textsuperscript{24}.

2. The Principles are a combination of GNSO Committee priorities, ICANN staff implementation principles developed in tandem with the Committee and the March 2007 GAC Public Policy Principles on New Top-Level Domains. The Principles are supported by all GNSO Constituencies.\textsuperscript{25}

3. ICANN’s Mission and Core Values were key reference points for the development of the Committee’s Principles, Recommendations and Implementation Guidelines. These are referenced in the right-hand column of the tables below.

4. The Principles have support from all GNSO Constituencies.

\textsuperscript{24} The root server system is explained here \url{http://en.wikipedia.org/wiki/Rootserver}

\textsuperscript{25} Ms Doria supports all of the Principles but expressed concern about Principle B by saying “...While I strongly support the introduction of IDN TLDS, I am concerned that the unresolved issues with IDN ccTLD equivalents may interfere with the introduction of IDN TLDs. I am also concerned that some of these issues could impede the introduction of some new ASCII TLDs dealing with geographically related identifiers” and Principle D “...While I favor the establishment of a minimum set of necessary technical criteria, I am concerned that this set actually be the basic minimum set necessary to protect the stability, security and global interoperability.”
<table>
<thead>
<tr>
<th>PRINCIPLES</th>
<th>MISSION &amp; CORE VALUES</th>
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<tbody>
<tr>
<td><strong>A</strong></td>
<td>New generic top-level domains (gTLDs) must be introduced in an orderly, timely and predictable way.</td>
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<tr>
<td><strong>B</strong></td>
<td>Some new generic top-level domains should be internationalised domain names (IDNs) subject to the approval of IDNs being available in the root.</td>
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<tr>
<td><strong>C</strong></td>
<td>The reasons for introducing new top-level domains include that there is demand from potential applicants for new top-level domains in both ASCII and IDN formats. In addition the introduction of new top-level domain application process has the potential to promote competition in the provision of registry services, to add to consumer choice, market differentiation and geographical and service-provider diversity.</td>
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<tr>
<td><strong>D</strong></td>
<td>A set of technical criteria must be used for assessing a new gTLD registry applicant to minimise the risk of harming the operational stability, security and global interoperability of the Internet.</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>A set of capability criteria for a new gTLD registry applicant must be used to provide an assurance that an applicant has the capability to meets its obligations under the terms of ICANN’s registry agreement.</td>
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<tr>
<td><strong>F</strong></td>
<td>A set of operational criteria must be set out in contractual conditions in the registry agreement to ensure compliance with ICANN policies.</td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>The string evaluation process must not infringe the applicant's freedom of expression rights that are protected under internationally recognized principles of law.</td>
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<tr>
<td>RECOMMENDATIONS</td>
<td>MISSION &amp; CORE VALUES</td>
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<tr>
<td><strong>1</strong></td>
<td>ICANN must implement a process that allows the introduction of new top-level domains. The evaluation and selection procedure for new gTLD registries should respect the principles of fairness, transparency and non-discrimination. All applicants for a new gTLD registry should therefore be evaluated against transparent and predictable criteria, fully available to the applicants prior to the initiation of the process. Normally, therefore, no subsequent additional selection criteria should be used in the selection process.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Strings must not be confusingly similar to an existing top-level domain or a Reserved Name.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Strings must not infringe the existing legal rights of others that are recognized or enforceable under generally accepted and internationally recognized principles of law. Examples of these legal rights that are internationally recognized include, but are not limited to, rights defined in the Paris Convention for the Protection of Industry Property (in particular trademark rights), the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR) (in particular freedom of expression rights).</td>
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<tr>
<td><strong>4</strong></td>
<td>Strings must not cause any technical instability.</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Strings must not be a Reserved Word27.</td>
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</tbody>
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26 Note the updated recommendation text sent to the gtld-council list after the 7 June meeting. http://forum.icann.org/lists/gtld-council/msg00520.html

27 Reserved word limitations will be included in the base contract that will be available to applicants prior to the start of the application round.
Strings must not be contrary to generally accepted legal norms relating to morality and public order that are recognized under international principles of law.

Examples of such principles of law include, but are not limited to, the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the International Convention on the Elimination of All Forms of Racial Discrimination, intellectual property treaties administered by the World Intellectual Property Organisation (WIPO) and the WTO Agreement on Trade-Related Aspects of Intellectual Property (TRIPS).

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<tr>
<td>6*</td>
<td>Strings must not be contrary to generally accepted legal norms relating to morality and public order that are recognized under international principles of law.</td>
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<td></td>
<td>Examples of such principles of law include, but are not limited to, the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the International Convention on the Elimination of All Forms of Racial Discrimination, intellectual property treaties administered by the World Intellectual Property Organisation (WIPO) and the WTO Agreement on Trade-Related Aspects of Intellectual Property (TRIPS).</td>
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<tr>
<td></td>
<td>M3 &amp; CV 4</td>
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<td>7</td>
<td>Applicants must be able to demonstrate their technical capability to run a registry operation for the purpose that the applicant sets out.</td>
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<td>M1-3 &amp; CV1</td>
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<td>8</td>
<td>Applicants must be able to demonstrate their financial and organisational operational capability.</td>
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<td>M1-3 &amp; CV1</td>
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<td>9</td>
<td>There must be a clear and pre-published application process using objective and measurable criteria.</td>
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<td>M3 &amp; CV6-9</td>
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<td>10</td>
<td>There must be a base contract provided to applicants at the beginning of the application process.</td>
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<td></td>
<td>CV7-9</td>
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<tr>
<td>11</td>
<td>[Replaced with Recommendation 20 and Implementation Guideline P and inserted into Term of Reference 3 Allocation Methods section]</td>
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<tr>
<td>12</td>
<td>Dispute resolution and challenge processes must be established prior to the start of the process.</td>
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<tr>
<td></td>
<td>CV7-9</td>
</tr>
<tr>
<td>13</td>
<td>Applications must initially be assessed in rounds until the scale of demand is clear.</td>
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<tr>
<td></td>
<td>CV7-9</td>
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<tr>
<td>14</td>
<td>The initial registry agreement term must be of a commercially reasonable length.</td>
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<td></td>
<td>CV5-9</td>
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<td></td>
<td>There must be renewal expectancy.</td>
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<tr>
<td>16</td>
<td>Registries must apply existing Consensus Policies and adopt new Consensus Policies as they are approved.</td>
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<tr>
<td>17</td>
<td>A clear compliance and sanctions process must be set out in the base contract which could lead to contract termination.</td>
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<tr>
<td>18</td>
<td>If an applicant offers an IDN service, then ICANN’s IDN guidelines must be followed.</td>
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<tr>
<td>19</td>
<td>Registries must use only ICANN accredited registrars in registering domain names and may not discriminate among such accredited registrars.</td>
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<tr>
<td>20*</td>
<td>An application will be rejected if an expert panel determines that there is substantial opposition to it from a significant portion of the community to which the string may be explicitly or implicitly targeted.</td>
</tr>
</tbody>
</table>

* The NCUC submitted Minority Statements on Recommendations 6 and 20. The remainder of the Recommendations have support from all GNSO Constituencies.

**IMPLEMENTATION GUIDELINES**

**MISSION & CORE VALUES**

**IG A**

The application process will provide a pre-defined roadmap for applicants that encourages the submission of applications for new top-level domains.

CV 2, 5, 6, 8 & 9

**IG B**

Application fees will be designed to ensure that adequate resources exist to cover the total cost to administer the new gTLD process.

Application fees may differ for applicants.

CV 5, 6, 8 & 9

**IG C**

ICANN will provide frequent communications with applicants and the public including comment forums.

CV 9 & 10

**IG D**

A first come first served processing schedule within the application round will be implemented and will continue

CV 8-

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28 http://www.icann.org/general/idn-guidelines-22feb06.htm
Applications will be time and date stamped on receipt.

IG E  The application submission date will be at least four months after the issue of the Request for Proposal and ICANN will promote the opening of the application round.

IG F*  If there is contention for strings, applicants may:

  i)  resolve contention between them within a pre-established timeframe

  ii) if there is no mutual agreement, a claim to support a community by one party will be a reason to award priority to that application. If there is no such claim, and no mutual agreement a process will be put in place to enable efficient resolution of contention and;

  iii) the ICANN Board may be used to make a final decision, using advice from staff and expert panels.

IG H*  Where an applicant lays any claim that the TLD is intended to support a particular community such as a sponsored TLD, or any other TLD intended for a specified community, that claim will be taken on trust with the following exceptions:

  (i) the claim relates to a string that is also subject to another application and the claim to support a community is being used to gain priority for the application; and

  (ii) a formal objection process is initiated.

Under these exceptions, Staff Evaluators will devise criteria and procedures to investigate the claim.

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29 The Implementation Team sought advice from a number of auction specialists and examined other industries in which auctions were used to make clear and binding decisions. Further expert advice will be used in developing the implementation of the application process to ensure the fairest and most appropriate method of resolving contention for strings.
Under exception (ii), an expert panel will apply the process, guidelines, and definitions set forth in IG P.

IG H: External dispute providers will give decisions on objections. CV 10

IG I: An applicant granted a TLD string must use it within a fixed timeframe which will be specified in the application process. CV 10

IG J: The base contract should balance market certainty and flexibility for ICANN to accommodate a rapidly changing market place. CV 4-10

IG K: ICANN should take a consistent approach to the establishment of registry fees. CV 5

IG L: The use of personal data must be limited to the purpose for which it is collected. CV 8

IG M: ICANN may establish a capacity building and support mechanism aiming at facilitating effective communication on important and technical Internet governance functions in a way that no longer requires all participants in the conversation to be able to read and write English. CV 3-7

IG N: ICANN may put in place a fee reduction scheme for gTLD applicants from economies classified by the UN as least developed. CV 3-7

IG O: ICANN may put in place systems that could provide information about the gTLD process in major languages other than English, for example, in the six working languages of the United Nations. CV 8-10

IG P*: The following process, definitions and guidelines refer to Recommendation 20.

Process

Opposition must be objection based.

Determination will be made by a dispute resolution panel

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30 Detailed work is being undertaken, lead by the Corporate Affairs Department, on establishing a translation framework for ICANN documentation. This element of the Implementation Guidelines may be addressed separately.
constituted for the purpose.

The objector must provide verifiable evidence that it is an established institution of the community (perhaps like the RSTEP pool of panelists from which a small panel would be constituted for each objection).

Guidelines

The task of the panel is the determination of substantial opposition.

a) substantial – in determining substantial the panel will assess the following: signification portion, community, explicitly targeting, implicitly targeting, established institution, formal existence, detriment

b) significant portion – in determining significant portion the panel will assess the balance between the level of objection submitted by one or more established institutions and the level of support provided in the application from one or more established institutions. The panel will assess significance proportionate to the explicit or implicit targeting.

c) community – community should be interpreted broadly and will include, for example, an economic sector, a cultural community, or a linguistic community. It may be a closely related community which believes it is impacted.

d) explicitly targeting – explicitly targeting means there is a description of the intended use of the TLD in the application.

e) implicitly targeting – implicitly targeting means that the objector
makes an assumption of targeting or that the objector believes there may be confusion by users over its intended use.

f) **established institution** – an institution that has been in formal existence for at least 5 years. In exceptional cases, standing may be granted to an institution that has been in existence for fewer than 5 years.

Exceptional circumstances include but are not limited to a re-organization, merger or an inherently younger community.

The following ICANN organizations are defined as established institutions: GAC, ALAC, GNSO, ccNSO, ASO.

g) **formal existence** – formal existence may be demonstrated by appropriate public registration, public historical evidence, validation by a government, intergovernmental organization, international treaty organization or similar.

h) **detriment** – the objector must provide sufficient evidence to allow the panel to determine that there would be a likelihood of detriment to the rights or legitimate interests of the community or to users more widely.

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**IG Q**

ICANN staff will provide an automatic reply to all those who submit public comments that will explain the objection procedure.

**IG R**

Once formal objections or disputes are accepted for review there will be a cooling off period to allow parties to resolve the dispute or objection before review by the panel is initiated.

* The NCUC submitted Minority Statements on Implementation Guidelines F, H & P. The remainder of the Implementation Guidelines have support from all GNSO Constituencies.
1. This set of implementation guidelines is the result of detailed discussion, particularly with respect to the two ICANN Staff Discussion Points\(^{31}\) documents that were prepared to facilitate consultation with the GNSO Committee about the implementation impacts of the proposed policy Recommendations. The Implementation Guidelines will be used to inform the final Implementation Plan which is approved by the ICANN Board.

2. The Discussion Points documents contain draft flowcharts which have been developed by the Implementation Team and which will be updated, based on the final vote of the GNSO Council and the direction of the ICANN Board. The Discussion Points documents have been used in the ongoing internal implementation discussions that have focused on ensuring that draft recommendations proposed by the Committee are implementable in an efficient and transparent manner\(^{32}\). The flowchart setting out the proposed Contention Evaluation Process is a more detailed component within the Application Evaluation Process and will be amended to take into account the inputs from Recommendation 20 and its related Implementation Guidelines.

3. This policy development process has been designed to produce a systemised and ongoing mechanism for applicants to propose new top-level domains. The Request for Proposals (RFP) for the first round will include scheduling information for the subsequent rounds to occur within one year. After the first round of new applications, the application system will be evaluated by ICANN’s TLDs Project Office to assess the effectiveness of the application system. Success metrics will be developed and any necessary adjustments made to the process for subsequent rounds.

4. The following sections set out in detail the explanation for the Committee’s recommendations for each Term of Reference.

\(^{31}\)http://gnso.icann.org/drafts/GNSO-PDP-Dec05-StaffMemo-14Nov06.pdf

\(^{32}\)Consistent with ICANN’s commitments to accountability and transparency found at http://www.icann.org/announcements/announcement-26jan07b.htm
TERM OF REFERENCE ONE -- WHETHER TO INTRODUCE NEW TOP-LEVEL DOMAINS

1. Recommendation 1 Discussion – All GNSO Constituencies supported the introduction of new top-level domains.

2. The GNSO Committee was asked to address the question of whether to introduce new top-level domains. The Committee recommends that ICANN should implement a process that allows the introduction of new top level domains and that work should proceed to develop policies that will enable the introduction of new generic top-level domains, taking into account the recommendations found in the latter sections of the Report concerning Selection Criteria (Term of Reference 2), Allocation Methods (Term of Reference 3) and Policies for Contractual Conditions (Term of Reference 4).

3. ICANN’s work on the introduction of new top-level domains has been ongoing since 1999. The early work included the 2000 Working Group C Report33 that also asked the question of “whether there should be new TLDs”. By mid-1999, the Working Group had quickly reached consensus on two issues, namely that “…ICANN should add new gTLDs to the root. The second is that ICANN should begin the deployment of new gTLDs with an initial rollout of six to ten new gTLDs, followed by an evaluation period”. This work was undertaken throughout 2000 and saw the introduction of, for example, .coop, .aero and .biz.

4. After an evaluation period, a further round of sponsored TLDs was introduced during 2003 and 2004 which included, amongst others, .mobi and .travel.

5. In addressing Term of Reference One, the Committee arrived at its recommendation by reviewing and analysing a wide variety of materials including Working Group C’s findings; the evaluation reports from the 2003-

33 Found at http://www.icann.org/dnso/wgc-report-21mar00.htm
2004 round of sponsored top-level domains and full range of other historic materials which are posted at http://gnso.icann.org/issues/new-gtlds/

6. In addition, the Committee considered the responses to a Call for Expert Papers issued at the beginning of the policy development process. These papers augmented a full set of GNSO Constituency Statements and a set of Constituency Impact Statements that addressed specific elements of the Principles, Recommendations and Implementation Guidelines.

7. The Committee was asked, at its February 2007 Los Angeles meeting, to confirm its rationale for recommending that ICANN introduce new top-level domains. In summary, there are five threads which have emerged:

(i) It is consistent with the reasons articulated in 1999 when the first proof-of-concept round was initiated

(ii) There are no technical impediments to the introduction of new top-level domains as evidenced by the two previous rounds

(iii) It is hoped that expanding the domain name space to accommodate the introduction of both new ASCII and internationalised domain name (IDN) top-level domains will give end users more choice about the nature of their presence on the Internet. In addition, users will be able to use domain names in their language of choice.

(iv) In addition, the introduction of a new top-level domain application process has the potential to promote competition in the provision of registry services, and to add to consumer choice, market differentiation and geographic and service-provider diversity which is consistent with ICANN’s Core Value 6.

(v) No compelling reason has been articulated to not proceed with accepting applications for new top-level domains.

34 The announcement is here http://icann.org/announcements/announcement-03jan06.htm and the results are here http://gnso.icann.org/issues/new-gtlds/new-gtld-pdp-input.htm
36 Found here http://forum.icann.org/lists/gtld-council/
8. Article X, Part 7, Section E of the GNSO’s Policy Development Process requires the submission of “constituency impact statements” which reflect the potential implementation impact of policy recommendations. By 4 July 2007 all GNSO Constituencies had submitted Constituency Impact Statements (CIS) to the gtld-council mailing list\(^37\). Each of those statements is referred to throughout the next sections\(^38\) and are found in full in Part B of the Report. The NCUC submitted Minority Statements on Recommendations 6 & 20 and on Implementation Guidelines F, H & P. These statements are found in full here in Annex A & C, respectively, as they relate specifically to the finalised text of those two recommendations. GNSO Committee Chair and Nominating Committee appointee Ms Avri Doria also submitted individual comments on the recommendation package. Her comments are found in Annex B here.

9. All Constituencies support the introduction of new TLDs particularly if the application process is transparent and objective. For example, the ISPCP said that, “…the ISPCP is highly supportive of the principles defined in this section, especially with regards to the statement in [principle A] (A): New generic top-level domains must be introduced in an orderly, timely and predictable way. Network operators and ISPs must ensure their customers do not encounter problems in addressing their emails, and in their web searching and access activities, since this can cause customer dissatisfaction and overload help-desk complaints. Hence this principle is a vital component of any addition sequence to the gTLD namespace. The various criteria as defined in D, E and F, are also of great importance in contributing to minimise the risk of moving forward with any new gTLDs, and our constituency urges ICANN to ensure they are scrupulously observed during the applications evaluation process”. The Business Constituency’s (BC) CIS said that “…If the outcome is the best possible there will be a beneficial impact on business

\(^37\) Archived at http://forum.icann.org/lists/gtld-council/
users from: a reduction in the competitive concentration in the Registry sector; increased choice of domain names; lower fees for registration and ownership; increased opportunities for innovative on-line business models.” The Registrar Constituency (RC) agreed with this view stating that “…new gTLDs present an opportunity to Registrars in the form of additional products and associated services to offer to its customers. However, that opportunity comes with the costs if implementing the new gTLDs as well as the efforts required to do the appropriate business analysis to determine which of the new gTLDs are appropriate for its particular business model.”

10. The Registry Constituency (RyC) said that “…Regarding increased competition, the RyC has consistently supported the introduction of new gTLDs because we believe that: there is a clear demand for new TLDs; competition creates more choices for potential registrants; introducing new TLDs with different purposes increases the public benefit; new gTLDs will result in creativity and differentiation in the domain name industry; the total market for all TLDs, new and old, will be expanded.” In summary, the Committee recommended, “ICANN must implement a process that allows the introduction of new top-level domains. The evaluation and selection procedure for new gTLD registries should respect the principles of fairness, transparency and non-discrimination. All applicants for a new gTLD registry should therefore be evaluated against transparent and predictable criteria, fully available to the applicants prior to the initiation of the process. Normally, therefore, no subsequent additional selection criteria should be used in the selection process”. Given that this recommendation has support from all Constituencies, the following sections set out the other Terms of Reference recommendations.
TERM OF REFERENCE -- SELECTION CRITERIA

1. Recommendation 2 Discussion -- Strings must not be confusingly similar to an existing top-level domain.

   i) This recommendation has support from all the GNSO Constituencies. Ms Doria accepted the recommendation with the concern expressed below\(^{39}\).

   ii) The list of existing top-level domains is maintained by IANA and is listed in full on ICANN’s website\(^{40}\). Naturally, as the application process enables the operation of new top-level domains this list will get much longer and the test more complex. The RyC, in its Impact Statement, said that “…This recommendation is especially important to the RyC. … It is of prime concern for the RyC that the introduction of new gTLDs results in a ubiquitous experience for Internet users that minimizes user confusion. gTLD registries will be impacted operationally and financially if new gTLDs are introduced that create confusion with currently existing gTLD strings or with strings that are introduced in the future. There is a strong possibility of significant impact on gTLD registries if IDN versions of existing ASCII gTLDs are introduced by registries different than the ASCII gTLD registries. Not only could there be user

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\(^{39}\) “My concern involves using definitions that rely on legal terminology established for trademarks for what I believe should be a policy based on technical criteria. In the first instance I believe that this is essentially a technical issue that should have been resolved with reference to typography, homologues, orthographic neighbourhood, transliteration and other technically defined attributes of a name that would make it unacceptable. There is a large body of scientific and technical knowledge and description in this field that we could have drawn on. By using terms that rely on the legal language of trademark law, I believe we have created an implicit redundancy between recommendations 2 and 3. I.e., I believe both 2 and 3 can be used to protect trademarks and other intellectual property rights, and while 3 has specific limitations, 2 remains open to full and varied interpretation. As we begin to consider IDNs, I am concerned that the interpretations of confusingly similar may be used to eliminate many potential TLDs based on translation. That is, when a translation may have the same or similar meaning to an existing TLD, that the new name may be eliminated because it is considered confusing to users who know both languages.”

\(^{40}\) http://data.iana.org/TLD/tlds-alpha-by-domain.txt
confusion in both email and web applications, but dispute resolution processes could be greatly complicated.” The ISPCP also stated that this recommendation was “especially important in the avoidance of any negative impact on network activities.” The RC stated that “…Registrars would likely be hesitant to offer confusingly similar gTLDs due to customer demand and support concerns. On the other hand, applying the concept too broadly would inhibit gTLD applicants and ultimately limit choice to Registrars and their customers”.

iii) There are two other key concepts within this recommendation. The first is the issue of “confusingly similar”41 and the second “likelihood of confusion”. There is extensive experience within the Committee with respect to trademark law and the issues found below have been discussed at length, both within the Committee and amongst the Implementation Team.

iv) The Committee used a wide variety of existing law42, international treaty agreements and covenants to arrive at a common understanding that strings should not be confusingly similar either to existing top-level domains like .com and .net or to existing trademarks43. For example, the Committee considered the World Trade Organisation’s TRIPS agreement, in particular Article 16 which discusses the rights which are

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42 In addition to the expertise within the Committee, the NCUC provided, as part of its Constituency Impact Statement expert outside advice from Professor Christine Haight Farley which said, in part, “…A determination about whether use of a mark by another is “confusingly similar” is simply a first step in the analysis of infringement. As the committee correctly notes, account will be taken of visual, phonetic and conceptual similarity. But this determination does not end the analysis. Delta Dental and Delta Airlines are confusingly similar, but are not like to cause confusion, and therefore do not infringe. … In trademark law, where there is confusing similarity and the mark is used on similar goods or services, a likelihood of confusion will usually be found. European trademark law recognizes this point perhaps more readily than U.S. trademark law. As a result, sometimes “confusingly similar” is used as shorthand for “likelihood of confusion”. However, these concepts must remain distinct in domain name policy where there is no opportunity to consider how the mark is being used.”
43 In addition, advice was sought from experts within WIPO who continue to provide guidance on this and other elements of dispute resolution procedures.
conferrered to a trademark owner. In particular, the Committee agreed upon an expectation that strings must avoid increasing opportunities for entities or individuals, who operate in bad faith and who wish to defraud consumers. The Committee also considered the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights which address the “freedom of expression” element of the Committee’s deliberations.

v) The Committee also benefited from the work of the Protecting the Rights of Others Working Group (PRO-WG). The PRO-WG presented its Final Report to the Committee at the June 2007 San Juan meeting. The Committee agreed that the Working Group could develop some reference implementation guidelines on rights protection mechanisms that may inform potential new TLD applicants during the application process. A small ad-hoc group of interested volunteers are preparing those materials for consideration by the Council by mid-October 2007.

vi) The Committee had access to a wide range of differing approaches to rights holder protection mechanisms including the United Kingdom, the USA, Jordan, Egypt and Australia.

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44 Kristina Rosette provided the reference to the Agreement on Trade-Related Aspects of Intellectual Property Rights which is found online at http://www.wto.org/english/tratop_e/trips_e/t_agm1_e.htm

“…Article 16 Rights Conferred 1. The owner of a registered trademark shall have the exclusive right to prevent all third parties not having the owner's consent from using in the course of trade identical or similar signs for goods or services which are identical or similar to those in respect of which the trademark is registered where such use would result in a likelihood of confusion. In case of the use of an identical sign for identical goods or services, a likelihood of confusion shall be presumed. The rights described above shall not prejudice any existing prior rights, nor shall they affect the possibility of Members making rights available on the basis of use.…”

45 http://www.ohchr.org/english/bodies/hrc/comments.htm

46 http://gnso.icann.org/drafts/GNSO-PRO-WG-final-01Jun07.pdf

47 Charles Shaban provided a range of examples from Arabic speaking countries. For example, in Jordan, Article 7 Trademarks eligible for registration are 1- A trademark shall be registered if it is distinctive, as to words, letters, numbers, figures, colors, or other signs or any combination thereof and visually perceptible. 2- For the purposes of this Article, "distinctive" shall mean applied in a manner which secures distinguishing the goods of the proprietor of the trademark from those of other persons. Article 8 Marks which may not be registered as trademarks: 10- A mark identical with one belonging to a different proprietor which is already entered in the register in respect of the same goods or class of goods for which the mark is
vii) In addition, the Committee referred to the 1883 Paris Convention on the Protection of Industrial Property. It describes the notion of confusion and describes creating confusion as “to create confusion by any means whatever” (Article 10bis (3) (1) and, further, being “liable to mislead the public” (Article 10bis (3) (3)). The treatment of confusingly similar is also contained in European Union law (currently covering twenty-seven countries) and is structured as follows. “…because of its identity with or similarity to…there exists a likelihood of confusion on the part of the public…; the likelihood of confusion includes the likelihood of association…” (Article 4 (1) (b) of the 1988 EU Trade Mark directive 89/104/EEC). Article 8 (1) (b) of the 1993 European Union Trade Mark regulation 40/94 is also relevant.

intended to be registered, or so closely resembling such trademark to the extent that it may lead to deceiving third parties.

12- The trademark which is identical or similar to, or constitutes a translation of, a well-known trademark for use on similar or identical goods to those for which that one is well-known for and whose use would cause confusion with the well-known mark, or for use of different goods in such a way as to prejudice the interests of the well-known mark and leads to believing that there is a connection between its owner and those goods as well as the marks which are similar or identical to the honorary badges, flags, and other insignia as well as the names and abbreviations relating to international or regional organizations or those that offend our Arab and Islamic age-old values.

In Oman for example, Article 2 of the Sultan Decree No. 38/2000 states:
“The following shall not be considered as trademarks and shall not be registered as such: If the mark is identical, similar to a degree which causes confusion, or a translation of a trademark or a commercial name known in the Sultanate of Oman with respect to identical or similar goods or services belonging to another business, or if it is known and registered in the Sultanate of Oman on goods and service which are neither identical nor similar to those for which the mark is sought to be registered provided that the usage of the mark on those goods or services in this last case will suggest a connection between those goods or services and the owner of the known trademark and such use will cause damage to the interests of the owner of the known trademark.”

Although the laws In Egypt do not have specific provisions regarding confusion they stress in great detail the importance of distinctiveness of a trade mark.

Article 63 in the IP Law of Egypt No.82 for the year 2002 states:
“A trademark is any sign distinguishing goods, whether products or services, and include is particular names represented in a distinctive manner, signatures, words, letters, numerals, design, symbols, signposts, stamps, seal, drawings, engravings, a combination of distinctly formed colors and any other combination of these elements if used, or meant to be used, to distinguish the precedents of a particular industry, agriculture, forest or mining venture or any goods, or to indicate the origin of products or goods or their quality, category, guarantee, preparation process, or to indicate the provision of any service. In all cases, a trademark shall be a sign that is recognizable by sight.”
viii) In the United States, existing trade mark law requires applicants for trademark registration to state under penalty of perjury that “…to the best of the verifier's knowledge and belief, no other person has the right to use such mark in commerce either in the identical form thereof or in such near resemblance thereto as to be likely, when used on or in connection with the goods of such other person, to cause confusion, or to cause mistake, or to deceive…” which is contained in Section 1051 (3) (d) of the US Trademark Act 2005 (found at http://www.bitlaw.com/source/15usc/1051.html.)

ix) In Australia, the Australian Trade Marks Act 1995 Section 10 says that “…For the purposes of this Act, a trade mark is taken to be deceptively similar to another trade mark if it so nearly resembles that other trade mark that it is likely to deceive or cause confusion” (found at http://www.ipaustralia.gov.au/resources/legislation_index.shtml)

x) A number of different trademark offices provide guidance on how to interpret confusion. For example, the European Union Trade Mark Office provides guidance on how to interpret confusion. “…confusion may be visual, phonetic or conceptual. A mere aural similarity may create a likelihood of confusion. A mere visual similarity may create a likelihood of confusion. Confusion is based on the fact that the relevant public does not tend to analyse a word in detail but pays more attention to the distinctive and dominant components. Similarities are more significant than dissimilarities. The visual comparison is based on an analysis of the number and sequence of the letters, the number of words and the structure of the signs. Further particularities may be of relevance, such as the existence of special letters or accents that may be perceived as an indication of a specific language. For words, the visual comparison coincides with the phonetic comparison unless in the relevant language the word is not pronounced as it is written. It should

49 Further information can be found at the US Patent and Trademark Office’s website http://www.uspto.gov/
be assumed that the relevant public is either unfamiliar with that foreign language, or even if it understands the meaning in that foreign language, will still tend to pronounce it in accordance with the phonetic rules of their native language. The length of a name may influence the effect of differences. The shorter a name, the more easily the public is able to perceive all its single elements. Thus, small differences may frequently lead in short words to a different overall impression. In contrast, the public is less aware of differences between long names. The overall phonetic impression is particularly influenced by the number and sequence of syllables.” (found at http://oami.europa.eu/en/mark/marque/direc.htm).

xi) An extract from the United Kingdom’s Trade Mark Office’s Examiner’s Guidance Manual is useful in explaining further the Committee’s approach to developing its Recommendation. “For likelihood of confusion to exist, it must be probable, not merely possible that confusion will arise in the mind of the average consumer. Likelihood of association is not an alternative to likelihood of confusion, “but serves to define its scope”. Mere association, in the sense that the later mark brings the earlier mark to mind is insufficient to find a likelihood of confusion, unless the average consumer, in bringing the earlier mark to mind, is led to expect the goods or services of both marks to be under the control of one single trade source. “The risk that the public might believe that the goods/services in question come from the same undertaking or, as the case may be, from economically-linked undertakings, constitutes a likelihood of confusion….” (found at http://www.patent.gov.uk/tm/t-decisionmaking/t-law/t-law-manual.htm)

xii) The Committee also looked in detail at the existing provisions of ICANN's Registrar Accreditation Agreement, particularly Section 3.7.7.950 which says that “...The Registered Name Holder shall

50 Found at http://www.icann.org/registrars/ra-agreement-17may01.htm#3
represent that, to the best of the Registered Name Holder's knowledge and belief, neither the registration of the Registered Name nor the manner in which it is directly or indirectly used infringes the legal rights of any third party.”

xiii) The implications of the introduction of Internationalised Domain Names (IDNs) are, in the main, the same as for ASCII top-level domains. On 22 March 2007 the IDN-WG released its Outcomes Report51 that the Working Group presented to the GNSO Committee. The Working Group’s exploration of IDN-specific issues confirmed that the new TLD recommendations are valid for IDN TLDs. The full IDN WG Report is found in Part B of the Report.

xiv) The technical testing for IDNs at the top-level is not yet completed although strong progress is being made. Given this and the other work that is taking place around the introduction of IDNs at the top-level, there are some critical factors that may impede the immediate acceptance of new IDN TLD applications. The conditions under which those applications would be assessed would remain the same as for ASCII TLDs.

xv) Detailed work continues on the preparation of an Implementation Plan that reflects both the Principles and the Recommendations. The proposed Implementation Plan deals with a comprehensive range of potentially controversial (for whatever reason) string applications which balances the need for reasonable protection of existing legal rights and the capacity to innovate with new uses for top level domains that may be attractive to a wide range of users52.

xvi) The draft Implementation Plan (included in the Discussion Points document), illustrates the flow of the application and evaluation process.

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52 The 2003 correspondence between ICANN’s then General Counsel and the then GAC Chairman is also useful http://www.icann.org/correspondence/touton-letter-to-tarmizi-10feb03.htm.
and includes a detailed dispute resolution and extended evaluation tracks designed to resolve objections to applicants or applications.

xvii) There is tension between those on the Committee who are concerned about the protection of existing TLD strings and those concerned with the protection of trademark and other rights as compared to those who wish, as far as possible, to preserve freedom of expression and creativity. The Implementation Plan sets out a series of tests to apply the recommendation during the application evaluation process.

2. Recommendation 3 Discussion -- Strings must not infringe the existing legal rights of others that are recognized or enforceable under generally accepted and internationally recognized principles of law. Examples of these legal rights that are internationally recognized include, but are not limited to, rights defined in the Paris Convention for the Protection of Industry Property (in particular trademark rights), the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR) (in particular freedom of expression rights).

i. This recommendation has support from all GNSO Constituencies. Ms Doria supported the recommendation with concern expressed below.

ii. This recommendation was discussed in detail in the lead up to the Committee’s 7 June 2007 conference call and it was agreed that further work would be beneficial. That work was conducted through a series of teleconferences and email exchanges. The Committee decided to leave the recommendation text as it had been drafted and insert a new Principle G that reads “…The string evaluation process must not

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53 “My first concern relates to the protection of what can be called the linguistic commons. While it is true that much of trademark law and practice does protect general vocabulary and common usage from trademark protection, I am not sure that this is always the case in practice. I am also not convinced that trademark law and policy that applies to specific product type within a specific locale is entirely compatible with a general and global naming system.”
infringe the applicant’s freedom of expression rights that are protected under internationally recognized principles of law.”

iii. Prior to this, the Committee engaged in comprehensive discussion about this recommendation and took advice from a number of experts within the group\(^{54}\). The original text of the recommendation has been modified to recognise that an applicant would be bound by the laws of the country where they are located and an applicant may be bound by another country that has jurisdiction over them. In addition, the original formulation that included “freedom of speech” was modified to read the more generally applicable “freedom of expression”.

iv. Before reaching agreement on the final text, the IPC and the NCUC, in their respective Constituency Impact Statements (CIS), had differing views. The NCUC argued that “…there is no recognition that trade marks (and other legal rights have legal limits and defenses.” The IPC says “agreed [to the recommendation], and, as stated before, appropriate mechanisms must be in place to address conflicts that may arise between any proposed new string and the IP rights of others.”

3. **Recommendation 4 Discussion -- Strings must not cause any technical instability.**

   i. This recommendation is supported by all GNSO Constituencies and Ms Doria.

   ii. It was agreed by the Committee that the string should not cause any technical issues that threatened the stability and security of the Internet.

   iii. In its CIS, the ISPCP stated that “…this is especially important in the avoidance of any negative impact on network activities…The ISPCP considers recommendations 7 and 8 to be fundamental. The technical, financial, organizational and operational capability of the applicant are the evaluators’ instruments for preventing potential negative impact on

\(^{54}\) For example, David Maher, Jon Bing, Steve Metalitz, Philip Sheppard and Michael Palage.
a new string on the activities of our sector (and indeed of many other sectors).” The IPC also agreed that “technical and operational stability are imperative to any new gTLD introduction.” The RC said “…This is important to Registrars in that unstable registry and/or zone operations would have a serious and costly impact on its operations and customer service and support.”

iv. The Security and Stability Advisory Committee (SSAC) has been involved in general discussions about new top level domains and will be consulted formally to confirm that the implementation of the recommendations will not cause any technical instability.

v. A reserved word list, which includes strings which are reserved for technical reasons, has been recommended by the RN-WG. This table is found in the section below.

4. **Recommendation 5 Discussion -- Strings must not be a Reserved Word.**

i. This recommendation is supported by all GNSO Constituencies. Ms Doria supported the recommendation but expressed some concerns outlined in the footnote below.

ii. The RN WG developed a definition of “reserved word” in the context of new TLDs which said “…depending on the specific reserved name category as well as the type (ASCII or IDN), the reserved name requirements recommended may apply in any one or more of the following levels as indicated:

1. At the top level regarding gTLD string restrictions

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55 Reserved Word has a specific meaning in the ICANN context and includes, for example, the reserved word provisions in ICANN’s existing registry contracts. See [http://www.icann.org/registries/agreements.htm](http://www.icann.org/registries/agreements.htm).

56 “Until such time as the technical work on IDNAbis is completed, I am concerned about establishing reserved name rules connected to IDNs. My primary concern involves policy decisions made in ICANN for reserved names becoming hard coded in the IDNAbis technical solution and thus becoming technical constraints that are no longer open to future policy reconsideration.”
2. At the second-level as contractual conditions

3. At the third-level as contractual conditions for any new gTLDs that offer domain name registrations at the third-level.

iii. The notion of “reserved words” has a specific meaning within the ICANN context. Each of the existing ICANN registry contracts has provisions within it that govern the use of reserved words. Some of these recommendations will become part of the contractual conditions for new registry operators.

iv. The Reserved Names Working Group (RN-WG) developed a series of recommendations across a broad spectrum of reserved words. The Working Group’s Final Report was reviewed and the recommendations updated by the Committee at ICANN’s Puerto Rico meeting and, with respect to the recommendations relating to IDNs, with IDN experts. The final recommendations are included in the following table.

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<table>
<thead>
<tr>
<th>Reserved Name Category</th>
<th>Domain Name Level(s)</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICANN &amp; IANA All ASCII</td>
<td>The names listed as ICANN and IANA names will be reserved at all levels.</td>
</tr>
<tr>
<td>2</td>
<td>ICANN &amp; IANA Top level, IDN</td>
<td>Any names that appear in the IDN evaluation facility which consist exclusively of translations of ‘example’ or ‘test’ that appear in the document at <a href="http://www.icann.org/topics/idn/idn-evaluation-plan-v2%209.pdf">http://www.icann.org/topics/idn/idn-evaluation-plan-v2%209.pdf</a> shall be reserved.</td>
</tr>
<tr>
<td>3</td>
<td>ICANN &amp; IANA 2nd &amp; 3rd levels, IDN</td>
<td>Any names that appear in the IDN evaluation facility which consist exclusively of translations of ‘example’ or ‘test’ that appear in the document at <a href="http://www.icann.org/topics/idn/idn-evaluation-plan-v2%209.pdf">http://www.icann.org/topics/idn/idn-evaluation-plan-v2%209.pdf</a> shall be reserved.</td>
</tr>
<tr>
<td>4</td>
<td>Symbols All</td>
<td>We recommend that the current practice be maintained, so that no symbols other than the '-' [hyphen] be considered for use, with further allowance for any equivalent marks that may explicitly be made available in future revisions of the IDNA protocol.</td>
</tr>
<tr>
<td>5</td>
<td>Single and Two Character IDNs IDNA-valid strings at all levels</td>
<td>Single and two-character U-labels on the top level and second level of a domain name should not be restricted in general. At the top level, requested strings should be analyzed on a case-by-case basis in the new gTLD process depending on the script and language used in order to determine whether the string should be granted for allocation in the DNS with particular caution applied to U-labels in Latin script (see Recommendation 10 below). Single and two character labels at the second level and the third level if applicable should be available for registration, provided they are consistent with the IDN Guidelines.</td>
</tr>
<tr>
<td>6</td>
<td>Single Letters Top Level</td>
<td>We recommend reservation of single letters at the top level based on technical questions raised. If sufficient research at a later date demonstrates that the technical issues and concerns are addressed, the topic of releasing reservation status can be reconsidered.</td>
</tr>
<tr>
<td>7</td>
<td>Single Letters and Digits 2nd Level</td>
<td>In future gTLDs we recommend that single letters and single digits be available at the second (and third level if applicable).</td>
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</tbody>
</table>

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The Committee are aware that the terminology used here for the purposes of policy recommendations requires further refinement and may be at odds with similar terminology developed in other context. The terminology may be imprecise in other contexts than the general discussion about reserved words found here.
<table>
<thead>
<tr>
<th>Reserved Name Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>8 Single and Two Digits</td>
<td>Top Level</td>
<td>A top-level label must not be a plausible component of an IPv4 or IPv6 address. (e.g., .3, .99, .123, .1035, .0xAF, .1578234)</td>
</tr>
<tr>
<td>9 Single Letter, Single Digit Combinations</td>
<td>Top Level</td>
<td>Applications may be considered for single letter, single digit combinations at the top level in accordance with the terms set forth in the new gTLD process. Examples include .3F, .A1, .u7.</td>
</tr>
<tr>
<td>10 Two Letters</td>
<td>Top Level</td>
<td>We recommend that the current practice of allowing two letter names at the top level, only for ccTLDs, remains at this time. Examples include .AU, .DE, .UK.</td>
</tr>
<tr>
<td>11 Any combination of Two Letters, Digits</td>
<td>2nd Level</td>
<td>Registries may propose release provided that measures to avoid confusion with any corresponding country codes are implemented. Examples include ba.aero, ub.cat, 53.com, 3M.com, e8.org.</td>
</tr>
<tr>
<td>12 Tagged Names</td>
<td>Top Level ASCII</td>
<td>In the absence of standardization activity and appropriate IANA registration, all labels with hyphens in both the third and fourth character positions (e.g., &quot;bq--1k2n4h4b&quot; or &quot;xn--ndk061n&quot;) must be reserved at the top-level.</td>
</tr>
</tbody>
</table>

59 The subgroup was encouraged by the ccNSO not to consider removing the restriction on two-letter names at the top level. IANA has based its allocation of two-letter names at the top level on the ISO 3166 list. There is a risk of collisions between any interim allocations, and ISO 3166 assignments which may be desired in the future.

60 The existing gTLD registry agreements provide for a method of potential release of two-character LDH names at the second level. In addition, two character LDH strings at the second level may be released through the process for new registry services, which process involves analysis of any technical or security concerns and provides opportunity for public input. Technical issues related to the release of two-letter and/or number strings have been addressed by the RSTEP Report on GNR’s proposed registry service. The GAC has previously noted the WIPO II Report statement that “If ISO 3166 alpha-2 country code elements are to be registered as domain names in the gTLDs, it is recommended that this be done in a manner that minimises the potential for confusion with the ccTLDs.”

61 Considering that the current requirement in all 16 registry agreement reserves “All labels with hyphens in the third and fourth character positions (e.g., "bq--1k2n4h4b" or "xn--ndk061n")”, this requirement reserves any names having any of a combination of 1296 different prefixes (36x36).
Reserved Name Category | Domain Name Level(s) | Recommendation
--- | --- | ---
13 N/A | Top Level IDN | For each IDN gTLD proposed, applicant must provide both the "ASCII compatible encoding" ("A-label") and the "Unicode display form" ("U-label") \(^{62}\). For example:

- If the Chinese word for 'Beijing' is proposed as a new gTLD, the applicant would be required to provide the A-label (xn--1lq90i) and the U-label (北京).

- If the Japanese word for 'Tokyo' is proposed as a new gTLD, the applicant would be required to provide the A-label (xn--1lqs71d) and the U-label (東京).

14 Tagged Names | 2\(^{nd}\) Level ASCII | The current reservation requirement be reworded to say, "In the absence of standardization activity and appropriate IANA registration, all labels with hyphens in both the third and fourth character positions (e.g., "bq--1k2n4h4b" or "xn--ndk061n") must be reserved in ASCII at the second (2\(^{nd}\)) level." \(^{63}\) – added words in italics. (Note that names starting with "xn--" may only be used if the current ICANN IDN Guidelines are followed by a gTLD registry.)

15 Tagged Names | 3\(^{rd}\) Level ASCII | All labels with hyphens in both the third and fourth character positions (e.g., "bq--1k2n4h4b" or "xn--ndk061n") must be reserved in ASCII at the third (3\(^{rd}\) level) for gTLD registries that register names at the third level." \(^{64}\) – added words in italics. (Note that names starting with "xn--" may only be used if the current ICANN IDN Guidelines are followed by a gTLD registry.)

16 NIC, WHOIS, WWW | Top ASCII | The following names must be reserved: nic, whois, www.

17 NIC, WHOIS, WWW | Top IDN | Do not try to translate nic, whois and www into Unicode versions for various scripts or to reserve any ACE versions of such translations or transliterations if they exist.


\(^{63}\) Considering that the current requirement in all 16 registry agreement reserves "All labels with hyphens in the third and fourth character positions (e.g., "bq--1k2n4h4b" or "xn--ndk061n"), this requirement reserves any names having any of a combination of 1296 different prefixes (36x36).

\(^{64}\) Considering that the current requirement in all 16 registry agreement reserves "All labels with hyphens in the third and fourth character positions (e.g., "bq--1k2n4h4b" or "xn--ndk061n"), this requirement reserves any names having any of a combination of 1296 different prefixes (36x36).
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</thead>
<tbody>
<tr>
<td>NIC, WHOIS, WWW</td>
<td>Second and Third* ASCII</td>
<td>The following names must be reserved for use in connection with the operation of the registry for the Registry TLD: nic, whois, <a href="http://www">www</a>. Registry Operator may use them, but upon conclusion of Registry Operator’s designation as operator of the registry for the Registry TLD, they shall be transferred as specified by ICANN. (*Third level only applies in cases where a registry offers registrations at the third level.)</td>
</tr>
<tr>
<td>NIC, WHOIS, WWW</td>
<td>Second and Third* IDN</td>
<td>Do not try to translate nic, whois and www into Unicode versions for various scripts or to reserve any ACE versions of such translations or transliterations if they exist, except on a case by case basis as proposed by given registries. (*Third level only applies in cases where a registry offers registrations at the third level.)</td>
</tr>
<tr>
<td>Geographic and geopolitical</td>
<td>Top Level ASCII and IDN</td>
<td>There should be no geographical reserved names (i.e., no exclusionary list, no presumptive right of registration, no separate administrative procedure, etc.). The proposed challenge mechanisms currently being proposed in the draft new gTLD process would allow national or local governments to initiate a challenge, therefore no additional protection mechanisms are needed. Potential applicants for a new TLD need to represent that the use of the proposed string is not in violation of the national laws in which the applicant is incorporated. However, new TLD applicants interested in applying for a TLD that incorporates a country, territory, or place name should be advised of the GAC Principles, and the advisory role vested to it under the ICANN Bylaws. Additionally, a summary overview of the obstacles encountered by previous applicants involving similar TLDs should be provided to allow an applicant to make an informed decision. Potential applicants should also be advised that the failure of the GAC, or an individual GAC member, to file a challenge during the TLD application process, does not constitute a waiver of the authority vested to the GAC under the ICANN Bylaws.</td>
</tr>
</tbody>
</table>

Note New gTLD Recommendation 20
<table>
<thead>
<tr>
<th>Reserved Name Category</th>
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<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Geographic and geopolitical</td>
<td>All Levels ASCII and IDN</td>
<td>The term ‘geopolitical names’ should be avoided until such time that a useful definition can be adopted. The basis for this recommendation is founded on the potential ambiguity regarding the definition of the term, and the lack of any specific definition of it in the WIPO Second Report on Domain Names or GAC recommendations.</td>
</tr>
</tbody>
</table>

*Note New gTLD Recommendation 20*

| 22 Geographic and geopolitical | Second Level & Third Level if applicable, ASCII & IDN | The consensus view of the working group is given the lack of any established international law on the subject, conflicting legal opinions, and conflicting recommendations emerging from various governmental fora, the current geographical reservation provision contained in the sTLD contracts during the 2004 Round should be removed, and harmonized with the more recently executed .COM, .NET, .ORG, .BIZ and .INFO registry contracts. The only exception to this consensus recommendation is those registries incorporated/organized under countries that require additional protection for geographical identifiers. In this instance, the registry would have to incorporate appropriate mechanisms to comply with their national/local laws. |

For those registries incorporated/organized under the laws of those countries that have expressly supported the guidelines of the WIPO Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications as adopted by the WIPO General Assembly, it is strongly recommended (but not mandated) that these registries take appropriate action to promptly implement protections that are in line with these WIPO guidelines and are in accordance with the relevant national laws of the applicable Member State.

*Note New gTLD Recommendation 20*
<table>
<thead>
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<th>Reserved Name Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>23 gTLD Reserved Names</td>
<td>Second &amp; Third Level ASCII and IDN (when applicable)</td>
<td>Absent justification for user confusion(^{65}), the recommendation is that gTLD strings should no longer be reserved from registration for new gTLDs at the second or when applicable at the third level. Applicants for new gTLDs should take into consideration possible abusive or confusing uses of existing gTLD strings at the second level of their corresponding gTLD, based on the nature of their gTLD, when developing the startup process for their gTLD.</td>
</tr>
<tr>
<td>24 Controversial Names</td>
<td>All Levels, ASCII &amp; IDN</td>
<td>There should not be a new reserved names category for Controversial Names.</td>
</tr>
<tr>
<td>25 Controversial Names</td>
<td>Top Level, ASCII &amp; IDN</td>
<td>There should be a list of disputed names created as a result of the dispute process to be created by the new gTLD process.</td>
</tr>
<tr>
<td>26 Controversial Names</td>
<td>Top Level, ASCII &amp; IDN</td>
<td>In the event of the initiation of a CN-DRP process, applications for that label will be placed in a HOLD status that would allow for the dispute to be further examined. If the dispute is dismissed or otherwise resolved favorably, the applications will reenter the processing queue. The period of time allowed for dispute should be finite and should be relegated to the CN-DRP process. The external dispute process should be defined to be objective, neutral, and transparent. The outcome of any dispute shall not result in the development of new categories of Reserved Names.(^{66})</td>
</tr>
<tr>
<td>27 Controversial Names</td>
<td>Top Level, ASCII &amp; IDN</td>
<td>The new GTLD Controversial Names Dispute Resolution Panel should be established as a standing mechanism that is convened at the time a dispute is initiated. Preliminary elements of that process are provided in this report but further work is needed in this area.</td>
</tr>
</tbody>
</table>

\(^{65}\) With its recommendation, the sub-group takes into consideration that justification for potential user confusion (i.e., the minority view) as a result of removing the contractual condition to reserve gTLD strings for new TLDs may surface during one or more public comment periods.

\(^{66}\) Note that this recommendation is a continuation of the recommendation in the original RN-WG report, modified to synchronize with the additional work done in the 30-day extension period.
<table>
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</thead>
<tbody>
<tr>
<td>28 Controversial Names</td>
<td>Top Level, ASCII &amp; IDN</td>
<td>Within the dispute process, disputes would be initiated by the ICANN Advisory Committees (e.g., ALAC or GAC) or supporting organizations (e.g., GNSO or ccNSO). As these organizations do not currently have formal processes for receiving, and deciding on such activities, these processes would need to be defined:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o The Advisory Groups and the Supporting Organizations, using their own processes and consistent with their organizational structure, will need to define procedures for deciding on any requests for dispute initiation.</td>
</tr>
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<td>o Any consensus or other formally supported position from an ICANN Advisory Committee or ICANN Supporting Organization must document the position of each member within that committee or organization (i.e., support, opposition, abstention) in compliance with both the spirit and letter of the ICANN bylaws regarding openness and transparency.</td>
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<tr>
<td>Note New gTLD Recommendation 6</td>
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<tr>
<td>29 Controversial Names</td>
<td>Top Level, ASCII &amp; IDN</td>
<td>Further work is needed to develop predictable and transparent criteria that can be used by the Controversial Resolution Panel. These criteria must take into account the need to:</td>
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<td></td>
<td></td>
<td>▪ Protect freedom of expression</td>
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<td>▪ Affirm the fundamental human rights, in the dignity and worth of the human person and the equal rights of men and women</td>
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<td>▪ Take into account sensitivities regarding terms with cultural and religious significance.</td>
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<td>Note New gTLD Recommendation 6</td>
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</tr>
<tr>
<td>30 Controversial Names</td>
<td>Top Level, ASCII &amp; IDN</td>
<td>In any dispute resolution process, or sequence of issue resolution processes, the Controversial name category should be the last category considered.</td>
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<td>Note New gTLD Recommendation 6</td>
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v. With respect to geographic terms, the NCUC’s CIS stated that “…We oppose any attempts to create lists of reserved names. Even examples are to be avoided as they can only become prescriptive. We are
concerned that geographic names should not be fenced off from the commons of language and rather should be free for the use of all...Moreover, the proposed recommendation does not make allowance for the duplication of geographic names outside the ccTLDs – where the real issues arise and the means of resolving competing use and fair and nominative use.”

vi. The GAC’s Public Policy Principle 2.2 states that “ICANN should avoid country, territory or place names, and country, territory or regional language or people descriptions, unless in agreement with the relevant government or public authorities.”

vii. The Implementation Team has developed some suggestions about how this recommendation may be implemented. Those suggestions and the process flow were incorporated into the Version 2 of the ICANN Staff Discussion Points document for consideration by the Committee.

5. Recommendation 6 Discussion -- Strings must not be contrary to generally accepted legal norms relating to morality and public order that are recognized under international principles of law.

Examples of such principles of law include, but are not limited to, the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the International Convention of the Elimination of All Forms of Racial Discrimination, intellectual property treaties administered by the World Intellectual Property Organisation (WIPO) and the WTO Agreement on Trade-Related Aspects of Intellectual Property (TRIPS).

i. This Recommendation is supported by all GNSO Constituencies except the NCUC. The NCUC has submitted a Minority Statement which is found in full in Annex A. The NCUC’s earlier Constituency Impact Statement is found, along with all the GNSO Constituency Impact Statements, in Part B of this report. Ms Doria has submitted individual
The Committee has discussed this recommendation in great detail and has attempted to address the experiences of the 2003-2004 sTLD round and the complex issues surrounding the .xxx application. The Committee has also recognised the GAC’s Public Policy Principles, most notably Principle 2.1 a) and b) which refer to both freedom of expression and terms with significance in a variety of contexts. In addition, the Committee recognises the tension respecting freedom of expression and being sensitive to the legitimate concerns others have about offensive terms. The NCUC’s earlier CIS says “…we oppose any string criteria based on morality and public order”.

ii. Other Constituencies did not address this recommendation in their CISs. The Implementation Team has tried to balance these views by establishing an Implementation Plan that recognises the practical effect of opening a new top-level domain application system that will attract applications that some members of the community do not agree with. Whilst ICANN does have a technical co-ordination remit, it must also put in place a system of handling objections to strings or to applicants, using pre-published criteria, that is fair and predictable for applicants. It is also necessary to develop guidance for independent evaluators tasked with making decisions about objections.

67 Ms Doria said “…My primary concern focuses on the term ‘morality’. While public order is frequently codified in national laws and occasionally in international law and conventions, the definition of what constitutes morality is not generally codified, and when it is, I believe it could be referenced as public order. This concern is related to the broad set of definitions used in the world to define morality. By including morality in the list of allowable exclusions we have made the possible exclusion list indefinitely large and have subjected the process to the consideration of all possible religious and ethical systems. ICANN or the panel of reviewers will also have to decide between different sets of moral principles, e.g., a morality that holds that people should be free to express themselves in all forms of media and those who believe that people should be free from exposure to any expression that is prohibited by their faith or moral principles. This recommendation will also subject the process to the fashion and occasional demagoguery of political correctness. I do not understand how ICANN or any expert panel will be able to judge that something should be excluded based on reasons of morality without defining, at least de-facto, an ICANN definition of morality? And while I am not a strict constructionist and sometimes allow for the broader interpretation of ICANN’s mission, I do not believe it includes the definition of a system of morality.”
iii. In its consideration of public policy aspects of new top-level domains the Committee examined the approach taken in a wide variety of jurisdictions to issues of morality and public order. This was done not to make decisions about acceptable strings but to provide a series of potential tests for independent evaluators to use should an objection be raised to an application. The use of the phrase “morality and public order” within the recommendation was done to set some guidelines for potential applicants about areas that may raise objections. The phrasing was also intended to set parameters for potential objectors so that any objection to an application could be analysed within the framework of broadly accepted legal norms that independent evaluators could use across a broad spectrum of possible objections. The Committee also sought to ensure that the objections process would have parameters set for who could object. Those suggested parameters are found within the Implementation Guidelines.

iv. In reaching its decision about the recommendation, the Committee sought to be consistent with, for example, Article 3 (1) (f) of the 1988 European Union Trade Mark Directive 89/104/EEC and within Article 7 (1) (f) of the 1993 European Union Trade Mark Regulation 40/94. In addition, the phrasing “contrary to morality or public order and in particular of such a nature as to deceive the public” comes from Article 6quinques (B)(3) of the 1883 Paris Convention. The reference to the Paris Convention remains relevant to domain names even though, when it was drafted, domain names were completely unheard of.

v. The concept of “morality” is captured in Article 19 United Nations Convention on Human Rights (http://www.unhchr.ch/udhr/lang/eng.htm) says “…Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.” Article 29 continues by saying that “…In the
exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society”.

vi. The EU Trade Mark Office’s Examiner’s guidelines provides assistance on how to interpret morality and deceit. “…Contrary to morality or public order. Words or images which are offensive, such as swear words or racially derogatory images, or which are blasphemous are not acceptable. There is a dividing line between this and words which might be considered in poor taste. The latter do not offend against this provision.” The further element is deception of the public which is treated in the following way. “…Deceive the public. To deceive the public, is for instance as to the nature, quality or geographical origin. For example, a word may give rise to a real expectation of a particular locality which is untrue.” For more information, see Sections 8.7 and 8.8 at http://oami.europa.eu/en/mark/marque/direc.htm

vii. The UK Trade Mark office provides similar guidance in its Examiner’s Guidance Manual. “Marks which offend fall broadly into three types: those with criminal connotations, those with religious connotations and explicit/taboo signs. Marks offending public policy are likely to offend accepted principles of morality, e.g. illegal drug terminology, although the question of public policy may not arise against marks offending accepted principles of morality, for example, taboo swear words. If a mark is merely distasteful, an objection is unlikely to be justified, whereas if it would cause outrage or would be likely significantly to undermine religious, family or social values, then an objection will be appropriate. Offence may be caused on matters of race, sex, religious belief or general matters of taste and decency. Care should be taken when words have a religious significance and which may provoke
greater offence than mere distaste, or even outrage, if used to parody a
religion or its values. Where a sign has a very sacred status to
members of a religion, mere use may be enough to cause outrage.”
For more information, see http://www.patent.gov.uk/tm/t-
decisionmaking/t-law/t-law-manual.htm)

viii. This recommendation has been the subject of detailed Committee and
small group work in an attempt to reach consensus about both the text
of the recommendation and the examples included as guidance about
generally accepted legal norms. The work has been informed by
detailed discussion within the GAC and through interactions between
the GNSO Committee and the GAC.

6. Recommendation 7 Discussion -- Applicants must be able to
demonstrate their technical capability to run a registry operation for the
purpose that the applicant sets out.

i. This recommendation is supported by all GNSO Constituencies and Ms
Doria.

ii. The Committee agreed that the technical requirements for applicants
would include compliance with a minimum set of technical standards
and that this requirement would be part of the new registry operator’s
contractual conditions included in the proposed base contract. The
more detailed discussion about technical requirements has been moved
to the contractual conditions section.

iii. Reference was made to numerous Requests for Comment (RFCs) and
other technical standards which apply to existing registry operators.
For example, Appendix 7 of the June 2005 .net agreement68 provides a
comprehensive listing of technical requirements in addition to other
technical specifications in other parts of the agreement. These
requirements are consistent with that which is expected of all current

68 http://www.icann.org/tlds/agreements/net/appendix7.html
registry operators. These standards would form the basis of any new top-level domain operator requirements.

iv. This recommendation is referred to in two CISs. “The ISPCP considers recommendations 7 and 8 to be fundamental. The technical, financial, organisational and operational capabilities of the applicant are the evaluators’ instruments for preventing potential negative impact on a new string on the activities of our sector (and indeed of many other sectors).” The NCUC submitted “…we record that this must be limited to transparent, predictable and minimum technical requirements only. These must be published. They must then be adhered to neutrally, fairly and without discrimination.”

v. The GAC supported this direction in its Public Policy Principles 2.6, 2.10 and 2.11.

7. Recommendation 8 Discussion -- Applicants must be able to demonstrate their financial and organisational operational capability.

i. This recommendation is supported by all GNSO Constituencies and accepted with concern by Ms Doria69.

ii. The Committee discussed this requirement in detail and determined that it was reasonable to request this information from potential applicants. It was also consistent with past practices including the prior new TLD rounds in 2000 and 2003-2004; the .net and .org rebids and the conditions associated with ICANN registrar accreditation.

iii. This is also consistent with best practice procurement guidelines recommended by the World Bank (www.worldbank.org), the OECD

69 “While I accept that a prospective registry must show adequate operational capability, creating a financial criteria is of concern. There may be many different ways of satisfying the requirement for operational capability and stability that may not be demonstrable in a financial statement or traditional business plan. E.g., in the case of an less developed community, the registry may rely on volunteer effort from knowledgeable technical experts. Another concern I have with financial requirements and high application fees is that they may act to discourage applications from developing nations or indigenous and minority peoples that have a different set of financial opportunities or capabilities then those recognized as acceptable within an expensive and highly developed region such as Los Angeles or Brussels.”
(www.oecd.org) and the Asian Development Bank (www.adb.org) as well as a range of federal procurement agencies such as the UK telecommunications regulator, Ofcom; the US Federal Communications Commission and major public companies.

iv. The challenging aspect of this recommendation is to develop robust and objective criteria against which applicants can be measured, recognising a vast array of business conditions and models. This will be an important element of the ongoing development of the Implementation Plan.

v. The ISPCP discussed the importance of this recommendation in its CIS, as found in Recommendation 7 above.

vi. The NCUC’s CIS addressed this recommendation by saying “…we support this recommendation to the extent that the criteria is truly limited to minimum financial and organizational operationally capability…All criteria must be transparent, predictable and minimum. They must be published. They must then be adhered to neutrally, fairly and without discrimination.”

vii. The GAC echoed these views in its Public Policy Principle 2.5 that said “…the evaluation and selection procedure for new gTLD registries should respect the principles of fairness, transparency and non-discrimination. All applicants for a new gTLD registry should therefore be evaluated against transparent and predictable criteria, fully available to the applicants prior to the initiation of the process. Normally, therefore, no subsequent additional selection criteria should be used in the selection process.”

8. **Recommendation 9 Discussion -- There must be a clear and pre-published process using objective and measurable criteria.**

   i. This recommendation is supported by all GNSO Constituencies and by Ms Doria. It is consistent with ICANN’s previous TLD rounds in 2000
and 2003-2004 and with its re-bid of both the .net and .org registry contracts.

ii. It is also consistent with ICANN’s Mission and Core Values especially 7, 8 and 9 which address openness in decision-making processes and the timeliness of those processes.

iii. The Committee decided that the “process” criteria for introducing new top-level domains would follow a pre-published application system including the levying of an application fee to recover the costs of the application process. This is consistent with ICANN’s approach to the introduction of new TLDs in the previous 2000 and 2004 round for new top-level domains.

iv. The RyC reiterated its support for this recommendation in its CIS. It said that “…this Recommendation is of major importance to the RyC because the majority of constituency members incurred unnecessarily high costs in previous rounds of new gTLD introductions as a result of excessively long time periods from application submittal until they were able to start their business. We believe that a significant part of the delays were related to selection criteria and processes that were too subjective and not very measurable. It is critical in our opinion that the process for the introduction of new gTLDs be predictable in terms of evaluation requirements and timeframes so that new applicants can properly scope their costs and develop reliable implementation plans.” The NCUC said that “…we strongly support this recommendation and again stress the need for all criteria to be limited to minimum operational, financial, and technical considerations. We all stress the need that all evaluation criteria be objective and measurable.”

9. **Recommendation 10 Discussion -- There must be a base contract provided to applicants at the beginning of the process.**

   i. This recommendation is supported by all GNSO Constituencies and by Ms Doria.
ii. The General Counsel’s office has been involved in discussions about the provision of a base contract which would assist applicants both during the application process and in any subsequent contract negotiations.

iii. A framework for the base contract was developed for discussion at the June 2007 ICANN meeting in Puerto Rico. The base contract will not be completed until the policy recommendations are in place. Completion of the policy recommendations will enable the completion of a draft base contract that would be available to applicants prior to the start of the new gTLD process, that is, prior to the beginning of the four-month window preceding the application submittal period.

iv. The RyC, in its CIS, said, “…like the comments for Recommendation 9, we believe that this recommendation will facilitate a more cost-effective and timely application process and thereby minimize the negative impacts of a process that is less well-defined and objective. Having a clear understanding of base contractual requirements is essential for a new gTLD applicant in developing a complete business plan.”

10. Recommendation 11 Discussion -- (This recommendation has been removed and is left intentionally blank. Note Recommendation 20 and its Implementation Guidelines).

11. Recommendation 12 Discussion -- Dispute resolution and challenge processes must be established prior to the start of the process.

   i. This recommendation is supported by all GNSO Constituencies and Ms Doria.

   ii. The Committee has provided clear direction on its expectations that all the dispute resolution and challenge processes would be established prior to the opening of the application round. The full system will be published prior to an application round starting. However, the finalisation of this process is contingent upon a completed set of
recommendations being agreed; a public comment period and the final agreement of the ICANN Board.

iii. The draft Implementation Plan in the Implementation Team *Discussion Points* document sets out the way in which the ICANN Staff proposes that disputes between applicants and challenge processes may be handled. Expert legal and other professional advice from, for example, auctions experts is being sought to augment the Implementation Plan.
TERM OF REFERENCE THREE -- ALLOCATION METHODS

12. **Recommendation 13 Discussion -- Applications must initially be assessed in rounds until the scale of demand is clear.**

   i. This recommendation is supported by all GNSO Constituencies and Ms Doria.

   ii. This recommendation sets out the principal allocation methods for TLD applications. The narrative here should be read in conjunction with the draft flowcharts and the draft Request for Proposals.

   iii. An application round would be opened on Day 1 and closed on an agreed date in the future with an unspecified number of applications to be processed within that round.

   iv. This recommendation may be amended, after an evaluation period and report that may suggest modifications to this system. The development of objective “success metrics” is a necessary part of the evaluation process that could take place within the new TLDs Project Office.

   v. The ISPCP expressed its support for this recommendation. Its CIS said that “…this is an essential element in the deployment of new gTLDs, as it enables any technical difficulties to be quickly identified and sorted out, working with reduced numbers of new strings at a time, rather than many all at once. Recommendation 18 on the use of IDNs is also important in preventing any negative impact on network operators and ISPs.”

13. **Recommendation 20 Discussion -- An application will be rejected if an expert panel determines that there is substantial opposition to it from a significant portion of the community to which the string may be explicitly or implicitly targeted.**

   i. This recommendation is supported by the majority of GNSO Constituencies. Ms Doria supports the recommendation but has
concerns about its implementation\textsuperscript{70}. The NCUC has submitted a Minority Statement which is found in full in Annex C about the recommendation and its associated Implementation Guidelines F, H and P.

ii. This recommendation was developed during the preparations for the Committee’s 7 June 2007 conference call and during subsequent Committee deliberations. The intention was to factor into the process the very likely possibility of objections to applications from a wide variety of stakeholders.

iii. The language used here is relatively broad and the implementation impact of the proposed recommendation is discussed in detail in the Implementation Team’s Discussion Points document.

iv. The NCUC’s response to this recommendation in its earlier CIS says, in part, “...recommendation 20 swallows up any attempt to narrow the string criteria to technical, operational and financial evaluations. It asks for objections based on entirely subjective and unknowable criteria and for unlimited reasons and by unlimited parties.” This view has, in part, been addressed in the Implementation Team’s proposed plan but this requires further discussion and agreement by the Committee.

\textsuperscript{70} “In general I support the policy though I do have concerns about the implementation which I discuss below in relation to IG (P)”. 
TERM OF REFERENCE FOUR -- CONTRACTUAL CONDITIONS

14. Recommendation 14 Discussion -- The initial registry agreement term must be of a commercially reasonable length.

i. The remainder of the recommendations address Term of Reference Four on policies for contractual conditions and should be read in conjunction with Recommendation 10 on the provision of a base contract prior to the opening of an application round. The recommendation is supported by all GNSO Constituencies and Ms Doria.

ii. This recommendation is consistent with the existing registry contract provisions found in, for example, the .com and .biz agreements.

iii. These conditions would form the baseline conditions of term length for new TLD operators. It was determined that a term of ten years would reasonably balance the start up costs of registry operations with reasonable commercial terms.

iv. The RyC commented on this recommendation in its CIS saying that “…the members of the RyC have learned first hand that operating a registry in a secure and stable manner is a capital intensive venture. Extensive infrastructure is needed both for redundant registration systems and global domain name constellations. Even the most successful registries have taken many years to recoup their initial investment costs. The RyC is convinced that these two recommendations [14 & 15] will make it easier for new applicants to raise the initial capital necessary and to continue to make investments needed to ensure the level of service expected by registrants and users of their TLDs. These two recommendations will have a very positive impact on new
gTLD registries and in turn on the quality of the service they will be able to provide to the Internet community.”

15. **Recommendation 15 -- There must be renewal expectancy.**

   i. This recommendation is consistent with the existing registry contract provisions found in, for example, the .com and .biz agreements and is supported by all Constituencies. Ms Doria supported the recommendation and provided the comments found in the footnote below.\(^{71}\)

   ii. These conditions would form the baseline conditions of term length for new TLD operators. It was determined that a term of ten years would reasonably balance the start up costs of registry operations with reasonable commercial terms.

   iii. See the CIS comments from the RyC in the previous section.

16. **Recommendation 16 -- Registries must apply existing Consensus Policies\(^{72}\) and adopt new Consensus Policies as they are approved.**

   i. This recommendation is supported by all GNSO Constituencies and Ms Doria.

   ii. The full set of existing ICANN registry contracts can be found here [http://www.icann.org/registries/agreements.htm](http://www.icann.org/registries/agreements.htm) and ICANN’s seven current Consensus Policies are found at [http://www.icann.org/general/consensus-policies.htm](http://www.icann.org/general/consensus-policies.htm).

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\(^{71}\) “In general I support the idea that a registry that is doing a good job should have the expectancy of renewal. I do, however, believe that a registry, especially a registry with general market dominance, or specific or local market dominance, should be subject to comment from the relevant user public and to evaluation of that public comment before renewal. When performance is satisfactory, there should be some expectation of renewal. When performance is not satisfactory, there should be some procedure for correcting the situation before renewal.”

\(^{72}\) Consensus Policies has a particular meaning within the ICANN environment. Refer to [http://www.icann.org/general/consensus-policies.htm](http://www.icann.org/general/consensus-policies.htm) for the full list of ICANN’s Consensus Policies.
iii. ICANN develops binding Consensus Policies through its policy development processes, in this case, through the GNSO73.

17. Recommendation 17 -- A clear compliance and sanctions process must be set out in the base contract which could lead to contract termination.

i. This recommendation is supported by all GNSO Constituencies and Ms Doria.

ii. Referring to the recommendations on contractual conditions above, this section sets out the discussion of the policies for contractual conditions for new top-level domain registry operators. The recommendations are consistent with the existing provisions for registry operators which were the subject of detailed community input throughout 200674.

iii. The Committee developed its recommendations during the Brussels and Amsterdam face-to-face consultations, with assistance from the ICANN General Counsel’s office. The General Counsel’s office has also provided a draft base contract which will be completed once the policy recommendations are agreed. Reference should also be made to Recommendation 5 on reserved words as some of the findings could be part of the base contract.

iv. The Committee has focused on the key principles of consistency, openness and transparency. It was also determined that a scalable and predictable process is consistent with industry best practice standards for services procurement. The Committee referred in particular to standards within the broadcasting, telecommunications and Internet services industries to examine how regulatory agencies in those environments conducted, for

73 http://www.icann.org/general/bylaws.htm#AnnexA
74 http://www.icann.org/registries/agreements.htm
example, spectrum auctions, broadcasting licence distribution and media ownership frameworks.

v. Since then ICANN has developed and published a new approach to its compliance activities. These are found on ICANN’s website at http://www.icann.org/compliance/ and will be part of the development of base contract materials.

vi. The Committee found a number of expert reports beneficial. In particular, the World Bank report on mobile licensing conditions provides some guidance on best practice principles for considering broader market investment conditions. “…A major challenge facing regulators in developed and developing countries alike is the need to strike the right balance between ensuring certainty for market players and preserving flexibility of the regulatory process to accommodate the rapidly changing market, technological and policy conditions. As much as possible, policy makers and regulators should strive to promote investors’ confidence and give incentives for long-term investment. They can do this by favouring the principle of ‘renewal expectancy’, but also by promoting regulatory certainty and predictability through a fair, transparent and participatory renewal process. For example, by providing details for license renewal or reissue, clearly establishing what is the discretion offered to the licensing body, or ensuring sufficient lead-times and transitional arrangements in the event of non-renewal or changes in licensing conditions. Public consultation procedures and guaranteeing the right to appeal regulatory decisions maximizes the prospects for a successful renewal process. As technological changes and convergence and technologically neutral approaches gain importance, regulators and policy

75 The full list of reports is found in the Reference section at the end of the document.
makers need to be ready to adapt and evolve licensing procedures and practices to the new environment."

vii. The Recommendations which the Committee has developed with respect to the introduction of new TLDs are consistent with the World Bank principles.

18. Recommendation 18 Discussion -- If an applicant offers an IDN service, then ICANN's IDN guidelines must be followed.

i. This recommendation is supported by all GNSO Constituencies and Ms Doria. The introduction of internationalised domain names at the root presents ICANN with a series of implementation challenges. This recommendation would apply to any new gTLD (IDN or ASCII TLD) offering IDN services. The initial technical testing\(^\text{76}\) has been completed and a series of live root tests will take place during the remainder of 2007.

ii. The Committee recognises that there is ongoing work in other parts of the ICANN organisation that needs to be factored into the application process that will apply to IDN applications. The work includes the President’s Committee on IDNs and the GAC and ccNSO joint working group on IDNs.

19. Recommendation 19 Discussion -- Registries must use only ICANN accredited registrars in registering domain names and may not discriminate among such accredited registrars.

i. This recommendation is supported by all GNSO Constituencies and Ms Doria.

ii. There is a long history associated with the separation of registry and registrar operations for top-level domains. The structural separation of VeriSign’s registry operations from Network Solutions registrar operations explains much of the ongoing policy to require the use of ICANN accredited registrars.

\(^{76}\) http://www.icann.org/announcements/announcement-4-07mar07.htm

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ICANN Policy Staff policy@icann.org
Board Report: Introduction of New Top-Level Domains
iii. In order to facilitate the stable and secure operation of the DNS, the Committee agreed that it was prudent to continue the current requirement that registry operators be obliged to use ICANN accredited registrars.

iv. ICANN’s Registrar Accreditation Agreement has been in place since 200177. Detailed information about the accreditation of registrars can be found on the ICANN website78. The accreditation process is under active discussion but the critical element of requiring the use of ICANN accredited registrars remains constant.

v. In its CIS, the RyC noted that “…the RyC has no problem with this recommendation for larger gTLDs; the requirement to use accredited registrars has worked well for them. But it has not always worked as well for very small, specialized gTLDs. The possible impact on the latter is that they can be at the mercy of registrars for whom there is no good business reason to devote resources. In the New gTLD PDP, it was noted that this requirement would be less of a problem if the impacted registry would become a registrar for its own TLD, with appropriate controls in place. The RyC agrees with this line of reasoning but current registry agreements forbid registries from doing this. Dialog with the Registrars Constituency on this topic was initiated and is ongoing, the goal being to mutually agree on terms that could be presented for consideration and might provide a workable solution.”

77 Found at http://www.icann.org/registrars/ra-agreement-17may01.htm
NEXT STEPS

1. Under the GNSO’s Policy Development Process, the production of this Final Report completes Stage 9. The next steps are to conduct a twenty-day public comment period running from 10 August to 30 August 2007. The GNSO Council is due to meet on 6 September 2007 to vote on the package of principles, policy recommendations and implementation guidelines.

2. After the GNSO Council have voted the Council Report to the Board is prepared. The GNSO’s PDP guidelines stipulate that “the Staff Manager will be present at the final meeting of the Council, and will have five (5) calendar days after the meeting to incorporate the views of the Council into a report to be submitted to the Board (the “Board Report”). The Board Report must contain at least the following:

   a. A clear statement of any Supermajority Vote recommendation of the Council;

   b. If a Supermajority Vote was not reached, a clear statement of all positions held by Council members. Each statement should clearly indicate (i) the reasons underlying each position and (ii) the constituency(ies) that held the position;

   c. An analysis of how the issue would affect each constituency, including any financial impact on the constituency;

   d. An analysis of the period of time that would likely be necessary to implement the policy;

   e. The advice of any outside advisors relied upon, which should be accompanied by a detailed statement of the advisor’s (i) qualifications and
relevant experience; and (ii) potential conflicts of interest;

f. The Final Report submitted to the Council; and

g. A copy of the minutes of the Council deliberation on the policy issue, including all opinions expressed during such deliberation, accompanied by a description of who expressed such opinions.

3. It is expected that, according to the Bylaws, “...The Board will meet to discuss the GNSO Council recommendation as soon as feasible after receipt of the Board Report from the Staff Manager. In the event that the Council reached a Supermajority Vote, the Board shall adopt the policy according to the Council Supermajority Vote recommendation unless by a vote of more than sixty-six (66%) percent of the Board determines that such policy is not in the best interests of the ICANN community or ICANN. In the event that the Board determines not to act in accordance with the Council Supermajority Vote recommendation, the Board shall (i) articulate the reasons for its determination in a report to the Council (the "Board Statement"); and (ii) submit the Board Statement to the Council. The Council shall review the Board Statement for discussion with the Board within twenty (20) calendar days after the Council's receipt of the Board Statement. The Board shall determine the method (e.g., by teleconference, e-mail, or otherwise) by which the Council and Board will discuss the Board Statement. At the conclusion of the Council and Board discussions, the Council shall meet to affirm or modify its recommendation, and communicate that conclusion (the "Supplemental Recommendation") to the Board, including an explanation for its current recommendation. In the event that the Council is able to reach a Supermajority Vote on the Supplemental Recommendation, the Board shall adopt the recommendation unless more than sixty-six (66%) percent of the Board determines that such policy is not in the interests of the ICANN
community or ICANN. In any case in which the Council is not able to reach Supermajority, a majority vote of the Board will be sufficient to act. When a final decision on a GNSO Council Recommendation or Supplemental Recommendation is timely, the Board shall take a preliminary vote and, where practicable, will publish a tentative decision that allows for a ten (10) day period of public comment prior to a final decision by the Board.”

4. The final stage in the PDP is the implementation of the policy which is also governed by the Bylaws as follows, “…Upon a final decision of the Board, the Board shall, as appropriate, give authorization or direction to the ICANN staff to take all necessary steps to implement the policy.”
Annex A – NCUC Minority Statement:
Recommendation 6

STATEMENT OF DISSENT ON RECOMMENDATION #6 OF GNSO’S NEW GTLD REPORT FROM THE NON-COMMERCIAL USERS CONSTITUENCY (NCUC)
20 July 2007

NCUC supports most of the recommendations in the GNSO’s Final Report, but Recommendation #6 is one we cannot support.79

We oppose Recommendation #6 for the following reasons:
1) It will completely undermine ICANN’s efforts to make the gTLD application process predictable, and instead make the evaluation process arbitrary, subjective and political;
2) It will have the effect of suppressing free and diverse expression;
3) It exposes ICANN to litigation risks;
4) It takes ICANN too far away from its technical coordination mission and into areas of legislating morality and public order.

We also believe that the objective of Recommendation #6 is unclear, in that much of its desirable substance is already covered by Recommendation #3. At a minimum, we believe that the words “relating to morality and public order” must be struck from the recommendation.

1) Predictability, Transparency and Objectivity

Recommendation #6 poses severe implementation problems. It makes it impossible to achieve the GNSO’s goals of predictable and transparent evaluation criteria for new gTLDs.

Principle 1 of the New gTLD Report states that the evaluation process must be “predictable,” and Recommendation #1 states that the evaluation criteria

79 Text of Recommendation #6: “Strings must not be contrary to generally accepted legal norms relating to morality and public order that are enforceable under generally accepted and internationally recognized principles of law. Examples of such principles of law include, but are not limited to, the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) and the International Convention on the Elimination of All Forms of Racial Discrimination, intellectual property treaties administered by the World Intellectual Property Organisation (WIPO) and the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).”
must be transparent, predictable, and fully available to applicants prior to their application.

NCUC strongly supports those guidelines. But no gTLD applicant can possibly know in advance what people or governments in a far away land will object to as “immoral” or contrary to “public order.” When applications are challenged on these grounds, applicants cannot possibly know what decision an expert panel – which will be assembled on an ad hoc basis with no precedent to draw on – will make about it.

Decisions by expert panels on “morality and public order” must be subjective and arbitrary, because there is no settled and well-established international law regarding the relationship between TLD strings and morality and public order. There is no single “community standard” of morality that ICANN can apply to all applicants in every corner of the globe. What is considered “immoral” in Teheran may be easily accepted in Los Angeles or Stockholm; what is considered a threat to “public order” in China and Russia may not be in Brazil and Qatar.

2) Suppression of expression of controversial views

gTLD applicants will respond to the uncertainty inherent in a vague “morality and public order” standard and lack of clear standards by suppressing and avoiding any ideas that might generate controversy. Applicants will have to invest sizable sums of money to develop a gTLD application and see it through the ICANN process. Most of them will avoid risking a challenge under Recommendation #6. In other words, the presence of Recommendation #6 will result in self-censorship by most applicants.

That policy would strip citizens everywhere of their rights to express controversial ideas because someone else finds them offensive. This policy recommendation ignores international and national laws, in particular freedom of expression guarantees that permit the expression of “immoral” or otherwise controversial speech on the Internet.

3) Risk of litigation

Some people in the ICANN community are under the mistaken impression that suppressing controversial gTLDs will protect it from litigation. Nothing could be further from the truth. By introducing subjective and culturally divisive standards into the evaluation process Recommendation #6 will increase the likelihood of litigation.

ICANN operates under authority from the US Commerce Department. It is undisputed that the US Commerce Department is prohibited from censoring the expression of US citizens in the manner proposed by Recommendation #6. The US Government cannot “contract away” the constitutional protections of its citizens to ICANN any more than it can engage in the censorship itself.
Adoption of Recommendation #6 invites litigation against ICANN to determine whether its censorship policy is compatible with the US First Amendment. An ICANN decision to suppress a gTLD string that would be permitted under US law could and probably would lead to legal challenges to the decision as a form of US Government action.

If ICANN left the adjudication of legal rights up to courts, it could avoid the legal risk and legal liability that this policy of censorship brings upon it.

4) ICANN’s mission and core values

Recommendation #6 exceeds the scope of ICANN’s technical mission. It asks ICANN to create rules and adjudicate disputes about what is permissible expression. It enables it to censor expression in domain names that would be lawful in some countries. It would require ICANN and “expert panels” to make decisions about permitting top-level domain names based on arbitrary “morality” judgments and other subjective criteria. Under Recommendation #6, ICANN will evaluate domain names based on ideas about “morality and public order” -- concepts for which there are varying interpretations, in both law and culture, in various parts of the world. Recommendation #6 risks turning ICANN into the arbiter of “morality” and “appropriate” public policy through global rules.

This new role for ICANN conflicts with its intended narrow technical mission, as embodied in its mission and core values. ICANN holds no legitimate authority to regulate in this entirely non-technical area and adjudicate the legal rights of others. This recommendation takes the adjudication of people’s rights to use domain names out of the hands of democratically elected representatives and into the hands of “expert panels” or ICANN staff and board with no public accountability.

Besides exceeding the scope of ICANN’s authority, Recommendation #6 seems unsure of its objective. It mandates “morality and public order” in domain names, but then lists, as examples of the type of rights to protect, the WTO TRIPS Agreement and all 24 World Intellectual Property (WIPO) Treaties, which deal with economic and trade rights, and have little to do with “morality and public order”. Protection for intellectual property rights was fully covered in Recommendation #3, and no explanation has been provided as to why intellectual property rights would be listed again in a recommendation on “morality and public order”, an entirely separate concept.

In conclusion Recommendation #6 exceeds ICANN’s authority, ignores Internet users’ free expression rights, and its adoption would impose an enormous burden on and liability for ICANN. It should not be adopted by the Board of Directors in the final policy decision for new gtlds.
Annex B – Nominating Committee Appointee Avri Doria\textsuperscript{80}: Individual Comments

Comments from Avri Doria

The “Personal level of support” indications fall into 3 categories:

- Support: these are principles, recommendations or guidelines that are compatible with my personal opinions
- Support with concerns: While these principles, recommendations and guidelines are not incompatible with my personal opinions, I have some concerns about them.
- Accept with concern: these recommendations and guidelines do not necessarily correspond to my personal opinions, but I am able to accept them in that they have the broad support of the committee. I do, however, have concerns with these recommendations and guideline.

I believe these comments are consistent with comments I have made throughout the process and do not constitute new input.

Principles

\begin{tabular}{|c|c|}
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\# & Personal level of support & Explanation \\
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A & Support & \\
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B & Support with concerns & While I strongly support the introduction of IDN TLDS, I am concerned that the unresolved issues with IDN ccTLD equivalents may interfere with the introduction of IDN TLDs. I am also concerned that some of these issues could impede the introduction of some new ASCII TLDs dealing with geographically related identifiers. \\
\hline
C & Support & \\
\hline
D & Support with concerns & While I favor the establishment of a minimum set of necessary technical criteria, I am concerned that this set actually be the basic minimum set necessary to protect the stability, security and global interoperability. \\
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\textsuperscript{80} Ms Doria took over from former GNSO Council Chairman (and GNSO new TLDs Committee Chairman) Dr Bruce Tonkin on 7 June 2007. Ms Doria’s term runs until 31 January 2008.
### Recommendations

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<tr>
<th>#</th>
<th>Level of support</th>
<th>Explanation</th>
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<tr>
<td>1</td>
<td>Support</td>
<td>My concern involves using definitions that rely on legal terminology established for trademarks for what I believe should be a policy based on technical criteria.</td>
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<td>- In the first instance I believe that this is essentially a technical issue that should have been resolved with reference to typography, homologues, orthographic neighbourhood, transliteration and other technically defined attributes of a name that would make it unacceptable. There is a large body of scientific and technical knowledge and description in this field that we could have drawn on.</td>
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<td>- By using terms that rely on the legal language of trademark law, I believe we have created an implicit redundancy between recommendations 2 and 3. I.e., I believe both 2 and 3 can be used to protect trademarks and other intellectual property rights, and while 3 has specific limitations, 2 remains open to full and varied interpretation.</td>
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<td>2</td>
<td>Accept with concern</td>
<td>As we begin to consider IDNs, I am concerned that the interpretations of confusingly similar may be used to eliminate many potential TLDs based on translation. That is, when a translation may have the same or similar meaning to an existing TLD, that the new name may be eliminated because it is considered confusing to users who know both languages.</td>
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<td>3</td>
<td>Support with concerns</td>
<td>My first concern relates to the protection of what can be called the linguistic commons. While it is true that much of trademark law and practice does protect general vocabulary and common usage from trademark protection, I am not sure that this is always the case in practice. I am also not convinced that trademark law and policy that applies to specific product type within a specific locale is entirely compatible with a general and global naming system.</td>
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<td>Support</td>
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<td>5</td>
<td>Support with concerns</td>
<td>Until such time as the technical work on IDNAbis is completed, I am concerned about establishing reserved name rules connected to IDNs. My primary concern involves policy decisions made in ICANN for reserved names becoming hard coded in the IDNAbis technical solution and thus becoming technical constraints that are no longer open to future policy reconsideration.</td>
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<td>6</td>
<td>Accept with concern</td>
<td>My primary concern focuses on the term 'morality'. While public order is frequently codified in national laws and occasionally in international law and conventions, the definition of what constitutes morality is not generally codified, and when it is, I believe it could be referenced as public order. This concern is related to the broad set of definitions used in the world to define morality. By including morality in the list of allowable exclusions we have made the possible exclusion list indefinitely large and have subjected the process to the consideration of all possible religious and ethical systems. ICANN or the panel of reviewers will also have to decide between different sets of moral principles, e.g., a morality that holds that people should be free to express themselves in all forms of media and those who believe that people should be free from exposure to any expression that is prohibited by their faith or moral principles. This recommendation will also subject the process to the fashion and occasional demagoguery of political correctness. I do not understand how ICANN or any expert panel will be</td>
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<td>able to judge that something should be excluded based on reasons of morality without defining, at least de-facto, an ICANN definition of morality? And while I am not a strict constructionist and sometimes allow for the broader interpretation of ICANN's mission, I do not believe it includes the definition of a system of morality.</td>
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<td>8</td>
<td>Accept with concern</td>
<td>While I accept that a prospective registry must show adequate operational capability, creating a financial criteria is of concern. There may be many different ways of satisfying the requirement for operational capability and stability that may not be demonstrable in a financial statement or traditional business plan. E.g., in the case of an less developed community, the registry may rely on volunteer effort from knowledgeable technical experts. Another concern I have with financial requirements and high application fees is that they may act to discourage applications from developing nations or indigenous and minority peoples that have a different set of financial opportunities or capabilities then those recognized as acceptable within an expensive and highly developed region such as Los Angeles or Brussels.</td>
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<td>9,10, 12-14</td>
<td>Support</td>
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<td>15</td>
<td>Support with concerns</td>
<td>In general I support the idea that a registry that is doing a good job should have the expectancy of renewal. I do, however, believe that a registry, especially a registry with general market dominance, or specific or local market dominance, should be subject to comment from the relevant user public and to evaluation of that public comment before renewal. When performance is satisfactory, there should an expectation of renewal. When performance is not satisfactory, there should be some procedure for correcting the situation before renewal.</td>
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<td>16-19</td>
<td>Support</td>
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## Implementation Guidelines

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<td>20</td>
<td>Support with concerns</td>
<td>In general I support the policy though I do have concerns about the implementation which I discuss below in relation to IG (P)</td>
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### Implementation Guidelines

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<tr>
<td>F</td>
<td>Accept with concern</td>
<td>In designing a New gTLD process, one of the original design goals had been to design a predictable and timely process that did not include the involvement of the Board of Directors except for very rare and exceptional cases and perhaps in the due diligence check of a final approval. My concern is that the use of Board in step (iii) may make them a regular part of many of the application procedure and may overload both the Board and the process. If every dispute can fall through to Board consideration in the process sieve, then the incentive to resolve the dispute earlier will be lessened.</td>
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<td>N</td>
<td>Support with concerns</td>
<td>I strongly support the idea of financial assistance programs and fee reduction for less developed communities. I am concerned that not providing pricing that enables applications from less developed countries and communities may serve to increase the divide between the haves and the haves nots in the Internet and may lead to a foreign 'land grab' of choice TLD names, especially IDN TLD names in a new form of resource colonialism because only those with well developed funding capability will be able to participate in the process as currently planned.</td>
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<td>Support</td>
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<td>P</td>
<td>Support with concerns</td>
<td>While I essentially agree with the policy recommendation and its implementation guideline, its social justice and fairness depends heavily on the implementation issues. While the implementation</td>
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details are not yet settled, I have serious concerns about the published draft plans of the ICANN staff in this regard. The current proposal involves using fees to prevent vexatious or unreasonable objections. In my personal opinion this would be a cause of social injustice in the application of the policy as it would prejudice the objection policy in favor of the rich. I also believe that an objection policy based on financial means would allow for well endowed entities to object to any term they found objectionable, hence enabling them to be as vexatious as they wish to be.

In order for an objection system to work properly, it must be fair and it must allow for any applicant to understand the basis on which they might have to answer an objection. If the policy and implementation are clear about objections only being considered when they can be shown to cause irreparable harm to a community then it may be possible to build a just process. In addition to the necessity for there to be strict filters on which potential objections are actually processed for further review by an objections review process, it is essential that an external and impartial professional review panel have a clear basis for judging any objections.

I do not believe that the ability to pay for a review will provide a reasonable criteria, nor do I believe that financial barriers are an adequate filter for stopping vexatious or unreasonable objections though they are a sufficient barrier for the poor.

I believe that ICANN should investigate other methods for balancing the need to allow even the poorest to raise an issue of irreparable harm while filtering out unreasonable disputes. I believe, as recommend in the Reserved Names Working group report, that the ALAC and GAC may be an important part of the solution. IG (P) currently includes support for treating ALAC and GAC as established institutions in regard to raising objections to TLD concerns. I believe this is an important part of the policy recommendation and should be retained in the implementation. I believe that it should be possible for the ALAC or GAC, through some internal procedure that they define, to take up the cause of the individual
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<td>complainant and to request a review by the external expert review panel. Some have argued that this is unacceptable because it operationalizes these Advisory Committees. I believe we do have precedence for such an operational role for volunteers within ICANN and that it is in keeping with their respective roles and responsibilities as representatives of the user community and of the international community of nations. I strongly recommend that such a solution be included in the Implementation of the New gTLD process.</td>
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<td>Support</td>
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STATEMENT OF DISSENT ON RECOMMENDATION #20 & IMPLEMENTATION GUIDELINES F, H, & P IN THE GNSO NEW GTLD COMMITTEE’S FINAL REPORT FROM THE NON-COMMERCIAL USERS CONSTITUENCY (NCUC)

RE: DOMAIN NAME OBJECTION AND REJECTION PROCESS

25 July 2007

Text of Recommendation #20:
"An application will be rejected if an expert panel determines that there is substantial opposition to it from a significant portion of the community to which the string may be explicitly or implicitly targeted."

Text of Implementation Guideline F:
If there is contention for strings, applicants may:
   i) resolve contention between them within a pre-established timeframe
   ii) if there is no mutual agreement, a claim to support a community by one party will be a reason to award priority to that application. If there is no such claim, and no mutual agreement a process will be put in place to enable efficient resolution of contention and;
   iii) the ICANN Board may be used to make a final decision, using advice from staff and expert panels.

Text of Implementation Guideline H:
External dispute providers will give decisions on complaints.

Text of Implementation Guideline P:
The following process, definitions, and guidelines refer to Recommendation 20.

Process
Opposition must be objection based.

Determination will be made by a dispute resolution panel constituted for the purpose.

The objector must provide verifiable evidence that it is an established institution of the community (perhaps like the RSTEP pool of panelists from which a small panel would be constituted for each objection).
Guidelines
The task of the panel is the determination of substantial opposition.

a) substantial
In determining substantial the panel will assess the following: significant portion, community, explicitly targeting, implicitly targeting, established institution, formal existence, detriment.

b) significant portion:
In determining significant portion the panel will assess the balance between the level of objection submitted by one or more established institutions and the level of support provided in the application from one or more established institutions. The panel will assess significance proportionate to the explicit or implicit targeting.

c) community
Community should be interpreted broadly and will include for example an economic sector, a cultural community, or a linguistic community. It may also be a closely related community which believes it is impacted.

d) explicitly targeting
Explicitly targeting means there is a description of the intended use of the TLD in the application.

e) implicitly targeting
Implicitly targeting means that the objector makes an assumption of targeting or that the objector believes there may be confusion by users over its intended use.

f) established institution
An institution that has been in formal existence for at least 5 years. In exceptional cases, standing may be granted to an institution that has been in existence for fewer then 5 years. Exceptional circumstance include but are not limited to reorganisation, merger, or an inherently younger community. The following ICANN organizations are defined as established institutions: GAC, ALAC, GNSO, ccNSO, ASO.

g) formal existence
Formal existence may be demonstrated by: appropriate public registration, public historical evidence, validation by a government, intergovernmental organization, international treaty organisation or similar.

h) detriment
Evidence of detriment to the community or to users more widely must be provided.

Recommendation #20
The Non-Commercial Users Constituency (NCUC) Dissenting Statement on Recommendation #20 of the New GTLD Committee’s Final Report\(^{81}\) should be read in combination with Implementation Guidelines F, H & P, which detail the implementation of Recommendation #20. This statement should also be read in conjunction with its statement\(^{82}\) of 13 June 2007 on the committee’s draft report.

NCUC cannot support the committee’s proposal for ICANN to establish a broad objection and rejection process for domain names that empowers ICANN and its “experts” to adjudicate the legal rights of domain name applicants (and objectors). The proposal would also empower ICANN and its “experts” to invent entirely new rights to domain names that do not exist in law and that will compete with existing legal rights to domains.

However “good-intentioned”, the proposal would inevitably set up a system that decides legal rights based on subjective beliefs of “expert panels” and the amount of insider lobbying. The proposal would give “established institutions” veto power over applications for domain names to the detriment of innovators and start-ups. The proposal is further flawed because it makes no allowances for generic words to which no community claims exclusive “ownership” of. Instead, it wants to assign rights to use language based on subjective standards and will over-regulate to the detriment of competition, innovation, and free expression.

There is no limitation on the type of objections that can be raised to kill a domain name, no requirement that actual harm be shown to deny an application, and no recourse for the wrongful denial of legal rights by ICANN and its experts under this proposal. An applicant must be able to appeal decisions of ICANN and its experts to courts, who have more competence and authority to decide the applicant’s legal rights. Legal due process requires maintaining a right to appeal these decisions to real courts.

The proposal is hopelessly flawed and will result in the improper rejection of many legitimate domain names. The reasons permitted to object to a domain are infinite in number. Anyone may make an objection; and an application will automatically be rejected upon a very low threshold of “detriment” or an even lower standard of “a likelihood of detriment” to anyone. Not a difficult bar to meet.

If ICANN attempted to put this policy proposal into practice it would intertwine itself in general policy debates, cultural clashes, business feuds, religious wars, and national politics, among a few of the disputes ICANN would have to rule on through this domain name policy.

\(^{81}\) Available at: [http://forum.icann.org/lists/gtld-council/pdfOQqgaRNrXf.pdf](http://forum.icann.org/lists/gtld-council/pdfOQqgaRNrXf.pdf)

The proposal operates under false assumptions of “communities” that can be defined, and that parties can be rightfully appointed representatives of “the community” by ICANN. The proposal gives preference to “established institutions” for domain names, and leaves applicants’ without the backing of “established institutions” with little right to a top-level domain. The proposal operates to the detriment of small-scale start-ups and innovators who are clever enough to come up with an idea for a domain first, but lack the insider-connections and financial resources necessary to convince an ICANN panel of their worthiness.

It will be excessively expensive to apply for either a controversial or a popular domain name, so only well-financed “established institutions” will have both the standing and financial wherewithal to be awarded a top-level domain. The proposal privileges who is awarded a top-level domain, and thus discourages diversity of thought and the free flow of information by making it more difficult to obtain information on controversial ideas or from innovative new-comers.

**Implementation Guideline F**

NCUC does not agree with the part of Implementation Guideline F that empowers ICANN identified “communities” to support or oppose applications. Why should all “communities” agree before a domain name can be issued? How to decide who speaks for a “community”?  

NCUC also notes that ICANN’s Board of Directors would make the final decisions on applications and thus the legal rights of applicants under proposed IG-F. ICANN Board Members are not democratically elected, accountable to the public in any meaningful way, or trained in the adjudication of legal rights. Final decisions regarding legal rights should come from legitimate law-making processes, such as courts.

“Expert panels” or corporate officers are not obligated to respect an applicant’s free expression rights and there is no recourse for a decision by the panel or ICANN for rights wrongfully denied. None of the “expert” panelists are democratically elected, nor accountable to the public for their decisions. Yet they will take decisions on the boundaries between free expression and trademark rights in domain names; and “experts” will decide what ideas are too controversial to be permitted in a domain name under this process.

**Implementation Guideline H**

Implementation Guideline H recommends a system to adjudicate legal rights that exists entirely outside of legitimate democratic law-making processes. The process sets up a system of unaccountable “private law” where “experts” are free to pick and choose favored laws, such as trademark rights, and ignore disfavored laws, such as free expression guarantees.
IG-H operates under the false premise that external dispute providers are authorized to adjudicate the legal rights of domain name applicants and objectors. It further presumes that such expert panels will be qualified to adjudicate the legal rights of applicants and others. But undertaking the creation of an entirely new international dispute resolution process for the adjudication of legal rights and the creation of new rights is not something that can be delegated to a team of experts. Existing international law that takes into account conflict of laws, choice of laws, jurisdiction, standing, and due process must be part of any legitimate process; and the applicant’s legal rights including freedom of expression rights must be respected in the process.

**Implementation Guideline P**

“The devil is in the details” of Implementation Guideline P as it describes in greater detail the proposed adversarial dispute process to adjudicate legal rights to top-level domain names in Recommendation #20. IG-P mandates the rejection of an application if there is “substantial opposition” to it according to ICANN’s expert panel. But “substantial” is defined in such a way so as to actually mean “insubstantial” and as a result many legitimate domain names would be rejected by such an extremely low standard for killing an application.

Under IG-P, opposition against and support for an application must be made by an “established institution” for it to count as “significant”, again favoring major industry players and mainstream cultural institutions over cultural diversity, innovative individuals, small niche, and medium-sized Internet businesses.

IG-P states that “community” should be interpreted broadly, which will allow for the maximum number of objections to a domain name to count against an application. It includes examples of “the economic sector, cultural community or linguistic community” as those who have a right to complain about an application. It also includes any “related community which believes it is impacted.” So anyone who claims to represent a community and believes to be impacted by a domain name can file a complaint and have standing to object to another’s application.

There is no requirement that the objection be based on legal rights or the operational capacity of the applicant. There is no requirement that the objection be reasonable or the belief about impact to be reasonable. There is no requirement that the harm be actual or verifiable. The standard for “community” is entirely subjective and based on the personal beliefs of the objector.

The definition of “implicitly targeting” further confirms this subjective standard by inviting objections where “the objector makes the assumption of targeting” and also where “the objector believes there may be confusion by users”. Such a subjective process will inevitably result in the rejection of many
legitimate domain names.

Picking such a subjective standard conflicts with Principle A in the Final Report that states domain names must be introduced in a “predictable way”, and also with Recommendation 1 that states “All applicants for a new gTLD registry should be evaluated against transparent and predictable criteria, fully available to the applicants prior to the initiation of the process.” The subjectivity and unpredictability invited into the process by Recommendation #20 turn Principle A and Recommendation 1 from the same report upside down.

Besides the inherent subjectivity, the standard for killing applications is remarkably low. An application need not be intended to serve a particular community for “community-based” objections to kill the application under the proposal. Anyone who believed that he or she was part of the targeted community or who believes others face “detriment” have standing to object to a domain name, and the objection weighs in favor of “significant opposition”. This standard is even lower than the “reasonable person” standard, which would at least require that the belief be “reasonable” for it to count against an applicant. The proposed standard for rejecting domains is so low it even permits unreasonable beliefs about a domain name to weigh against an applicant.

If a domain name does cause confusion, existing trademark law and unfair competition law have dealt with it for years and already balanced intellectual property rights against free expression rights in domain names. There is neither reason nor authority for ICANN processes to overtake the adjudication of legal rights and invite unreasonable and illegitimate objections to domain names.

IG-P falsely assumes that the number of years in operation is indicative of one’s right to use language. It privileges entities over 5 years old with objection rights that will effectively veto innovative start-ups who cannot afford the dispute resolution process and will be forced to abandon their application to the incumbents.

IG-P sets the threshold for harm that must be shown to kill an application for a domain name remarkably low. Indeed harm need not be actual or verified for an application to be killed based on “substantial opposition” from a single objector.

Whether the committee selects the unbounded definition for “detriment” that includes a “likelihood of detriment” or the narrower definition of “evidence of detriment” as the standard for killing an application for a domain name is largely irrelevant. The difference is akin to re-arranging the deck chairs on the Titanic. ICANN will become bogged down with the approval of domain names either way, although it is worth noting that “likelihood of detriment” is a
very long way from “substantial harm” and an easy standard to meet, so will result in many more domain names being rejected.

The definitions and guidelines detailed in IG-P invite a lobby-fest between competing businesses, instill the “heckler’s veto” into domain name policy, privilege incumbents, price out of the market non-commercial applicants, and give third-parties who have no legal rights to domain names the power to block applications for those domains. A better standard for killing an application for non-technical reasons would be for a domain name to be shown to be illegal in the applicant’s jurisdiction before it can rejected.

In conclusion, the committee’s recommendation for domain name objection and rejection processes are far too broad and unwieldy to be put into practice. They would stifle freedom of expression, innovation, cultural diversity, and market competition. Rather than follow existing law, the proposal would set up an illegitimate process that usurps jurisdiction to adjudicate peoples’ legal rights (and create new rights) in a process designed to favor incumbents. The adoption of this “free-for-all” objection and rejection process will further call into question ICANN’s legitimacy to govern and its ability to serve the global public interest that respects the rights of all citizens.

NCUC respectfully submits that ICANN will best serve the global public interest by resisting the temptation to stray from its technical mandate and meddle in international lawmaking as proposed by Rec. #20 and IG-F, IG-H, and IG-P of the New GTLD Committee Final Report.
## REFERENCE MATERIAL -- GLOSSARY

<table>
<thead>
<tr>
<th>TERM</th>
<th>ACRONYM &amp; EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-label</td>
<td>The A-label is what is transmitted in the DNS protocol and this is the ASCII-compatible (ACE) form of an IDNA string; for example “xn--11b5bs1di”.</td>
</tr>
<tr>
<td>ASCII Compatible Encoding</td>
<td>ACE</td>
</tr>
<tr>
<td></td>
<td>ACE is a system for encoding Unicode so each character can be transmitted using only the letters a-z, 0-9 and hyphens. Refer also to <a href="http://www.ietf.org/rfc/rfc3467.txt?number=3467">http://www.ietf.org/rfc/rfc3467.txt?number=3467</a></td>
</tr>
<tr>
<td>American Standard Code for Information Exchange</td>
<td>ASCII</td>
</tr>
<tr>
<td></td>
<td>ASCII is a common numerical code for computers and other devices that work with text. Computers can only understand numbers, so an ASCII code is the numerical representation of a character such as ‘a’ or ‘@’. See above referenced RFC for more information.</td>
</tr>
<tr>
<td>Advanced Research Projects Agency</td>
<td>ARPA</td>
</tr>
<tr>
<td>Commercial &amp; Business Users Constituency</td>
<td>CBUC</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.bizconst.org/">http://www.bizconst.org/</a></td>
</tr>
<tr>
<td>Consensus Policy</td>
<td>A defined term in all ICANN registry contracts usually found in Article 3 (Covenants). See, for example, <a href="http://www.icann.org/tlds/agreements/biz/registry-agmt-08dec06.htm">http://www.icann.org/tlds/agreements/biz/registry-agmt-08dec06.htm</a></td>
</tr>
<tr>
<td>Country Code Names Supporting Organization</td>
<td>ccNSO</td>
</tr>
<tr>
<td></td>
<td><a href="http://ccnso.icann.org/">http://ccnso.icann.org/</a></td>
</tr>
<tr>
<td>Country Code Top Level Domain</td>
<td>ccTLD</td>
</tr>
<tr>
<td></td>
<td>Two letter domains, such as .uk (United Kingdom), .de (Germany) and .jp (Japan) (for example), are called country code top level domains (ccTLDs) and correspond to a country, territory, or other geographic location. The rules and policies for registering domain names in the ccTLDs vary significantly and ccTLD registries limit use of the ccTLD to citizens of the corresponding country. Some ICANN-accredited registrars provide registration services in the ccTLDs in addition to registering names in .biz, .com, .info, .name, .net and .org, however, ICANN does not specifically accredit registrars to provide ccTLD registration services.</td>
</tr>
</tbody>
</table>

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83 This glossary has been developed over the course of the policy development process. Refer here to ICANN’s glossary of terms http://www.icann.org/general/glossary.htm for further information.
For more information regarding registering names in ccTLDs, including a complete database of designated ccTLDs and managers, please refer to http://www.iana.org/cctld/cctld.htm.

### Domain Names

The term **domain name** has multiple related meanings: A name that identifies a computer or computers on the internet. These names appear as a component of a Web site's URL, e.g. www.wikipedia.org. This type of domain name is also called a hostname.

The product that Domain name registrars provide to their customers. These names are often called **registered domain names**.

Names used for other purposes in the Domain Name System (DNS), for example the special name which follows the @ sign in an email address, or the Top-level domains like .com, or the names used by the Session Initiation Protocol (VoIP), or DomainKeys.


### Domain Name System

The Domain Name System (DNS) helps users to find their way around the Internet. Every computer on the Internet has a unique address - just like a telephone number - which is a rather complicated string of numbers. It is called its "IP address" (IP stands for "Internet Protocol"). IP Addresses are hard to remember. The DNS makes using the Internet easier by allowing a familiar string of letters (the "domain name") to be used instead of the arcane IP address. So instead of typing 207.151.159.3, you can type www.internic.net. It is a "mnemonic" device that makes addresses easier to remember.

### Generic Top Level Domain

**gTLD**

Most TLDs with three or more characters are referred to as "generic" TLDs, or "gTLDs". They can be subdivided into two types, "sponsored" TLDs (sTLDs) and "unsponsored TLDs (uTLDs), as described in more detail below.

In the 1980s, seven gTLDs (.com, .edu, .gov, .int, .mil, .net, and .org) were created. Domain names may be registered in three of these (.com, .net, and .org) without restriction; the other four have limited purposes.

In 2001 & 2002 four new unsponsored TLDs (.biz, .info, .name, and .pro) were introduced. The other three new TLDs (.aero, .coop, and .museum) were sponsored.

Generally speaking, an unsponsored TLD operates under policies established by the global Internet community directly through the ICANN process, while a sponsored TLD is a specialized TLD that has a sponsor representing the narrower community that is most affected by the TLD. The sponsor thus carries out delegated policy-formulation responsibilities over many matters concerning the TLD.

### Governmental Advisory Committee

**GAC**

http://gac.icann.org/web/index.shtml
http://gac.icann.org/web/index.shtml
| Intellectual Property Constituency | IPC  
http://www.ipconstituency.org/ |
| Internet Service & Connection Providers Constituency | ISPCP |
| Internationalized Domain Names | IDNs  
IDNs are domain names represented by local language characters. These domain names may contain characters with diacritical marks (required by many European languages) or characters from non-Latin scripts like Arabic or Chinese. |
| Internationalized Domain Names in Application | IDNA  
IDNA is a protocol that makes it possible for applications to handle domain names with non-ASCII characters. IDNA converts domain names with non-ASCII characters to ASCII labels that the DNS can accurately understand. These standards are developed within the IETF (http://www.ietf.org) |
| Internationalized Domain Names – Labels | IDN A Label  
The A-label is what is transmitted in the DNS protocol and this is the ASCII-compatible ACE form of an IDN A string. For example “xn-1iq90i”.  
IDN U Label  
The U-label is what should be displayed to the user and is the representation of the IDN in Unicode. For example “北京” (“Beijing” in Chinese).  
LDH Label  
The LDH-label strictly refers to an all-ASCII label that obeys the “hostname” (LDH) conventions and that is not an IDN; for example “icann” in the domain name “icann.org” |
| Internationalized Domain Names Working Group | IDN-WG  
http://forum.icann.org/lists/gnso-idn-wg/ |
| Letter Digit Hyphen | LDH  
The hostname convention used by domain names before internationalization. This meant that domain names could only practically contain the letters a-z, digits 0-9 and the hyphen “-”.  
The term “LDH code points” refers to this subset. With the introduction of IDNs this rule is no longer relevant for all domain names.  
The LDH-label strictly refers to an all-ASCII label that obeys the “hostname” (LDH) conventions and that is not an IDN; for example “icann” in the domain name “icann.org”. |
| Nominating Committee | NomCom  
http://nomcom.icann.org/ |
| Non-Commercial Users Constituency | NCUC  
http://www.ncdnhc.org/ |
Policy Development Process
PDP
See [http://www.icann.org/general/archive-bylaws/bylaws-28feb06.htm#AnnexA](http://www.icann.org/general/archive-bylaws/bylaws-28feb06.htm#AnnexA)

Protecting the Rights of Others Working Group
PRO-WG
See the mailing list archive at [http://forum.icann.org/lists/gnso-pro-wg/](http://forum.icann.org/lists/gnso-pro-wg/)

Punycode
Punycode is the ASCII-compatible encoding algorithm described in Internet standard [RFC3492]. This is the method that will encode IDNs into sequences of ASCII characters in order for the Domain Name System (DNS) to understand and manage the names. The intention is that domain name registrants and users will never see this encoded form of a domain name. The sole purpose is for the DNS to be able to resolve for example a web-address containing local characters.

Registrar
Domain names ending with .aero, .biz, .com, .coop, .info, .museum, .name, .net, .org, and .pro can be registered through many different companies (known as "registrars") that compete with one another. A listing of these companies appears in the Accredited Registrar Directory.

The registrar asks registrants to provide various contact and technical information that makes up the domain name registration. The registrar keeps records of the contact information and submits the technical information to a central directory known as the "registry."

Registrar Constituency
RC

Registry
A registry is the authoritative, master database of all domain names registered in each Top Level Domain. The registry operator keeps the master database and also generates the "zone file" which allows computers to route Internet traffic to and from top-level domains anywhere in the world. Internet users don't interact directly with the registry operator. Users can register names in TLDs including .biz, .com, .info, .net, .name, .org by using an ICANN-Accredited Registrar.

Registry Constituency
RyC

Request for Comment
A full list of all Requests for Comment [http://www.rfc-editor.org/rfcxx00.html](http://www/rfc-editor.org/rfcxx00.html)
Specific references used in this report are shown in the next column.
This document uses language, for example, "should", "must" and "may", consistent with RFC2119.

RFC
Reserved Names Working Group  
RN-WG  
See the mailing list archive at http://forum.icann.org/lists/gnso-rn-wg/

Root server  
A root nameserver is a DNS server that answers requests for the root namespace domain, and redirects requests for a particular top-level domain to that TLD's nameservers. Although any local implementation of DNS can implement its own private root nameservers, the term "root nameserver" is generally used to describe the thirteen well-known root nameservers that implement the root namespace domain for the Internet's official global implementation of the Domain Name System.

All domain names on the Internet can be regarded as ending in a full stop character e.g. "en.wikipedia.org.". This final dot is generally implied rather than explicit, as modern DNS software does not actually require that the final dot be included when attempting to translate a domain name to an IP address. The empty string after the final dot is called the root domain, and all other domains (i.e. .com, .org, .net, etc.) are contained within the root domain.  
http://en.wikipedia.org/wiki/Root_server

Sponsored Top Level Domain  
sTLD  
A Sponsor is an organization to which some policy making is delegated from ICANN. The sponsored TLD has a Charter, which defines the purpose for which the sponsored TLD has been created and will be operated. The Sponsor is responsible for developing policies on the delegated topics so that the TLD is operated for the benefit of a defined group of stakeholders, known as the Sponsored TLD Community, that are most directly interested in the operation of the TLD. The Sponsor also is responsible for selecting the registry operator and to varying degrees for establishing the roles played by registrars and their relationship with the registry operator. The Sponsor must exercise its delegated authority according to fairness standards and in a manner that is representative of the Sponsored TLD Community.

U-label  
The U-label is what should be displayed to the user and is the representation of the Internationalized Domain Name (IDN) in Unicode.

Unicode Consortium  
A not-for-profit organization found to develop, extend and promote use of the Unicode standard.  
See  
http://www.unicode.org

Unicode  
Unicode is a commonly used single encoding scheme that provides a unique number for each character across a wide variety of languages and scripts. The Unicode standard contains tables that list the code points for each local character identified. These tables continue to expand as more characters are digitalized.
ANNEX 19
Adopted Board Resolutions | Paris

26 Jun 2008

- Approval of Minutes
- GNSO Recommendations on New gTLDs
- IDNC / IDN Fast-track
- GNSO Recommendation on Domain Tasting
- Approval of Operating Plan and Budget for Fiscal Year 2008-2009
- Update on Draft Amendments to the Registrar Accreditation Agreement
- Approval of PIR Request to Implement DNSSEC in .ORG
- ICANN Board of Directors’ Code of Conduct
- Ratification of Selection of Consultant to Conduct Independent Review of the Board
- Appointment of Independent Review Working Groups
- Update on Independent Reviews of ICANN Structures
- Board Committee Assignment Revisions
- Approval of BGC Recommendations on GNSO Improvements
- Receipt of Report of President's Strategy Committee Consultation
- Selection of Mexico City for March 2009 ICANN Meeting
- Review of Paris Meeting Structure
- Board Response to Discussions Arising from Paris Meeting
- ICANN At-Large Summit Proposal
- Other Business
- Thanks to Steve Conte
- Thanks to Sponsors
- Thanks to Local Hosts, Staff, Scribes, Interpreters, Event Teams, and Others

Approval of Minutes

Resolved (2008.06.26.01), the minutes of the Board Meeting of 29 May 2008 are approved.

<http://www.icann.org/minutes/prelim-report-29may08.htm>
GNSO Recommendations on New gTLDs

Whereas, the GNSO initiated a policy development process on the introduction of New gTLDs in December 2005. <http://gnso.icann.org/issues/new-gtlds/>

Whereas, the GNSO Committee on the Introduction of New gTLDs addressed a range of difficult technical, operational, legal, economic, and policy questions, and facilitated widespread participation and public comment throughout the process.

Whereas, the GNSO successfully completed its policy development process on the Introduction of New gTLDs and on 7 September 2007, and achieved a Supermajority vote on its 19 policy recommendations. <http://gnso.icann.org/meetings/minutes-gnso-06sep07.shtml>

Whereas, the Board instructed staff to review the GNSO recommendations and determine whether they were capable of implementation.

Whereas, staff has engaged international technical, operational and legal expertise to provide counsel on details to support the implementation of the Policy recommendations and as a result, ICANN cross-functional teams have developed implementation details in support of the GNSO's policy recommendations, and have concluded that the recommendations are capable of implementation.

Whereas, staff has provided regular updates to the community and the Board on the implementation plan. <http://icann.org/topics/new-gtld-program.htm>

Whereas, consultation with the DNS technical community has led to the conclusion that there is not currently any evidence to support establishing a limit to how many TLDs can be inserted in the root based on technical stability concerns. <http://www.icann.org/topics/dns-stability-draft-paper-06feb08.pdf>

Whereas, the Board recognizes that the process will need to be resilient to unforeseen circumstances.
Whereas, the Board has listened to the concerns about the recommendations that have been raised by the community, and will continue to take into account the advice of ICANN's supporting organizations and advisory committees in the implementation plan.

Resolved (2008.06.26.02), based on both the support of the community for New gTLDs and the advice of staff that the introduction of new gTLDs is capable of implementation, the Board adopts the GNSO policy recommendations for the introduction of new gTLDs <http://gnso.icann.org/issues/new-gtlds/pdp-dec05-fr-parten-08aug07.htm>.

Resolved (2008.06.26.03), the Board directs staff to continue to further develop and complete its detailed implementation plan, continue communication with the community on such work, and provide the Board with a final version of the implementation proposals for the board and community to approve before the new gTLD introduction process is launched.

IDNC / IDN Fast-track

Whereas, the ICANN Board recognizes that the "IDNC Working Group" developed, after extensive community comment, a final report on feasible methods for timely (fast-track) introduction of a limited number of IDN ccTLDs associated with ISO 3166-1 two-letter codes while an overall, long-term IDN ccTLD policy is under development by the ccNSO.

Whereas, the IDNC Working Group has concluded its work and has submitted recommendations for the selection and delegation of "fast-track" IDN ccTLDs and, pursuant to its charter, has taken into account and was guided by consideration of the requirements to:

- Preserve the security and stability of the DNS;
- Comply with the IDNA protocols;
- Take input and advice from the technical community with respect to the implementation of IDNs; and
• Build on and maintain the current practices for the delegation of ccTLDs, which include the current IANA practices.

Whereas, the IDNC Working Group’s high-level recommendations require implementation planning.

Whereas, ICANN is looking closely at interaction with the final IDN ccTLD PDP process and potential risks, and intends to implement IDN ccTLDs using a procedure that will be resilient to unforeseen circumstances.

Whereas, staff will consider the full range of implementation issues related to the introduction of IDN ccTLDs associated with the ISO 3166-1 list, including means of promoting adherence to technical standards and mechanisms to cover the costs associated with IDN ccTLDs.

Whereas, the Board intends that the timing of the process for the introduction of IDN ccTLDs should be aligned with the process for the introduction of New gTLDs.

Resolved (2008.06.26.04), the Board thanks the members of the IDNC WG for completing their chartered tasks in a timely manner.

Resolved (2008.06.26.05), the Board directs staff to: (1) post the IDNC WG final report for public comments; (2) commence work on implementation issues in consultation with relevant stakeholders; and (3) submit a detailed implementation report including a list of any outstanding issues to the Board in advance of the ICANN Cairo meeting in November 2008.

GNSO Recommendation on Domain Tasting

Whereas, ICANN community stakeholders are increasingly concerned about domain tasting, which is the practice of using the add grace period (AGP) to register domain names in bulk in order to test their profitability.

Whereas, on 17 April 2008, the GNSO Council approved, by a Supermajority vote, a motion to prohibit any gTLD
operator that has implemented an AGP from offering a refund for any domain name deleted during the AGP that exceeds 10% of its net new registrations in that month, or fifty domain names, whichever is greater.

<http://gnso.icann.org/meetings/minutes-gnso-17apr08.shtml>

Whereas, on 25 April 2008, the GNSO Council forwarded its formal "Report to the ICANN Board - Recommendation for Domain Tasting" <http://gnso.icann.org/issues/domain-tasting/domain-tasting-board-report-gnso-council-25apr08.pdf>, which outlines the full text of the motion and the full context and procedural history of this proceeding.

Whereas, the Board is also considering the Proposed FY 09 Operating Plan and Budget <http://www.icann.org/financials/fiscal-30jun09.htm>, which includes (at the encouragement of the GNSO Council) a proposal similar to the GNSO policy recommendation to expand the applicability of the ICANN transaction fee in order to limit domain tasting.

Resolved (2008.06.26.06), the Board adopts the GNSO policy recommendation on domain tasting, and directs staff to implement the policy following appropriate comment and notice periods on the implementation documents.

Approval of Operating Plan and Budget for Fiscal Year 2008-2009


Whereas, the Initial Operating Plan and Budget Framework for fiscal year 2009 was presented at the New Delhi ICANN meeting and was posted in February 2008 for community consultation. <http://www.icann.org/announcements/announcement-2-04feb08.htm>

Whereas, community consultations were held to discuss and obtain feedback on the Initial Framework.
Whereas, the draft FY09 Operating Plan and Budget was posted for public comment in accordance with the Bylaws on 17 May 2008 based upon the Initial Framework, community consultation, and consultations with the Board Finance Committee. A slightly revised version was posted on 23 May 2008. <http://www.icann.org/financials/fiscal-30jun09.htm>

Whereas, ICANN has actively solicited community feedback and consultation with ICANN's constituencies. <http://forum.icann.org/lists/op-budget-fy2009/>

Whereas, the ICANN Board Finance Committee has discussed, and guided staff on, the FY09 Operating Plan and Budget at each of its regularly scheduled monthly meetings.

Whereas, the final FY09 Operating Plan and Budget was posted on 26 June 2008. <http://www.icann.org/en/financials/proposed-opplan-budget-v3-fy09-25jun08-en.pdf>

Whereas, the ICANN Board Finance Committee met in Paris on 22 June 2008 to discuss the FY09 Operating Plan and Budget, and recommended that the Board adopt the FY09 Operating Plan and Budget.

Whereas, the President has advised that the FY09 Operating Plan and Budget reflects the work of staff and community to identify the plan of activities, the expected revenue, and resources necessary to be spent in fiscal year ending 30 June 2009.

Whereas, continuing consultation on the budget has been conducted at ICANN's meeting in Paris, at constituency meetings, and during the public forum.


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Update on Draft Amendments to the Registrar Accreditation Agreement

(For discussion only.)

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Approval of PIR Request to Implement DNSSEC in .ORG

Whereas, Public Interest Registry has submitted a proposal to implement DNS Security Extensions (DNSSEC) in .ORG. <http://icann.org/registries/rsep/pir-request-03apr08.pdf>

Whereas, staff has evaluated the .ORG DNSSEC proposal as a new registry service via the Registry Services Evaluation Policy <http://icann.org/registries/rsep/>, and the proposal included a requested amendment to Section 3.1 (c)(i) of the .ORG Registry Agreement <http://icann.org/tlds/agreements/org/proposed-org-amendment-23apr08.pdf> which was posted for public comment along with the PIR proposal.

Whereas, the evaluation under the threshold test of the Registry Services Evaluation Policy <http://icann.org/registries/rsep/rsep.html> found a likelihood of security and stability issues associated with the proposed implementation. The RSTEP Review Team considered the proposal and found that there was a risk of a meaningful adverse effect on security and stability, which could be effectively mitigated by policies, decisions and actions to which PIR has expressly committed in its proposal or could be reasonably required to commit. <http://icann.org/registries/rsep/rstep-report-pir-dnssec-04jun08.pdf>

Whereas, the Chair of the SSAC has advised that RSTEP's thorough investigation of every issue that has been raised concerning the security and stability effects of DNSSEC deployment concludes that effective measures to deal with all of them can be taken by PIR, and that this conclusion after exhaustive review greatly increases the confidence with which DNSSEC deployment in .ORG can be undertaken.
Whereas, PIR intends to implement DNSSEC only after extended testing and consultation.

Resolved (2008.06.26.08), that PIR's proposal to implement DNSSEC in .ORG is approved, with the understanding that PIR will continue to cooperate and consult with ICANN on details of the implementation. The President and the General Counsel are authorized to enter the associated amendment to the .ORG Registry Agreement, and to take other actions as appropriate to enable the deployment of DNSSEC in .ORG.

ICANN Board of Directors' Code of Conduct

Whereas, the members of ICANN's Board of Directors are committed to maintaining a high standard of ethical conduct.

Whereas, the Board Governance Committee has developed a Code of Conduct to provide the Board with guiding principles for conducting themselves in an ethical manner.

Resolved (2008.06.26.09), the Board directs staff to post the newly proposed ICANN Board of Directors' Code of Conduct for public comment, for consideration by the Board as soon as feasible. [Reference to PDF will be inserted when posted.]

Ratification of Selection of Consultant to Conduct Independent Review of the Board

Whereas, the Board Governance Committee has recommended that Boston Consulting Group be selected as the consultant to perform the independent review of the ICANN Board.

Whereas, the BGC's recommendation to retain BCG was approved by the Executive Committee during its meeting on 12 June 2008.
Resolved (2008.06.26.10), the Board ratifies the Executive Committee's approval of the Board Governance Committee's recommendation to select Boston Consulting Group as the consultant to perform the independent review of the ICANN Board.

Appointment of Independent Review Working Groups

Whereas, the Board Governance Committee has recommended that several working groups should be formed to coordinate pending independent reviews of ICANN structures.

Resolved (2008.06.26.11), the Board establishes the following independent review working groups:

- ICANN Board Independent Review Working Group: Amadeu Abril i Abril, Roberto Gaetano (Chair), Steve Goldstein, Thomas Narten, Rajasekhar Ramaraj, Rita Rodin, and Jean Jacques Subrenat.
- DNS Root Server System Advisory Committee (RSSAC) Independent Review Working Group: Harald Alvestrand (Chair), Steve Crocker and Bruce Tonkin.

Update on Independent Reviews of ICANN Structures

(For discussion only.)

Board Committee Assignment Revisions

Whereas, the Board Governance Committee has recommended that the membership of several Board
should be revised, and that all other committees should remain unchanged until the 2008 Annual Meeting.

Resolved (2008.06.26.12), the membership of the Audit, Finance, and Reconsideration committees are revised as follows:

- Audit Committee: Raimundo Beca, Demi Getschko, Dennis Jennings, Njeri Rionge and Rita Rodin (Chair).
- Finance Committee: Raimundo Beca, Peter Dengate Thrush, Steve Goldstein, Dennis Jennings, Rajasekhar Ramaraj (Chair), and Bruce Tonkin (as observer).
- Reconsideration Committee: Susan Crawford (Chair), Demi Getschko, Dennis Jennings, Rita Rodin, and Jean-Jacques Subrenat.

Approval of BGC Recommendations on GNSO Improvements

Whereas, Article IV, Section 4 of ICANN's Bylaws calls for periodic reviews of the performance and operation of ICANN's structures by an entity or entities independent of the organization under review.

Whereas, the Board created the "Board Governance Committee GNSO Review Working Group" (Working Group) to consider the independent review of the GNSO and other relevant input, and recommend to the Board Governance Committee a comprehensive proposal to improve the effectiveness of the GNSO, including its policy activities, structure, operations and communications.

Whereas, the Working Group engaged in extensive public consultation and discussions, considered all input, and developed a final report <http://www.icann.org/topics/gnso-improvements/gnso-improvements-report-03feb08.pdf> containing a comprehensive and exhaustive list of proposed recommendations on GNSO improvements.

Whereas, the Board Governance Committee determined that the GNSO Improvements working group had fulfilled its
charter and forwarded the final report to the Board for consideration.

Whereas, a public comment forum was held open for 60 days to receive, consider and summarize <http://forum.icann.org/lists/gnso-improvements-report-2008/msg00033.html> public comments on the final report.

Whereas, the GNSO Council and Staff have worked diligently over the past few months to develop a top-level plan for approaching the implementation of the improvement recommendations, as requested by the Board at its New Delhi meeting.

Whereas, ICANN has a continuing need for a strong structure for developing policies that reflect to the extent possible a consensus of all stakeholders in the community including ICANN's contracted parties.

Resolved (2008.06.26.13), the Board endorses the recommendations of the Board Governance Committee's GNSO Review Working Group, other than on GNSO Council restructuring, and requests that the GNSO convene a small working group on Council restructuring including one representative from the current NomCom appointees, one member from each constituency and one member from each liaison-appointing advisory committee (if that advisory committee so desires), and that this group should reach consensus and submit a consensus recommendation on Council restructuring by no later than 25 July 2008 for consideration by the ICANN Board as soon as possible, but no later than the Board’s meeting in August 2008.

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Whereas, the PSC has developed three papers that outline key areas and possible responses to address them: "Transition Action Plan," "Improving Institutional Confidence in ICANN," and "FAQ." 

Whereas, these documents and the proposals contained in them have been discussed at ICANN's meeting in Paris.

Whereas, a dedicated webpage has been launched to provide the community with information, including regular updates <http://icann.org/jpa/iic/>.

Resolved (2008.06.26.14), the Board thanks the President's Strategy Committee for its work to date, and instructs ICANN staff to undertake the public consultation recommended in the action plan, and strongly encourages the entire ICANN community to participate in the continuing consultations on the future of ICANN by reviewing and submitting comments to the PSC by 31 July 2008.

Selection of Mexico City for March 2009 ICANN Meeting

Whereas, ICANN intends to hold its first meeting for calendar year 2009 in the Latin America region;

Whereas, the Mexican Internet Association (AMIPCI) has agreed to host the meeting;

Resolved (2008.06.26.15), the Board accepts the AMIPCI proposal to host ICANN's 34th global meeting in Mexico City, in March 2009.

Review of Paris Meeting Structure

(For discussion only.)

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Board Response to Discussions Arising from Paris Meeting
(For discussion only.)

ICANN At-Large Summit Proposal

Whereas, at the ICANN meeting in New Delhi in February 2008, the Board resolved to direct staff to work with the ALAC to finalise a proposal to fund an ICANN At-Large Summit, for consideration as part of the 2008-2009 operating plan and budget process.  
<http://www.icann.org/minutes/resolutions-15feb08.htm>

Whereas, potential funding for such a summit has been identified in the FY09 budget.  
<http://www.icann.org/financials/fiscal-30jun09.htm>

Whereas, a proposal for the Summit was completed and submitted shortly before the ICANN Meeting in Paris.

Resolved (2008.06.26.16), the Board approves the proposal to hold an ICANN At-Large Summit as a one-time special event, and requests that the ALAC work with ICANN Staff to implement the Summit in a manner that achieves efficiency, including considering the Mexico meeting as the venue.

Resolved (2008.06.26.17), with the maturation of At-Large and the proposal for the At-Large Summit's objectives set out, the Board expects the ALAC to look to more self-funding for At-Large travel in the fiscal year 2010 plan, consistent with the travel policies of other constituencies.

Other Business

(TBD)

Thanks to Steve Conte
Whereas, Steve Conte has served as an employee of ICANN for over five years.

Whereas, Steve has served ICANN in a number of roles, currently as ICANN's Chief Security Officer, but also as a vital support to the Board and its work at meetings.

Whereas, Steve has given notice to ICANN that he has accepted a new position with the Internet Society (ISOC), and that his employment with ICANN will conclude at the end of this meeting.

Whereas, Steve is of gentle nature, possessed of endless patience and fierce integrity, a love of music, and great dedication to the Internet and those who nurture it.

Whereas, the ICANN Board wishes to recognize Steve for his service to ICANN and the global Internet community. In particular, Steve has tirelessly and with good nature supported the past 19 ICANN meetings and his extraordinary efforts have been most appreciated.

Resolved (2008.06.26.18), the ICANN Board formally thanks Steve Conte for his service to ICANN, and expresses its good wishes to Steve for his work with ISOC and all his future endeavors.

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Thanks to Sponsors

The Board extends its thanks to all sponsors of this meeting:

L'Association Française pour le Nommage Internet en Coopération (AFNIC), France Télécom, Groupe Jutheau Husson, Stichting Internet Domeinregistratie Nederland (SIDN), Association Marocaine des Professionnels des Telecommunications (MATI), Afilias Limited, Deutsches Network Information Center (DENIC), The European Registry of Domain Names (EURid), European Domain Name Registration (EuroDNS), INDOM, Toit de la Grande Arche Parvis de la Défense, Musee de L'informatique, NeuStar, Inc., Public Interest Registry, VeriSign, Inc.,
Thanks to Local Hosts, Staff, Scribes, Interpreters, Event Teams, and Others

The Board wishes to extend its thanks to the local host organizers, AGIFEM, its President Daniel Dardailler, Vice-President Pierre Bonis and CEO Sebastien Bachollet, as well as Board Members from Afnic, Amen, Domaine.fr, Eurodns, Indom, Internet Society France, Internet fr, Namebay, Renater, and W3C.

The Board would also like to thank Eric Besson, the Minister for Forward Planning, Assessment of Public Policies and Development of the Digital Economy for his participation in the Welcome Ceremony and the Welcome Cocktail.

The Board thanks the Au Toit de la Grande Arche, its president, Francis Bouvier, and Directeur, Philippe Nieuwbourg, and Bertrand Delanoë, Maire de Paris, and Jean-Louis Missika, adjoint au Maire de Paris for their hospitality at the social events at the ICANN Paris meeting.

The Board expresses its appreciation to the scribes Laura Brewer, Teri Darrenougue, Jennifer Schuck, and Charles Motter and to the entire ICANN staff for their efforts in facilitating the smooth operation of the meeting. ICANN would particularly like to acknowledge the many efforts of Michael Evans for his assistance in organizing the past
eighteen public board meetings and many other smaller events for the ICANN community.

The Board also wishes to express its appreciation to VeriLan Events Services, Inc. for technical support, Auvitec and Prosn for audio/visual support, Calliope Interpreters France for interpretation, and France Telecom for bandwith. Additional thanks are given to the Le Meridien Montparnasse for this fine facility, and to the event facilities and support.

The Board also wishes to thank all those who worked to introduce a Business Access Agenda for the first time at this meeting, Ayesha Hassan of the International Chamber of Commerce, Marilyn Cade, and ICANN Staff.

The members of the Board wish to especially thank their fellow Board Member Jean-Jacques Subrenat for his assistance in making the arrangements for this meeting in Paris, France.
ANNEX 20
Approved Board Resolutions | Singapore

20 Jun 2011

1. Approval of the New gTLD Program

Whereas, on 28 November 2005, the GNSO Council voted unanimously to initiate a policy development process on the introduction of new gTLDs.

Whereas, the GNSO Committee on the Introduction of New gTLDs addressed a range of difficult technical, operational, legal, economic, and policy questions, and facilitated widespread participation and public comment throughout the policy development process.

Whereas, on 6 September 2007, the GNSO Council approved by a supermajority vote a motion supporting the 19 recommendations, as a whole, as set out in the Final Report of the ICANN Generic Names Supporting Organisation on the Introduction of New Generic Top-Level Domains going forward to the ICANN Board <http://gnso.icann.org/issues/new-gtlds/pdp-dec05-fr-parta-08aug07.htm>.

Whereas, the Board instructed staff to review the GNSO recommendations and determine whether they were capable of implementation, and staff engaged international technical, operational and legal expertise to support the implementation of the policy recommendations and developed implementation plans for the GNSO's policy recommendations.

Whereas, on 26 June 2008, the Board adopted the GNSO policy recommendations for the introduction of new gTLDs and directed staff to further develop and complete its detailed implementation plan, continue communication with the community on such work, and provide the Board with a final version of the implementation proposals for the board and community to approve before the launching the new gTLD application process <http://www.icann.org/en/minutes/resolutions-26jun08.htm#_Toc76113171>.
Whereas, staff has made implementation details publicly available in the form of drafts of the gTLD Applicant Guidebook and supporting materials for public discussion and comment.

Whereas, the first draft of the Applicant Guidebook was published on 23 October 2008 <http://www.icann.org/en/topics/new-gtlds/comments-en.htm>, and the Guidebook has undergone continued substantial revisions based on stakeholder input on multiple drafts.

Whereas, the Board has conducted intensive consultations with the Governmental Advisory Committee (including in Brussels in February 2011, in San Francisco in March 2011, by telephone in May 2011, and in Singapore on 19 June 2011), resulting in substantial agreement on a wide range of issues noted by the GAC, and the Board has directed revisions to the Applicant Guidebook to reflect such agreement.

Whereas, ICANN received letters from the United States Department of Commerce and the European Commission addressing the issue of registry-registrar cross-ownership, and the Board considered the concerns expressed therein. The Board agrees that the potential abuse of significant market power is a serious concern, and discussions with competition authorities will continue.

Whereas, ICANN has consulted with the GAC to find mutually acceptable solutions on areas where the implementation of policy is not consistent with GAC advice, and where necessary has identified its reasons for not incorporating the advice in particular areas, as required by the Bylaws; see <http://www.icann.org/en/minutes/rationale-gac-response-new-gtld-20jun11-en.pdf> [PDF, 103 KB].

Whereas, the ICANN community has dedicated countless hours to the review and consideration of numerous implementation issues, by the submission of public comments, participation in working groups, and other consultations.

Whereas, the Board has listened to the input that has been provided by the community, including the supporting
organizations and advisory committees, throughout the implementation process.

Whereas, careful analysis of the obligations under the Affirmation of Commitments and the steps taken throughout the implementation process indicates that ICANN has fulfilled the commitments detailed in the Affirmation <http://www.icann.org/en/documents/affirmation-of-commitments-30sep09-en.htm>.

Whereas, the Applicant Guidebook posted on 30 May 2011 <http://www.icann.org/en/topics/new-gtlds/comments-7-en.htm> includes updates resulting from public comment and from recent GAC advice.

Whereas, the draft New gTLDs Communications Plan <http://www.icann.org/en/topics/new-gtlds/new-gtlds-communications-plan-30may11-en.pdf> [PDF, 486 KB] forms the basis of the global outreach and education activities that will be conducted leading up to and during the execution of the program in each of the ICANN geographic regions.

Whereas, the Draft FY12 Operating Plan and Budget <http://www.icann.org/en/announcements/announcement-17may11-en.htm> includes a New gTLD Program Launch Scenario, and the Board is prepared to approve the expenditures included in Section 7 of the Draft FY12 Operating Plan and Budget.

Whereas, the Board considers an applicant support program important to ensuring an inclusive and diverse program, and will direct work to implement a model for providing support to potential applicants from developing countries.

Whereas, the Board’s Risk Committee has reviewed a comprehensive risk assessment associated with implementing the New gTLD Program, has reviewed the defined strategies for mitigating the identified risks, and will review contingencies as the program moves toward launch.

Whereas, the Board has reviewed the current status and plans for operational readiness and program management within ICANN.
Resolved (2011.06.20.01), the Board authorizes the President and CEO to implement the new gTLD program which includes the following elements:

1. the 30 May 2011 version of the Applicant Guidebook <http://www.icann.org/en/topics/new-gtlds/comments-7-en.htm>, subject to the revisions agreed to with the GAC on 19 June 2011, including: (a) deletion of text in Module 3 concerning GAC advice to remove references indicating that future Early Warnings or Advice must contain particular information or take specified forms; (b) incorporation of text concerning protection for specific requested Red Cross and IOC names for the top level only during the initial application round, until the GNSO and GAC develop policy advice based on the global public interest, and (c) modification of the "loser pays" provision in the URS to apply to complaints involving 15 (instead of 26) or more domain names with the same registrant; the Board authorizes staff to make further updates and changes to the Applicant Guidebook as necessary and appropriate, including as the possible result of new technical standards, reference documents, or policies that might be adopted during the course of the application process, and to prominently publish notice of such changes;

2. the Draft New gTLDs Communications Plan as posted at <http://www.icann.org/en/topics/new-gtlds/new-gtlds-communications-plan-30may11-en.pdf> [PDF, 486 KB], as may be revised and elaborated as necessary and appropriate;

3. operational readiness activities to enable the opening of the application process;

4. a program to ensure support for applicants from developing countries, with a form, structure and processes to be determined by the Board in consultation with stakeholders including: (a) consideration of the GAC recommendation for a fee waiver corresponding to 76 percent of the $185,000 USD evaluation fee, (b) consideration of recommendations of the ALAC and GNSO as chartering organizations of the Joint Applicant
Support (JAS) Working Group, (c) designation of a budget of up to $2 million USD for seed funding, and creating opportunities for other parties to provide matching funds, and (d) the review of additional community feedback, advice from ALAC, and recommendations from the GNSO following their receipt of a Final Report from the JAS Working Group (requested in time to allow staff to develop an implementation plan for the Board's consideration at its October 2011 meeting in Dakar, Senegal), with the goal of having a sustainable applicant support system in place before the opening of the application window;

5. a process for handling requests for removal of cross-ownership restrictions on operators of existing gTLDs who want to participate in the new gTLD program, based on the "Process for Handling Requests for Removal of Cross-Ownership Restrictions for Existing gTLDs"<http://www.icann.org/en/announcements/announcement-02may11-en.htm>, as modified in response to comments <http://www.icann.org/en/tlds/process-cross-ownership-gtlds-en.htm> (a redline of the Process to the earlier proposal is provided at <http://www.icann.org/en/minutes/process-cross-ownership-restrictions-gtlds-20jun11-en.pdf> [PDF, 97 KB]); consideration of modification of existing agreements to allow cross-ownership with respect to the operation of existing gTLDs is deferred pending further discussions including with competition authorities;

6. the expenditures related to the New gTLD Program as detailed in section 7 of the Draft FY12 Operating Plan and Budget <http://www.icann.org/en/announcements/announcement-17may11-en.htm>; and

7. the timetable as set forth in the attached graphic <http://www.icann.org/en/minutes/timeline-new-gtld-program-20jun11.pdf> [PDF, 167 KB], elements of which include the New gTLD application window opening on 12 January 2012 and closing on 12 April 2012, with the New gTLD Communications Plan beginning immediately.
Resolved (2011.06.20.02), the Board and the GAC have completed good faith consultations in a timely and efficient manner under the ICANN Bylaws, Article XI, Section 2.j. As the Board and the GAC were not able to reach a mutually acceptable solution on a few remaining issues, pursuant to ICANN Bylaws, Article XI, Section 2.k, the Board incorporates and adopts as set forth in the document describing the remaining areas of difference between ICANN’s Board and the GAC <http://www.icann.org/en/minutes/rationale-gac-response-new-gtld-20jun11-en.pdf> [PDF, 103 KB] the reasons why the GAC advice was not followed. The Board’s statement is without prejudice to the rights or obligations of GAC members with regard to public policy issues falling within their responsibilities.

Resolved (2011.06.20.03), the Board wishes to express its deep appreciation to the ICANN community, including the members of the GAC, for the extraordinary work it has invested in crafting the New gTLD Program in furtherance of ICANN’s mission and core values, and counts on the community’s ongoing support in executing and reviewing the program.

Rationale for Resolutions 2011.06.20.01-2011.06.20.03

* Note: The Rationale is not final until approved with the minutes of the Board meeting.

Rationale for Approval of the Launch of the New gTLD Program [PDF, 624 KB]
ANNEX 21
New gTLDs have been in the forefront of ICANN’s agenda since its creation. The new gTLD program will open up the top level of the Internet’s namespace to foster diversity, encourage competition, and enhance the utility of the DNS.

Currently the namespace consists of 22 gTLDs and over 250 ccTLDs operating on various models. Each of the gTLDs has a designated “registry operator” and, in most cases, a Registry Agreement between the operator (or sponsor) and ICANN. The registry operator is responsible for the technical operation of the TLD, including all of the names registered in that TLD. The gTLDs are served by over 900 registrars, who interact with registrants to perform domain name registration and other related services. The new gTLD program will create a means for prospective registry operators to apply for new gTLDs, and create new options for consumers in the market. When the program launches its first application round, ICANN expects a diverse set of applications for new gTLDs, including IDNs, creating significant potential for new uses and benefit to Internet users across the globe.

The program has its origins in carefully deliberated policy development work by the ICANN community. In October 2007, the Generic Names Supporting Organization (GNSO)—one of the groups that coordinate global Internet policy at ICANN—formally completed its policy development work on new gTLDs and approved a set of 19 policy recommendations. Representatives from a wide variety of stakeholder groups—governments, individuals, civil society, business and intellectual property constituencies, and the technology community—were engaged in discussions for more than 18 months on such questions as the demand, benefits and risks of new gTLDs, the selection criteria that should be applied, how gTLDs should be allocated, and the contractual conditions that should be required for new gTLD registries going forward. The culmination of this policy development process was a decision by the ICANN Board of Directors to adopt the community-developed policy in June 2008. A thorough brief to the policy process and outcomes can be found at [http://gnso.icann.org/issues/new-gtlds](http://gnso.icann.org/issues/new-gtlds).

ICANN’s work next focused on implementation: creating an application and evaluation process for new gTLDs that is aligned with the policy recommendations and provides a clear roadmap for applicants to reach delegation, including Board approval. This implementation work is reflected in the drafts of the applicant guidebook that were released for public comment, and in the explanatory papers giving insight into rationale behind some of the conclusions reached on specific topics. Meaningful community input has led to revisions of the draft applicant guidebook. In parallel, ICANN has established the resources needed to successfully launch and operate the program. This process concluded with the decision by the ICANN Board of Directors in June 2011 to launch the New gTLD Program.

For current information, timelines and activities related to the New gTLD Program, please go to [http://www.icann.org/en/topics/new-gtld-program.htm](http://www.icann.org/en/topics/new-gtld-program.htm).


Module 1

Introduction to the gTLD Application Process

This module gives applicants an overview of the process for applying for a new generic top-level domain, and includes instructions on how to complete and submit an application, the supporting documentation an applicant must submit with an application, the fees required, and when and how to submit them.

This module also describes the conditions associated with particular types of applications, and the stages of the application life cycle.

Prospective applicants are encouraged to read and become familiar with the contents of this entire module, as well as the others, before starting the application process to make sure they understand what is required of them and what they can expect at each stage of the application evaluation process.

For the complete set of the supporting documentation and more about the origins, history and details of the policy development background to the New gTLD Program, please see http://gnso.icann.org/issues/new-gtlds.

This Applicant Guidebook is the implementation of Board-approved consensus policy concerning the introduction of new gTLDs, and has been revised extensively via public comment and consultation over a two-year period.

1.1 Application Life Cycle and Timelines

This section provides a description of the stages that an application passes through once it is submitted. Some stages will occur for all applications submitted; others will only occur in specific circumstances. Applicants should be aware of the stages and steps involved in processing applications received.

1.1.1 Application Submission Dates

The user registration and application submission periods open at 00:01 UTC 12 January 2012.

The user registration period closes at 23:59 UTC 29 March 2012. New users to TAS will not be accepted beyond this
time. Users already registered will be able to complete the application submission process.

Applicants should be aware that, due to required processing steps (i.e., online user registration, application submission, fee submission, and fee reconciliation) and security measures built into the online application system, it might take substantial time to perform all of the necessary steps to submit a complete application. Accordingly, applicants are encouraged to submit their completed applications and fees as soon as practicable after the Application Submission Period opens. Waiting until the end of this period to begin the process may not provide sufficient time to submit a complete application before the period closes. Accordingly, new user registrations will not be accepted after the date indicated above.

The application submission period closes at 23:59 UTC 12 April 2012.

To receive consideration, all applications must be submitted electronically through the online application system by the close of the application submission period. An application will not be considered, in the absence of exceptional circumstances, if:

- It is received after the close of the application submission period.

- The application form is incomplete (either the questions have not been fully answered or required supporting documents are missing). Applicants will not ordinarily be permitted to supplement their applications after submission.

- The evaluation fee has not been paid by the deadline. Refer to Section 1.5 for fee information.

ICANN has gone to significant lengths to ensure that the online application system will be available for the duration of the application submission period. In the event that the system is not available, ICANN will provide alternative instructions for submitting applications on its website.

1.1.2 Application Processing Stages

This subsection provides an overview of the stages involved in processing an application submitted to ICANN. Figure 1-1 provides a simplified depiction of the process. The shortest and most straightforward path is marked with bold lines, while certain stages that may or may not be
applicable in any given case are also shown. A brief description of each stage follows.

1.1.2.1 Application Submission Period

At the time the application submission period opens, those wishing to submit new gTLD applications can become registered users of the TLD Application System (TAS).

After completing the user registration, applicants will supply a deposit for each requested application slot (see section 1.4), after which they will receive access to the full application form. To complete the application, users will answer a series of questions to provide general information, demonstrate financial capability, and demonstrate technical and operational capability. The supporting documents listed in subsection 1.2.2 of this module must also be submitted through the online application system as instructed in the relevant questions.

Applicants must also submit their evaluation fees during this period. Refer to Section 1.5 of this module for additional information about fees and payments.

Each application slot is for one gTLD. An applicant may submit as many applications as desired; however, there is no means to apply for more than one gTLD in a single application.
Following the close of the application submission period, ICANN will provide applicants with periodic status updates on the progress of their applications.

1.1.2.2 Administrative Completeness Check

Immediately following the close of the application submission period, ICANN will begin checking all applications for completeness. This check ensures that:

- All mandatory questions are answered;
- Required supporting documents are provided in the proper format(s); and
- The evaluation fees have been received.

ICANN will post the public portions of all applications considered complete and ready for evaluation within two weeks of the close of the application submission period. Certain questions relate to internal processes or information: applicant responses to these questions will not be posted. Each question is labeled in the application form as to whether the information will be posted. See posting designations for the full set of questions in the attachment to Module 2.

The administrative completeness check is expected to be completed for all applications in a period of approximately 8 weeks, subject to extension depending on volume. In the event that all applications cannot be processed within this period, ICANN will post updated process information and an estimated timeline.

1.1.2.3 Comment Period

Public comment mechanisms are part of ICANN’s policy development, implementation, and operational processes. As a private-public partnership, ICANN is dedicated to: preserving the operational security and stability of the Internet, promoting competition, achieving broad representation of global Internet communities, and developing policy appropriate to its mission through bottom-up, consensus-based processes. This necessarily involves the participation of many stakeholder groups in a public discussion.

ICANN will open a comment period (the Application Comment period) at the time applications are publicly posted on ICANN’s website (refer to subsection 1.1.2.2). This period will allow time for the community to review and submit comments on posted application materials.
The comment forum will require commenters to associate comments with specific applications and the relevant panel. Application comments received within a 60-day period from the posting of the application materials will be available to the evaluation panels performing the Initial Evaluation reviews. This period is subject to extension, should the volume of applications or other circumstances require. **To be considered by evaluators, comments must be received in the designated comment forum within the stated time period.**

Evaluators will perform due diligence on the application comments (i.e., determine their relevance to the evaluation, verify the accuracy of claims, analyze meaningfulness of references cited) and take the information provided in these comments into consideration. In cases where consideration of the comments has impacted the scoring of the application, the evaluators will seek clarification from the applicant. Statements concerning consideration of application comments that have impacted the evaluation decision will be reflected in the evaluators’ summary reports, which will be published at the end of Extended Evaluation.

Comments received after the 60-day period will be stored and available (along with comments received during the comment period) for other considerations, such as the dispute resolution process, as described below.

In the new gTLD application process, all applicants should be aware that comment fora are a mechanism for the public to bring relevant information and issues to the attention of those charged with handling new gTLD applications. Anyone may submit a comment in a public comment forum.

**Comments and the Formal Objection Process:** A distinction should be made between application comments, which may be relevant to ICANN’s task of determining whether applications meet the established criteria, and formal objections that concern matters outside those evaluation criteria. The formal objection process was created to allow a full and fair consideration of objections based on certain limited grounds outside ICANN’s evaluation of applications on their merits (see subsection 3.2).

Public comments will not be considered as formal objections. Comments on matters associated with formal objections will not be considered by panels during Initial Evaluation. These comments will be available to and may
be subsequently considered by an expert panel during a dispute resolution proceeding (see subsection 1.1.2.9). However, in general, application comments have a very limited role in the dispute resolution process.

**String Contention:** Comments designated for the Community Priority Panel, as relevant to the criteria in Module 4, may be taken into account during a Community Priority Evaluation.

**Government Notifications:** Governments may provide a notification using the application comment forum to communicate concerns relating to national laws. However, a government’s notification of concern will not in itself be deemed to be a formal objection. A notification by a government does not constitute grounds for rejection of a gTLD application. A government may elect to use this comment mechanism to provide such a notification, in addition to or as an alternative to the GAC Early Warning procedure described in subsection 1.1.2.4 below.

Governments may also communicate directly to applicants using the contact information posted in the application, e.g., to send a notification that an applied-for gTLD string might be contrary to a national law, and to try to address any concerns with the applicant.

**General Comments:** A general public comment forum will remain open through all stages of the evaluation process, to provide a means for the public to bring forward any other relevant information or issues.

### 1.1.2.4 GAC Early Warning

Concurrent with the 60-day comment period, ICANN’s Governmental Advisory Committee (GAC) may issue a GAC Early Warning notice concerning an application. This provides the applicant with an indication that the application is seen as potentially sensitive or problematic by one or more governments.

The GAC Early Warning is a notice only. It is not a formal objection, nor does it directly lead to a process that can result in rejection of the application. However, a GAC Early Warning should be taken seriously as it raises the likelihood that the application could be the subject of GAC Advice on New gTLDs (see subsection 1.1.2.7) or of a formal objection (see subsection 1.1.2.6) at a later stage in the process.
A GAC Early Warning typically results from a notice to the GAC by one or more governments that an application might be problematic, e.g., potentially violate national law or raise sensitivities. A GAC Early Warning may be issued for any reason. The GAC may then send that notice to the Board – constituting the GAC Early Warning. ICANN will notify applicants of GAC Early Warnings as soon as practicable after receipt from the GAC. The GAC Early Warning notice may include a nominated point of contact for further information.

GAC consensus is not required for a GAC Early Warning to be issued. Minimally, the GAC Early Warning must be provided in writing to the ICANN Board, and be clearly labeled as a GAC Early Warning. This may take the form of an email from the GAC Chair to the ICANN Board. For GAC Early Warnings to be most effective, they should include the reason for the warning and identify the objecting countries.

Upon receipt of a GAC Early Warning, the applicant may elect to withdraw the application for a partial refund (see subsection 1.5.1), or may elect to continue with the application (this may include meeting with representatives from the relevant government(s) to try to address the concern). To qualify for the refund described in subsection 1.5.1, the applicant must provide notification to ICANN of its election to withdraw the application within 21 calendar days of the date of GAC Early Warning delivery to the applicant.

To reduce the possibility of a GAC Early Warning, all applicants are encouraged to identify potential sensitivities in advance of application submission, and to work with the relevant parties (including governments) beforehand to mitigate concerns related to the application.

1.1.2.5 Initial Evaluation

Initial Evaluation will begin immediately after the administrative completeness check concludes. All complete applications will be reviewed during Initial Evaluation. At the beginning of this period, background screening on the applying entity and the individuals named in the application will be conducted. Applications

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While definitive guidance has not been issued, the GAC has indicated that strings that could raise sensitivities include those that "purport to represent or that embody a particular group of people or interests based on historical, cultural, or social components of identity, such as nationality, race or ethnicity, religion, belief, culture or particular social origin or group, political opinion, membership of a national minority, disability, age, and/or a language or linguistic group (non-exhaustive)" and "those strings that refer to particular sectors, such as those subject to national regulation (such as .bank, .pharmacy) or those that describe or are targeted to a population or industry that is vulnerable to online fraud or abuse."
must pass this step in conjunction with the Initial Evaluation reviews.

There are two main elements of the Initial Evaluation:

1. **String reviews (concerning the applied-for gTLD string).** String reviews include a determination that the applied-for gTLD string is not likely to cause security or stability problems in the DNS, including problems caused by similarity to existing TLDs or reserved names.

2. **Applicant reviews (concerning the entity applying for the gTLD and its proposed registry services).** Applicant reviews include a determination of whether the applicant has the requisite technical, operational, and financial capabilities to operate a registry.

By the conclusion of the Initial Evaluation period, ICANN will post notice of all Initial Evaluation results. Depending on the volume of applications received, such notices may be posted in batches over the course of the Initial Evaluation period.

The Initial Evaluation is expected to be completed for all applications in a period of approximately 5 months. If the volume of applications received significantly exceeds 500, applications will be processed in batches and the 5-month timeline will not be met. The first batch will be limited to 500 applications and subsequent batches will be limited to 400 to account for capacity limitations due to managing extended evaluation, string contention, and other processes associated with each previous batch.

If batching is required, a secondary time-stamp process will be employed to establish the batches. (Batching priority will not be given to an application based on the time at which the application was submitted to ICANN, nor will batching priority be established based on a random selection method.)

The secondary time-stamp process will require applicants to obtain a time-stamp through a designated process which will occur after the close of the application submission period. The secondary time stamp process will occur, if required, according to the details to be published on ICANN's website. (Upon the Board's approval of a final designation of the operational details of the "secondary timestamp" batching process, the final plan will be added as a process within the Applicant Guidebook.)
If batching is required, the String Similarity review will be completed on all applications prior to the establishment of evaluation priority batches. For applications identified as part of a contention set, the entire contention set will be kept together in the same batch.

If batches are established, ICANN will post updated process information and an estimated timeline.

Note that the processing constraints will limit delegation rates to a steady state even in the event of an extremely high volume of applications. The annual delegation rate will not exceed 1,000 per year in any case, no matter how many applications are received.²

1.1.2.6 Objection Filing

Formal objections to applications can be filed on any of four enumerated grounds, by parties with standing to object. The objection filing period will open after ICANN posts the list of complete applications as described in subsection 1.1.2.2, and will last for approximately 7 months.

Objectors must file such formal objections directly with dispute resolution service providers (DRSPs), not with ICANN. The objection filing period will close following the end of the Initial Evaluation period (refer to subsection 1.1.2.5), with a two-week window of time between the posting of the Initial Evaluation results and the close of the objection filing period. Objections that have been filed during the objection filing period will be addressed in the dispute resolution stage, which is outlined in subsection 1.1.2.9 and discussed in detail in Module 3.

All applicants should be aware that third parties have the opportunity to file objections to any application during the objection filing period. Applicants whose applications are the subject of a formal objection will have an opportunity to file a response according to the dispute resolution service provider’s rules and procedures. An applicant wishing to file a formal objection to another application that has been submitted would do so within the objection filing period, following the objection filing procedures in Module 3.

Applicants are encouraged to identify possible regional, cultural, property interests, or other sensitivities regarding TLD strings and their uses before applying and, where

possible, consult with interested parties to mitigate any concerns in advance.

1.1.2.7 Receipt of GAC Advice on New gTLDs

The GAC may provide public policy advice directly to the ICANN Board on any application. The procedure for GAC Advice on New gTLDs described in Module 3 indicates that, to be considered by the Board during the evaluation process, the GAC Advice on New gTLDs must be submitted by the close of the objection filing period. A GAC Early Warning is not a prerequisite to use of the GAC Advice process.

If the Board receives GAC Advice on New gTLDs stating that it is the consensus of the GAC that a particular application should not proceed, this will create a strong presumption for the ICANN Board that the application should not be approved. If the Board does not act in accordance with this type of advice, it must provide rationale for doing so.

See Module 3 for additional detail on the procedures concerning GAC Advice on New gTLDs.

1.1.2.8 Extended Evaluation

Extended Evaluation is available only to certain applicants that do not pass Initial Evaluation.

Applicants failing certain elements of the Initial Evaluation can request an Extended Evaluation. If the applicant does not pass Initial Evaluation and does not expressly request an Extended Evaluation, the application will proceed no further. The Extended Evaluation period allows for an additional exchange of information between the applicant and evaluators to clarify information contained in the application. The reviews performed in Extended Evaluation do not introduce additional evaluation criteria.

An application may be required to enter an Extended Evaluation if one or more proposed registry services raise technical issues that might adversely affect the security or stability of the DNS. The Extended Evaluation period provides a time frame for these issues to be investigated. Applicants will be informed if such a review is required by the end of the Initial Evaluation period.

Evaluators and any applicable experts consulted will communicate the conclusions resulting from the additional review by the end of the Extended Evaluation period.
At the conclusion of the Extended Evaluation period, ICANN will post summary reports, by panel, from the Initial and Extended Evaluation periods.

If an application passes the Extended Evaluation, it can then proceed to the next relevant stage. If the application does not pass the Extended Evaluation, it will proceed no further.

The Extended Evaluation is expected to be completed for all applications in a period of approximately 5 months, though this timeframe could be increased based on volume. In this event, ICANN will post updated process information and an estimated timeline.

1.1.2.9 Dispute Resolution

Dispute resolution applies only to applicants whose applications are the subject of a formal objection.

Where formal objections are filed and filing fees paid during the objection filing period, independent dispute resolution service providers (DRSPs) will initiate and conclude proceedings based on the objections received. The formal objection procedure exists to provide a path for those who wish to object to an application that has been submitted to ICANN. Dispute resolution service providers serve as the fora to adjudicate the proceedings based on the subject matter and the needed expertise. Consolidation of objections filed will occur where appropriate, at the discretion of the DRSP.

As a result of a dispute resolution proceeding, either the applicant will prevail (in which case the application can proceed to the next relevant stage), or the objector will prevail (in which case either the application will proceed no further or the application will be bound to a contention resolution procedure). In the event of multiple objections, an applicant must prevail in all dispute resolution proceedings concerning the application to proceed to the next relevant stage. Applicants will be notified by the DRSP(s) of the results of dispute resolution proceedings.

Dispute resolution proceedings, where applicable, are expected to be completed for all applications within approximately a 5-month time frame. In the event that volume is such that this timeframe cannot be accommodated, ICANN will work with the dispute resolution service providers to create processing procedures and post updated timeline information.
1.1.2.10 String Contention

String contention applies only when there is more than one qualified application for the same or similar gTLD strings.

String contention refers to the scenario in which there is more than one qualified application for the identical gTLD string or for similar gTLD strings. In this Applicant Guidebook, “similar” means strings so similar that they create a probability of user confusion if more than one of the strings is delegated into the root zone.

Applicants are encouraged to resolve string contention cases among themselves prior to the string contention resolution stage. In the absence of resolution by the contending applicants, string contention cases are resolved either through a community priority evaluation (if a community-based applicant elects it) or through an auction.

In the event of contention between applied-for gTLD strings that represent geographic names, the parties may be required to follow a different process to resolve the contention. See subsection 2.2.1.4 of Module 2 for more information.

Groups of applied-for strings that are either identical or similar are called contention sets. All applicants should be aware that if an application is identified as being part of a contention set, string contention resolution procedures will not begin until all applications in the contention set have completed all aspects of evaluation, including dispute resolution, if applicable.

To illustrate, as shown in Figure 1-2, Applicants A, B, and C all apply for .EXAMPLE and are identified as a contention set. Applicants A and C pass Initial Evaluation, but Applicant B does not. Applicant B requests Extended Evaluation. A third party files an objection to Applicant C’s application, and Applicant C enters the dispute resolution process. Applicant A must wait to see whether Applicants B and C successfully complete the Extended Evaluation and dispute resolution phases, respectively, before it can proceed to the string contention resolution stage. In this example, Applicant B passes the Extended Evaluation, but Applicant C does not prevail in the dispute resolution proceeding. String contention resolution then proceeds between Applicants A and B.
Applicants prevailing in a string contention resolution procedure will proceed toward delegation of the applied-for gTLDs.

String contention resolution for a contention set is estimated to take from 2.5 to 6 months to complete. The time required will vary per case because some contention cases may be resolved in either a community priority evaluation or an auction, while others may require both processes.

### 1.1.2.11 Transition to Delegation

Applicants successfully completing all the relevant stages outlined in this subsection 1.1.2 are required to carry out a series of concluding steps before delegation of the applied-for gTLD into the root zone. These steps include execution of a registry agreement with ICANN and completion of a pre-delegation technical test to validate information provided in the application.

Following execution of a registry agreement, the prospective registry operator must complete technical set-up and show satisfactory performance on a set of technical tests before delegation of the gTLD into the root zone may be initiated. If the pre-delegation testing requirements are not satisfied so that the gTLD can be delegated into the root zone within the time frame specified in the registry agreement, ICANN may in its sole and absolute discretion elect to terminate the registry agreement.
Once all of these steps have been successfully completed, the applicant is eligible for delegation of its applied-for gTLD into the DNS root zone.

It is expected that the transition to delegation steps can be completed in approximately 2 months, though this could take more time depending on the applicant’s level of preparedness for the pre-delegation testing and the volume of applications undergoing these steps concurrently.

1.1.3 Lifecycle Timelines

Based on the estimates for each stage described in this section, the lifecycle for a straightforward application could be approximately 9 months, as follows:

- 2 Months
  - Administrative Check

- 5 Months
  - Initial Evaluation

- 2 Months
  - Transition to Delegation

Figure 1-3 – A straightforward application could have an approximate 9-month lifecycle.

The lifecycle for a highly complex application could be much longer, such as 20 months in the example below:
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1.1.4 Posting Periods

The results of application reviews will be made available to the public at various stages in the process, as shown below.

<table>
<thead>
<tr>
<th>Period</th>
<th>Posting Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>During Administrative Completeness Check</td>
<td>Public portions of all applications (posted within 2 weeks of the start of the Administrative Completeness Check).</td>
</tr>
<tr>
<td>End of Administrative Completeness Check</td>
<td>Results of Administrative Completeness Check.</td>
</tr>
<tr>
<td>GAC Early Warning Period</td>
<td>GAC Early Warnings received.</td>
</tr>
<tr>
<td>During Initial Evaluation</td>
<td>Status updates for applications withdrawn or ineligible for further review. Contention sets resulting from String Similarity review.</td>
</tr>
</tbody>
</table>
## 1.1.5 Sample Application Scenarios

The following scenarios briefly show a variety of ways in which an application may proceed through the evaluation process. The table that follows exemplifies various processes and outcomes. This is not intended to be an exhaustive list of possibilities. There are other possible combinations of paths an application could follow.

Estimated time frames for each scenario are also included, based on current knowledge. Actual time frames may vary depending on several factors, including the total number

<table>
<thead>
<tr>
<th>Period</th>
<th>Posting Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of Initial Evaluation</td>
<td>Application status updates with all Initial Evaluation results.</td>
</tr>
<tr>
<td>GAC Advice on New gTLDs</td>
<td>GAC Advice received.</td>
</tr>
<tr>
<td>End of Extended Evaluation</td>
<td>Application status updates with all Extended Evaluation results.</td>
</tr>
<tr>
<td></td>
<td>Evaluation summary reports from the Initial and Extended Evaluation periods.</td>
</tr>
<tr>
<td>During Objection Filing/Dispute Resolution</td>
<td>Information on filed objections and status updates available via Dispute Resolution Service Provider websites. Notice of all objections posted by ICANN after close of objection filing period.</td>
</tr>
<tr>
<td>During Contention Resolution (Community Priority Evaluation)</td>
<td>Results of each Community Priority Evaluation posted as completed.</td>
</tr>
<tr>
<td>During Contention Resolution (Auction)</td>
<td>Results from each auction posted as completed.</td>
</tr>
<tr>
<td>Transition to Delegation</td>
<td>Registry Agreements posted when executed. Pre-delegation testing status updated.</td>
</tr>
</tbody>
</table>
of applications received by ICANN during the application submission period. It should be emphasized that most applications are expected to pass through the process in the shortest period of time, i.e., they will not go through extended evaluation, dispute resolution, or string contention resolution processes. Although most of the scenarios below are for processes extending beyond nine months, it is expected that most applications will complete the process within the nine-month timeframe.

<table>
<thead>
<tr>
<th>Scenario Number</th>
<th>Initial Evaluation</th>
<th>Extended Evaluation</th>
<th>Objection(s)Filed</th>
<th>String Contention</th>
<th>Approvals for Delegation Steps</th>
<th>Estimated Elapsed Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pass</td>
<td>N/A</td>
<td>None</td>
<td>No</td>
<td>Yes</td>
<td>9 months</td>
</tr>
<tr>
<td>2</td>
<td>Fail</td>
<td>Pass</td>
<td>None</td>
<td>No</td>
<td>Yes</td>
<td>14 months</td>
</tr>
<tr>
<td>3</td>
<td>Pass</td>
<td>N/A</td>
<td>None</td>
<td>Yes</td>
<td>Yes</td>
<td>11.5 – 15 months</td>
</tr>
<tr>
<td>4</td>
<td>Pass</td>
<td>N/A</td>
<td>Applicant prevails</td>
<td>No</td>
<td>Yes</td>
<td>14 months</td>
</tr>
<tr>
<td>5</td>
<td>Pass</td>
<td>N/A</td>
<td>Objector prevails</td>
<td>N/A</td>
<td>No</td>
<td>12 months</td>
</tr>
<tr>
<td>6</td>
<td>Fail</td>
<td>Quit</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>7 months</td>
</tr>
<tr>
<td>7</td>
<td>Fail</td>
<td>Fail</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>12 months</td>
</tr>
<tr>
<td>8</td>
<td>Fail</td>
<td>Pass</td>
<td>Applicant prevails</td>
<td>Yes</td>
<td>Yes</td>
<td>16.5 – 20 months</td>
</tr>
<tr>
<td>9</td>
<td>Fail</td>
<td>Pass</td>
<td>Applicant prevails</td>
<td>Yes</td>
<td>No</td>
<td>14.5 – 18 months</td>
</tr>
</tbody>
</table>

**Scenario 1 - Pass Initial Evaluation, No Objection, No Contention** – In the most straightforward case, the application passes Initial Evaluation and there is no need for an Extended Evaluation. No objections are filed during the objection period, so there is no dispute to resolve. As there is no contention for the applied-for gTLD string, the applicant can enter into a registry agreement and the application can proceed toward delegation of the applied-for gTLD. Most applications are expected to complete the process within this timeframe.

**Scenario 2 - Extended Evaluation, No Objection, No Contention** – In this case, the application fails one or more aspects of the Initial Evaluation. The applicant is eligible for and requests an Extended Evaluation for the appropriate elements. Here, the application passes the Extended Evaluation. As with Scenario 1, no objections are filed.
during the objection period, so there is no dispute to resolve. As there is no contention for the gTLD string, the applicant can enter into a registry agreement and the application can proceed toward delegation of the applied-for gTLD.

Scenario 3 – Pass Initial Evaluation, No Objection, Contention – In this case, the application passes the Initial Evaluation so there is no need for Extended Evaluation. No objections are filed during the objection period, so there is no dispute to resolve. However, there are other applications for the same or a similar gTLD string, so there is contention. In this case, the application prevails in the contention resolution, so the applicant can enter into a registry agreement and the application can proceed toward delegation of the applied-for gTLD.

Scenario 4 – Pass Initial Evaluation, Win Objection, No Contention – In this case, the application passes the Initial Evaluation so there is no need for Extended Evaluation. During the objection filing period, an objection is filed on one of the four enumerated grounds by an objector with standing (refer to Module 3, Objection Procedures). The objection is heard by a dispute resolution service provider panel that finds in favor of the applicant. The applicant can enter into a registry agreement and the application can proceed toward delegation of the applied-for gTLD.

Scenario 5 – Pass Initial Evaluation, Lose Objection – In this case, the application passes the Initial Evaluation so there is no need for Extended Evaluation. During the objection period, multiple objections are filed by one or more objectors with standing for one or more of the four enumerated objection grounds. Each objection is heard by a dispute resolution service provider panel. In this case, the panels find in favor of the applicant for most of the objections, but one finds in favor of the objector. As one of the objections has been upheld, the application does not proceed.

Scenario 6 – Fail Initial Evaluation, Applicant Withdraws – In this case, the application fails one or more aspects of the Initial Evaluation. The applicant decides to withdraw the application rather than continuing with Extended Evaluation. The application does not proceed.

Scenario 7 – Fail Initial Evaluation, Fail Extended Evaluation – In this case, the application fails one or more aspects of the Initial Evaluation. The applicant requests Extended Evaluation for the appropriate elements. However, the
application fails Extended Evaluation also. The application does not proceed.

**Scenario 8 - Extended Evaluation, Win Objection, Pass Contention** – In this case, the application fails one or more aspects of the Initial Evaluation. The applicant is eligible for and requests an Extended Evaluation for the appropriate elements. Here, the application passes the Extended Evaluation. During the objection filing period, an objection is filed on one of the four enumerated grounds by an objector with standing. The objection is heard by a dispute resolution service provider panel that finds in favor of the applicant. However, there are other applications for the same or a similar gTLD string, so there is contention. In this case, the applicant prevails over other applications in the contention resolution procedure, the applicant can enter into a registry agreement, and the application can proceed toward delegation of the applied-for gTLD.

**Scenario 9 - Extended Evaluation, Objection, Fail Contention** – In this case, the application fails one or more aspects of the Initial Evaluation. The applicant is eligible for and requests an Extended Evaluation for the appropriate elements. Here, the application passes the Extended Evaluation. During the objection filing period, an objection is filed on one of the four enumerated grounds by an objector with standing. The objection is heard by a dispute resolution service provider that finds in favor of the applicant. However, there are other applications for the same or a similar gTLD string, so there is contention. In this case, another applicant prevails in the contention resolution procedure, and the application does not proceed.

**Transition to Delegation** – After an application has successfully completed Initial Evaluation, and other stages as applicable, the applicant is required to complete a set of steps leading to delegation of the gTLD, including execution of a registry agreement with ICANN, and completion of pre-delegation testing. Refer to Module 5 for a description of the steps required in this stage.

1.1.6 *Subsequent Application Rounds*

ICANN’s goal is to launch subsequent gTLD application rounds as quickly as possible. The exact timing will be based on experiences gained and changes required after this round is completed. The goal is for the next application round to begin within one year of the close of the application submission period for the initial round.
ICANN has committed to reviewing the effects of the New gTLD Program on the operations of the root zone system after the first application round, and will defer the delegations in a second application round until it is determined that the delegations resulting from the first round did not jeopardize root zone system security or stability.

It is the policy of ICANN that there be subsequent application rounds, and that a systemized manner of applying for gTLDs be developed in the long term.

1.2 Information for All Applicants

1.2.1 Eligibility

Established corporations, organizations, or institutions in good standing may apply for a new gTLD. Applications from individuals or sole proprietorships will not be considered. Applications from or on behalf of yet-to-be-formed legal entities, or applications presupposing the future formation of a legal entity (for example, a pending Joint Venture) will not be considered.

ICANN has designed the New gTLD Program with multiple stakeholder protection mechanisms. Background screening, features of the gTLD Registry Agreement, data and financial escrow mechanisms are all intended to provide registrant and user protections.

The application form requires applicants to provide information on the legal establishment of the applying entity, as well as the identification of directors, officers, partners, and major shareholders of that entity. The names and positions of individuals included in the application will be published as part of the application; other information collected about the individuals will not be published.

Background screening at both the entity level and the individual level will be conducted for all applications to confirm eligibility. This inquiry is conducted on the basis of the information provided in questions 1-11 of the application form. ICANN may take into account information received from any source if it is relevant to the criteria in this section. If requested by ICANN, all applicants will be required to obtain and deliver to ICANN and ICANN’s background screening vendor any consents or agreements of the entities and/or individuals named in questions 1-11 of the application form necessary to conduct background screening activities.
ICANN will perform background screening in only two areas: (1) General business diligence and criminal history; and (2) History of cybersquatting behavior. The criteria used for criminal history are aligned with the “crimes of trust” standard sometimes used in the banking and finance industry.

In the absence of exceptional circumstances, applications from any entity with or including any individual with convictions or decisions of the types listed in (a) - (m) below will be automatically disqualified from the program.

a. within the past ten years, has been convicted of any crime related to financial or corporate governance activities, or has been judged by a court to have committed fraud or breach of fiduciary duty, or has been the subject of a judicial determination that ICANN deems as the substantive equivalent of any of these;

b. within the past ten years, has been disciplined by any government or industry regulatory body for conduct involving dishonesty or misuse of the funds of others;

c. within the past ten years has been convicted of any willful tax-related fraud or willful evasion of tax liabilities;

d. within the past ten years has been convicted of perjury, forswearing, failing to cooperate with a law enforcement investigation, or making false statements to a law enforcement agency or representative;

e. has ever been convicted of any crime involving the use of computers, telephony systems, telecommunications or the Internet to facilitate the commission of crimes;

f. has ever been convicted of any crime involving the use of a weapon, force, or the threat of force;

g. has ever been convicted of any violent or sexual offense victimizing children, the
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elderly, or individuals with disabilities;

h. has ever been convicted of the illegal sale, manufacture, or distribution of pharmaceutical drugs, or been convicted or successfully extradited for any offense described in Article 3 of the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988;

i. has ever been convicted or successfully extradited for any offense described in the United Nations Convention against Transnational Organized Crime (all Protocols);

j. has been convicted, within the respective timeframes, of aiding, abetting, facilitating, enabling, conspiring to commit, or failing to report any of the listed crimes above (i.e., within the past 10 years for crimes listed in (a) - (d) above, or ever for the crimes listed in (e) - (i) above);

k. has entered a guilty plea as part of a plea agreement or has a court case in any jurisdiction with a disposition of Adjudicated Guilty or Adjudication Withheld (or regional equivalents), within the respective timeframes listed above for any of the listed crimes (i.e., within the past 10 years for crimes listed in (a) - (d) above, or ever for the crimes listed in (e) - (i) above);

l. is the subject of a disqualification imposed by ICANN and in effect at the time the application is considered;

m. has been involved in a pattern of adverse, final decisions indicating that the applicant

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5 It is recognized that not all countries have signed on to the UN conventions referenced above. These conventions are being used solely for identification of a list of crimes for which background screening will be performed. It is not necessarily required that an applicant would have been convicted pursuant to the UN convention but merely convicted of a crime listed under these conventions, to trigger these criteria.
or individual named in the application was engaged in cybersquatting as defined in the Uniform Domain Name Dispute Resolution Policy (UDRP), the Anti-Cybersquatting Consumer Protection Act (ACPA), or other equivalent legislation, or was engaged in reverse domain name hijacking under the UDRP or bad faith or reckless disregard under the ACPA or other equivalent legislation. Three or more such decisions with one occurring in the last four years will generally be considered to constitute a pattern.

n. fails to provide ICANN with the identifying information necessary to confirm identity at the time of application or to resolve questions of identity during the background screening process;

o. fails to provide a good faith effort to disclose all relevant information relating to items (a) – (m).

Background screening is in place to protect the public interest in the allocation of critical Internet resources, and ICANN reserves the right to deny an otherwise qualified application based on any information identified during the background screening process. For example, a final and legally binding decision obtained by a national law enforcement or consumer protection authority finding that the applicant was engaged in fraudulent and deceptive commercial practices as defined in the Organization for Economic Co-operation and Development (OECD) Guidelines for Protecting Consumers from Fraudulent and Deceptive Commercial Practices Across Borders may cause an application to be rejected. ICANN may also contact the applicant with additional questions based on information obtained in the background screening process.

All applicants are required to provide complete and detailed explanations regarding any of the above events as part of the application. Background screening information will not be made publicly available by ICANN.

Registrar Cross-Ownership -- ICANN-accredited registrars are eligible to apply for a gTLD. However, all gTLD registries
are required to abide by a Code of Conduct addressing, inter alia, non-discriminatory access for all authorized registrars. ICANN reserves the right to refer any application to the appropriate competition authority relative to any cross-ownership issues.

**Legal Compliance** -- ICANN must comply with all U.S. laws, rules, and regulations. One such set of regulations is the economic and trade sanctions program administered by the Office of Foreign Assets Control (OFAC) of the U.S. Department of the Treasury. These sanctions have been imposed on certain countries, as well as individuals and entities that appear on OFAC’s List of Specially Designated Nationals and Blocked Persons (the SDN List). ICANN is prohibited from providing most goods or services to residents of sanctioned countries or their governmental entities or to SDNs without an applicable U.S. government authorization or exemption. ICANN generally will not seek a license to provide goods or services to an individual or entity on the SDN List. In the past, when ICANN has been requested to provide services to individuals or entities that are not SDNs, but are residents of sanctioned countries, ICANN has sought and been granted licenses as required. In any given case, however, OFAC could decide not to issue a requested license.

### 1.2.2 Required Documents

All applicants should be prepared to submit the following documents, which are required to accompany each application:

1. **Proof of legal establishment** – Documentation of the applicant’s establishment as a specific type of entity in accordance with the applicable laws of its jurisdiction.

2. **Financial statements** – Applicants must provide audited or independently certified financial statements for the most recently completed fiscal year for the applicant. In some cases, unaudited financial statements may be provided.

As indicated in the relevant questions, supporting documentation should be submitted in the original language. English translations are not required.

All documents must be valid at the time of submission. Refer to the Evaluation Criteria, attached to Module 2, for additional details on the requirements for these documents.
Some types of supporting documentation are required only in certain cases:

1. **Community endorsement** - If an applicant has designated its application as community-based (see section 1.2.3), it will be asked to submit a written endorsement of its application by one or more established institutions representing the community it has named. An applicant may submit written endorsements from multiple institutions. If applicable, this will be submitted in the section of the application concerning the community-based designation.

   At least one such endorsement is required for a complete application. The form and content of the endorsement are at the discretion of the party providing the endorsement; however, the letter must identify the applied-for gTLD string and the applying entity, include an express statement of support for the application, and supply the contact information of the entity providing the endorsement.

   Written endorsements from individuals need not be submitted with the application, but may be submitted in the application comment forum.

2. **Government support or non-objection** - If an applicant has applied for a gTLD string that is a geographic name (as defined in this Guidebook), the applicant is required to submit documentation of support for or non-objection to its application from the relevant governments or public authorities. Refer to subsection 2.2.1.4 for more information on the requirements for geographic names. If applicable, this will be submitted in the geographic names section of the application.

3. **Documentation of third-party funding commitments** - If an applicant lists funding from third parties in its application, it must provide evidence of commitment by the party committing the funds. If applicable, this will be submitted in the financial section of the application.

### 1.2.3 Community-Based Designation

All applicants are required to designate whether their application is community-based.

#### 1.2.3.1 Definitions

For purposes of this Applicant Guidebook, a **community-based gTLD** is a gTLD that is operated for the benefit of a clearly delineated community. Designation or non-
designation of an application as community-based is entirely at the discretion of the applicant. Any applicant may designate its application as community-based; however, each applicant making this designation is asked to substantiate its status as representative of the community it names in the application by submission of written endorsements in support of the application. Additional information may be requested in the event of a community priority evaluation (refer to section 4.2 of Module 4). An applicant for a community-based gTLD is expected to:

1. Demonstrate an ongoing relationship with a clearly delineated community.
2. Have applied for a gTLD string strongly and specifically related to the community named in the application.
3. Have proposed dedicated registration and use policies for registrants in its proposed gTLD, including appropriate security verification procedures, commensurate with the community-based purpose it has named.
4. Have its application endorsed in writing by one or more established institutions representing the community it has named.

For purposes of differentiation, an application that has not been designated as community-based will be referred to hereinafter in this document as a **standard application**. A standard gTLD can be used for any purpose consistent with the requirements of the application and evaluation criteria, and with the registry agreement. A standard applicant may or may not have a formal relationship with an exclusive registrant or user population. It may or may not employ eligibility or use restrictions. Standard simply means here that the applicant has not designated the application as community-based.

**1.2.3.2 Implications of Application Designation**

Applicants should understand how their designation as community-based or standard will affect application processing at particular stages, and, if the application is successful, execution of the registry agreement and subsequent obligations as a gTLD registry operator, as described in the following paragraphs.

**Objection / Dispute Resolution** – All applicants should understand that a formal objection may be filed against any application on community grounds, even if the applicant has not designated itself as community-based or
declared the gTLD to be aimed at a particular community. Refer to Module 3, Objection Procedures.

**String Contention** - Resolution of string contention may include one or more components, depending on the composition of the contention set and the elections made by community-based applicants.

- **A settlement between the parties** can occur at any time after contention is identified. The parties will be encouraged to meet with an objective to settle the contention. Applicants in contention always have the opportunity to resolve the contention voluntarily, resulting in the withdrawal of one or more applications, before reaching the contention resolution stage.

- **A community priority evaluation** will take place only if a community-based applicant in a contention set elects this option. All community-based applicants in a contention set will be offered this option in the event that there is contention remaining after the applications have successfully completed all previous evaluation stages.

- **An auction** will result for cases of contention not resolved by community priority evaluation or agreement between the parties. Auction occurs as a contention resolution means of last resort. If a community priority evaluation occurs but does not produce a clear winner, an auction will take place to resolve the contention.

Refer to Module 4, String Contention Procedures, for detailed discussions of contention resolution procedures.

**Contract Execution and Post-Delegation** - A community-based applicant will be subject to certain post-delegation contractual obligations to operate the gTLD in a manner consistent with the restrictions associated with its community-based designation. Material changes to the contract, including changes to the community-based nature of the gTLD and any associated provisions, may only be made with ICANN’s approval. The determination of whether to approve changes requested by the applicant will be at ICANN’s discretion. Proposed criteria for approving such changes are the subject of policy discussions.

Community-based applications are intended to be a narrow category, for applications where there are
unambiguous associations among the applicant, the community served, and the applied-for gTLD string. Evaluation of an applicant's designation as community-based will occur only in the event of a contention situation that results in a community priority evaluation. However, any applicant designating its application as community-based will, if the application is approved, be bound by the registry agreement to implement the community-based restrictions it has specified in the application. This is true even if there are no contending applicants.

1.2.3.3 Changes to Application Designation
An applicant may not change its designation as standard or community-based once it has submitted a gTLD application for processing.

1.2.4 Notice concerning Technical Acceptance Issues with New gTLDs
All applicants should be aware that approval of an application and entry into a registry agreement with ICANN do not guarantee that a new gTLD will immediately function throughout the Internet. Past experience indicates that network operators may not immediately fully support new top-level domains, even when these domains have been delegated in the DNS root zone, since third-party software modification may be required and may not happen immediately.

Similarly, software applications sometimes attempt to validate domain names and may not recognize new or unknown top-level domains. ICANN has no authority or ability to require that software accept new top-level domains, although it does prominently publicize which top-level domains are valid and has developed a basic tool to assist application providers in the use of current root-zone data.

ICANN encourages applicants to familiarize themselves with these issues and account for them in their startup and launch plans. Successful applicants may find themselves expending considerable efforts working with providers to achieve acceptance of their new top-level domains.

Applicants should review http://www.icann.org/en/topics/TLD-acceptance/ for background. IDN applicants should also review the material concerning experiences with IDN test strings in the root zone (see http://idn.icann.org/).
1.2.5 Notice concerning TLD Delegations

ICANN is only able to create TLDs as delegations in the DNS root zone, expressed using NS records with any corresponding DS records and glue records. There is no policy enabling ICANN to place TLDs as other DNS record types (such as A, MX, or DNAME records) in the root zone.

1.2.6 Terms and Conditions

All applicants must agree to a standard set of Terms and Conditions for the application process. The Terms and Conditions are available in Module 6 of this guidebook.

1.2.7 Notice of Changes to Information

If at any time during the evaluation process information previously submitted by an applicant becomes untrue or inaccurate, the applicant must promptly notify ICANN via submission of the appropriate forms. This includes applicant-specific information such as changes in financial position and changes in ownership or control of the applicant.

ICANN reserves the right to require a re-evaluation of the application in the event of a material change. This could involve additional fees or evaluation in a subsequent application round.

Failure to notify ICANN of any change in circumstances that would render any information provided in the application false or misleading may result in denial of the application.

1.2.8 Voluntary Designation for High Security Zones


The Final Report may be used to inform further work. ICANN will support independent efforts toward developing voluntary high-security TLD designations, which may be available to gTLD applicants wishing to pursue such designations.

1.2.9 Security and Stability

Root Zone Stability: There has been significant study, analysis, and consultation in preparation for launch of the
New gTLD Program, indicating that the addition of gTLDs to the root zone will not negatively impact the security or stability of the DNS.

It is estimated that 200-300 TLDs will be delegated annually, and determined that in no case will more than 1000 new gTLDs be added to the root zone in a year. The delegation rate analysis, consultations with the technical community, and anticipated normal operational upgrade cycles all lead to the conclusion that the new gTLD delegations will have no significant impact on the stability of the root system. Modeling and reporting will continue during, and after, the first application round so that root-scaling discussions can continue and the delegation rates can be managed as the program goes forward.

All applicants should be aware that delegation of any new gTLDs is conditional on the continued absence of significant negative impact on the security or stability of the DNS and the root zone system (including the process for delegating TLDs in the root zone). In the event that there is a reported impact in this regard and processing of applications is delayed, the applicants will be notified in an orderly and timely manner.

1.2.10 Resources for Applicant Assistance

A variety of support resources are available to gTLD applicants. Financial assistance will be available to a limited number of eligible applicants. To request financial assistance, applicants must submit a separate financial assistance application in addition to the gTLD application form.

To be eligible for consideration, all financial assistance applications must be received by 23:59 UTC 12 April 2012. Financial assistance applications will be evaluated and scored against pre-established criteria.

In addition, ICANN maintains a webpage as an informational resource for applicants seeking assistance, and organizations offering support.

See http://newgtlds.icann.org/applicants/candidate-support for details on these resources.

1.2.11 Updates to the Applicant Guidebook

As approved by the ICANN Board of Directors, this Guidebook forms the basis of the New gTLD Program. ICANN reserves the right to make reasonable updates and
changes to the Applicant Guidebook at any time, including as the possible result of new technical standards, reference documents, or policies that might be adopted during the course of the application process. Any such updates or revisions will be posted on ICANN’s website.

1.3 Information for Internationalized Domain Name Applicants

Some applied-for gTLD strings are expected to be Internationalized Domain Names (IDNs). IDNs are domain names including characters used in the local representation of languages not written with the basic Latin alphabet (a - z), European-Arabic digits (0 - 9), and the hyphen (-). As described below, IDNs require the insertion of A-labels into the DNS root zone.

1.3.1 IDN-Specific Requirements

An applicant for an IDN string must provide information indicating compliance with the IDNA protocol and other technical requirements. The IDNA protocol and its documentation can be found at http://icann.org/en/topics/idn/rfcsh.htm.

Applicants must provide applied-for gTLD strings in the form of both a **U-label** (the IDN TLD in local characters) and an **A-label**.

An A-label is the ASCII form of an IDN label. Every IDN A-label begins with the IDNA ACE prefix, “xn--”, followed by a string that is a valid output of the Punycode algorithm, making a maximum of 63 total ASCII characters in length. The prefix and string together must conform to all requirements for a label that can be stored in the DNS including conformance to the LDH (host name) rule described in RFC 1034, RFC 1123, and elsewhere.

A U-label is the Unicode form of an IDN label, which a user expects to see displayed in applications.

For example, using the current IDN test string in Cyrillic script, the U-label is `<испытание>` and the A-label is `<xn--80akbyknj4d>`. An A-label must be capable of being produced by conversion from a U-label and a U-label must be capable of being produced by conversion from an A-label.

Applicants for IDN gTLDs will also be required to provide the following at the time of the application:
1. Meaning or restatement of string in English. The applicant will provide a short description of what the string would mean or represent in English.

2. Language of label (ISO 639-1). The applicant will specify the language of the applied-for gTLD string, both according to the ISO codes for the representation of names of languages, and in English.

3. Script of label (ISO 15924). The applicant will specify the script of the applied-for gTLD string, both according to the ISO codes for the representation of names of scripts, and in English.

4. Unicode code points. The applicant will list all the code points contained in the U-label according to its Unicode form.

5. Applicants must further demonstrate that they have made reasonable efforts to ensure that the encoded IDN string does not cause any rendering or operational problems. For example, problems have been identified in strings with characters of mixed right-to-left and left-to-right directionality when numerals are adjacent to the path separator (i.e., the dot). If an applicant is applying for a string with known issues, it should document steps that will be taken to mitigate these issues in applications. While it is not possible to ensure that all rendering problems are avoided, it is important that as many as possible are identified early and that the potential registry operator is aware of these issues. Applicants can become familiar with these issues by understanding the IDNA protocol (see http://www.icann.org/en/topics/idn/rfcs.htm), and by active participation in the IDN wiki (see http://idn.icann.org/) where some rendering problems are demonstrated.

6. [Optional] - Representation of label in phonetic alphabet. The applicant may choose to provide its applied-for gTLD string notated according to the International Phonetic Alphabet (http://www.langsci.ucl.ac.uk/ipa/). Note that this information will not be evaluated or scored. The information, if provided, will be used as a guide to ICANN in responding to inquiries or speaking of the application in public presentations.

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7 See examples at http://stupid.domain.name/node/683
1.3.2 IDN Tables

An IDN table provides the list of characters eligible for registration in domain names according to the registry’s policy. It identifies any multiple characters that are considered equivalent for domain name registration purposes (“variant characters”). Variant characters occur where two or more characters can be used interchangeably.

Examples of IDN tables can be found in the Internet Assigned Numbers Authority (IANA) IDN Repository at http://www.iana.org/procedures/idn-repository.html.

In the case of an application for an IDN gTLD, IDN tables must be submitted for the language or script for the applied-for gTLD string (the “top level tables”). IDN tables must also be submitted for each language or script in which the applicant intends to offer IDN registrations at the second or lower levels.

Each applicant is responsible for developing its IDN Tables, including specification of any variant characters. Tables must comply with ICANN’s IDN Guidelines8 and any updates thereto, including:

- Complying with IDN technical standards.
- Employing an inclusion-based approach (i.e., code points not explicitly permitted by the registry are prohibited).
- Defining variant characters.
- Excluding code points not permissible under the guidelines, e.g., line-drawing symbols, pictographic dingbats, structural punctuation marks.
- Developing tables and registration policies in collaboration with relevant stakeholders to address common issues.
- Depositing IDN tables with the IANA Repository for IDN Practices (once the TLD is delegated).

An applicant’s IDN tables should help guard against user confusion in the deployment of IDN gTLDs. Applicants are strongly urged to consider specific linguistic and writing system issues that may cause problems when characters are used in domain names, as part of their work of defining variant characters.

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8 See http://www.icann.org/en/topics/idn/implementation-guidelines.htm
To avoid user confusion due to differing practices across TLD registries, it is recommended that applicants cooperate with TLD operators that offer domain name registration with the same or visually similar characters. As an example, languages or scripts are often shared across geographic boundaries. In some cases, this can cause confusion among the users of the corresponding language or script communities. Visual confusion can also exist in some instances between different scripts (for example, Greek, Cyrillic and Latin).

Applicants will be asked to describe the process used in developing the IDN tables submitted. ICANN may compare an applicant’s IDN table with IDN tables for the same languages or scripts that already exist in the IANA repository or have been otherwise submitted to ICANN. If there are inconsistencies that have not been explained in the application, ICANN may ask the applicant to detail the rationale for differences. For applicants that wish to conduct and review such comparisons prior to submitting a table to ICANN, a table comparison tool will be available.

ICANN will accept the applicant’s IDN tables based on the factors above.

Once the applied-for string has been delegated as a TLD in the root zone, the applicant is required to submit IDN tables for lodging in the IANA Repository of IDN Practices. For additional information, see existing tables at http://iana.org/domains/idn-tables/, and submission guidelines at http://iana.org/procedures/idn-repository.html.

### 1.3.3 IDN Variant TLDs

A variant TLD string results from the substitution of one or more characters in the applied-for gTLD string with variant characters based on the applicant’s top level tables.

Each application contains one applied-for gTLD string. The applicant may also declare any variant strings for the TLD in its application. However, no variant gTLD strings will be delegated through the New gTLD Program until variant management solutions are developed and implemented.9 Declaring variant strings is informative only and will not imply any right or claim to the declared variant strings.

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When a variant delegation process is established, applicants may be required to submit additional information such as implementation details for the variant TLD management mechanism, and may need to participate in a subsequent evaluation process, which could contain additional fees and review steps.

The following scenarios are possible during the gTLD evaluation process:

a. Applicant declares variant strings to the applied-for gTLD string in its application. If the application is successful, the applied-for gTLD string will be delegated to the applicant. The declared variant strings are noted for future reference. These declared variant strings will not be delegated to the applicant along with the applied-for gTLD string, nor will the applicant have any right or claim to the declared variant strings.

Variant strings listed in successful gTLD applications will be tagged to the specific application and added to a “Declared Variants List” that will be available on ICANN’s website. A list of pending (i.e., declared) variant strings from the IDN ccTLD Fast Track is available at http://icann.org/en/topics/idn/fast-track/string-evaluation-completion-en.htm.

ICANN may perform independent analysis on the declared variant strings, and will not necessarily include all strings listed by the applicant on the Declared Variants List.

b. Multiple applicants apply for strings that are identified by ICANN as variants of one another. These applications will be placed in a contention set and will follow the contention resolution procedures in Module 4.

c. Applicant submits an application for a gTLD string and does not indicate variants to the applied-for gTLD string. ICANN will not identify variant strings unless scenario (b) above occurs.

Each variant string declared in the application must also conform to the string requirements in section 2.2.1.3.2.

Variant strings declared in the application will be reviewed for consistency with the top-level tables submitted in the application. Should any declared variant strings not be
based on use of variant characters according to the
submitted top-level tables, the applicant will be notified
and the declared string will no longer be considered part
of the application.

Declaration of variant strings in an application does not
provide the applicant any right or reservation to a
particular string. Variant strings on the Declared Variants List
may be subject to subsequent additional review per a
process and criteria to be defined.

It should be noted that while variants for second and
lower-level registrations are defined freely by the local
communities without any ICANN validation, there may be
specific rules and validation criteria specified for variant
strings to be allowed at the top level. It is expected that the
variant information provided by applicants in the first
application round will contribute to a better understanding
of the issues and assist in determining appropriate review
steps and fee levels going forward.

1.4 Submitting an Application

Applicants may complete the application form and submit
supporting documents using ICANN’s TLD Application
System (TAS). To access the system, each applicant must
first register as a TAS user.

As TAS users, applicants will be able to provide responses in
open text boxes and submit required supporting
documents as attachments. Restrictions on the size of
attachments as well as the file formats are included in the
instructions on the TAS site.

Except where expressly provided within the question, all
application materials must be submitted in English.

ICANN will not accept application forms or supporting
materials submitted through other means than TAS (that is,
hard copy, fax, email), unless such submission is in
accordance with specific instructions from ICANN to
applicants.

1.4.1 Accessing the TLD Application System

The TAS site will be accessible from the New gTLD webpage
(http://www.icann.org/en/topics/new-gtld-program.htm),
and will be highlighted in communications regarding the
opening of the application submission period. Users of TAS
will be expected to agree to a standard set of terms of use
including user rights, obligations, and restrictions in relation to the use of the system.

### 1.4.1.1 User Registration

TAS user registration (creating a TAS user profile) requires submission of preliminary information, which will be used to validate the identity of the parties involved in the application. An overview of the information collected in the user registration process is below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Full legal name of Applicant</td>
</tr>
<tr>
<td>2</td>
<td>Principal business address</td>
</tr>
<tr>
<td>3</td>
<td>Phone number of Applicant</td>
</tr>
<tr>
<td>4</td>
<td>Fax number of Applicant</td>
</tr>
<tr>
<td>5</td>
<td>Website or URL, if applicable</td>
</tr>
<tr>
<td>6</td>
<td>Primary Contact: Name, Title, Address, Phone, Fax, Email</td>
</tr>
<tr>
<td>7</td>
<td>Secondary Contact: Name, Title, Address, Phone, Fax, Email</td>
</tr>
<tr>
<td>8</td>
<td>Proof of legal establishment</td>
</tr>
<tr>
<td>9</td>
<td>Trading, subsidiary, or joint venture information</td>
</tr>
<tr>
<td>10</td>
<td>Business ID, Tax ID, VAT registration number, or equivalent of Applicant</td>
</tr>
<tr>
<td>11</td>
<td>Applicant background: previous convictions, cybersquatting activities</td>
</tr>
<tr>
<td>12</td>
<td>Deposit payment confirmation and payer information</td>
</tr>
</tbody>
</table>

A subset of identifying information will be collected from the entity performing the user registration, in addition to the applicant information listed above. The registered user could be, for example, an agent, representative, or...
employee who would be completing the application on behalf of the applicant.

The registration process will require the user to request the desired number of application slots. For example, a user intending to submit five gTLD applications would complete five application slot requests, and the system would assign the user a unique ID number for each of the five applications.

Users will also be required to submit a deposit of USD 5,000 per application slot. This deposit amount will be credited against the evaluation fee for each application. The deposit requirement is in place to help reduce the risk of frivolous access to the online application system.

After completing the registration, TAS users will receive access enabling them to enter the rest of the application information into the system. Application slots will be populated with the registration information provided by the applicant, which may not ordinarily be changed once slots have been assigned.

No new user registrations will be accepted after 23:59 UTC 29 March 2012.

ICANN will take commercially reasonable steps to protect all applicant data submitted from unauthorized access, but cannot warrant against the malicious acts of third parties who may, through system corruption or other means, gain unauthorized access to such data.

1.4.1.2 Application Form

Having obtained the requested application slots, the applicant will complete the remaining application questions. An overview of the areas and questions contained in the form is shown here:

<table>
<thead>
<tr>
<th>No.</th>
<th>Application and String Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Payment confirmation for remaining evaluation fee amount</td>
</tr>
<tr>
<td>13</td>
<td>Applied-for gTLD string</td>
</tr>
<tr>
<td>14</td>
<td>IDN string information, if applicable</td>
</tr>
<tr>
<td>15</td>
<td>IDN tables, if applicable</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>16</td>
<td>Mitigation of IDN operational or rendering problems, if applicable</td>
</tr>
<tr>
<td>17</td>
<td>Representation of string in International Phonetic Alphabet (Optional)</td>
</tr>
<tr>
<td>18</td>
<td>Mission/purpose of the TLD</td>
</tr>
<tr>
<td>19</td>
<td>Is the application for a community-based TLD?</td>
</tr>
<tr>
<td>20</td>
<td>If community based, describe elements of community and proposed policies</td>
</tr>
<tr>
<td>21</td>
<td>Is the application for a geographic name? If geographic, documents of support required</td>
</tr>
<tr>
<td>22</td>
<td>Measures for protection of geographic names at second level</td>
</tr>
<tr>
<td>23</td>
<td>Registry Services: name and full description of all registry services to be provided</td>
</tr>
<tr>
<td>24</td>
<td>Technical and Operational Questions (External)</td>
</tr>
<tr>
<td>25</td>
<td>Shared registration system (SRS) performance</td>
</tr>
<tr>
<td>26</td>
<td>EPP</td>
</tr>
<tr>
<td>27</td>
<td>Whois</td>
</tr>
<tr>
<td>28</td>
<td>Registration life cycle</td>
</tr>
<tr>
<td>29</td>
<td>Abuse prevention &amp; mitigation</td>
</tr>
<tr>
<td>30(a)</td>
<td>Rights protection mechanisms</td>
</tr>
<tr>
<td>30(b)</td>
<td>Security</td>
</tr>
<tr>
<td>31</td>
<td>Technical overview of proposed registry</td>
</tr>
<tr>
<td>32</td>
<td>Architecture</td>
</tr>
</tbody>
</table>
1.4.2 Customer Service during the Application Process

Assistance will be available to applicants throughout the application process via the Applicant Service Center (ASC). The ASC will be staffed with customer service agents.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Database capabilities</td>
</tr>
<tr>
<td>34</td>
<td>Geographic diversity</td>
</tr>
<tr>
<td>35</td>
<td>DNS service compliance</td>
</tr>
<tr>
<td>36</td>
<td>IPv6 reachability</td>
</tr>
<tr>
<td>37</td>
<td>Data backup policies and procedures</td>
</tr>
<tr>
<td>38</td>
<td>Escrow</td>
</tr>
<tr>
<td>39</td>
<td>Registry continuity</td>
</tr>
<tr>
<td>40</td>
<td>Registry transition</td>
</tr>
<tr>
<td>41</td>
<td>Failover testing</td>
</tr>
<tr>
<td>42</td>
<td>Monitoring and fault escalation processes</td>
</tr>
<tr>
<td>43</td>
<td>DNSSEC</td>
</tr>
<tr>
<td>44</td>
<td>IDNs (Optional)</td>
</tr>
<tr>
<td>45</td>
<td>Financial statements</td>
</tr>
<tr>
<td>46</td>
<td>Projections template: costs and funding</td>
</tr>
<tr>
<td>47</td>
<td>Costs: setup and operating</td>
</tr>
<tr>
<td>48</td>
<td>Funding and revenue</td>
</tr>
<tr>
<td>49</td>
<td>Contingency planning: barriers, funds, volumes</td>
</tr>
<tr>
<td>50</td>
<td>Continuity: continued operations instrument</td>
</tr>
</tbody>
</table>
to answer questions relating to the New gTLD Program, the application process, and TAS.

### 1.4.3 Backup Application Process

If the online application system is not available, ICANN will provide alternative instructions for submitting applications.

### 1.5 Fees and Payments

This section describes the fees to be paid by the applicant. Payment instructions are also included here.

#### 1.5.1 gTLD Evaluation Fee

The gTLD evaluation fee is required from all applicants. This fee is in the amount of USD 185,000. The evaluation fee is payable in the form of a 5,000 deposit submitted at the time the user requests an application slot within TAS, and a payment of the remaining 180,000 submitted with the full application. ICANN will not begin its evaluation of an application unless it has received the full gTLD evaluation fee by 23:59 UTC 12 April 2012.

The gTLD evaluation fee is set to recover costs associated with the new gTLD program. The fee is set to ensure that the program is fully funded and revenue neutral and is not subsidized by existing contributions from ICANN funding sources, including generic TLD registries and registrars, ccTLD contributions and RIR contributions.

The gTLD evaluation fee covers all required reviews in Initial Evaluation and, in most cases, any required reviews in Extended Evaluation. If an extended Registry Services review takes place, an additional fee will be incurred for this review (see section 1.5.2). There is no additional fee to the applicant for Extended Evaluation for geographic names, technical and operational, or financial reviews.

**Refunds** -- In certain cases, refunds of a portion of the evaluation fee may be available for applications that are withdrawn before the evaluation process is complete. An applicant may request a refund at any time until it has executed a registry agreement with ICANN. The amount of the refund will depend on the point in the process at which the withdrawal is requested, as follows:

<table>
<thead>
<tr>
<th>Refund Available to Applicant</th>
<th>Percentage of Evaluation Fee</th>
<th>Amount of Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 21 calendar days of a GAC Early</td>
<td>80%</td>
<td>USD 148,000</td>
</tr>
<tr>
<td>Refund Available to Applicant</td>
<td>Percentage of Evaluation Fee</td>
<td>Amount of Refund</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Warning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After posting of applications until posting of Initial Evaluation results</td>
<td>70%</td>
<td>USD 130,000</td>
</tr>
<tr>
<td>After posting Initial Evaluation results</td>
<td>35%</td>
<td>USD 65,000</td>
</tr>
<tr>
<td>After the applicant has completed Dispute Resolution, Extended Evaluation, or String Contention Resolution(s)</td>
<td>20%</td>
<td>USD 37,000</td>
</tr>
<tr>
<td>After the applicant has entered into a registry agreement with ICANN</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Thus, any applicant that has not been successful is eligible for at least a 20% refund of the evaluation fee if it withdraws its application.

An applicant that wishes to withdraw an application must initiate the process through TAS. Withdrawal of an application is final and irrevocable. Refunds will only be issued to the organization that submitted the original payment. All refunds are paid by wire transfer. Any bank transfer or transaction fees incurred by ICANN, or any unpaid evaluation fees, will be deducted from the amount paid. Any refund paid will be in full satisfaction of ICANN’s obligations to the applicant. The applicant will have no entitlement to any additional amounts, including for interest or currency exchange rate changes.

**Note on 2000 proof-of-concept round applicants** -- Participants in ICANN’s proof-of-concept application process in 2000 may be eligible for a credit toward the evaluation fee. The credit is in the amount of USD 86,000 and is subject to:
• submission of documentary proof by the applicant that it is the same entity, a successor in interest to the same entity, or an affiliate of the same entity that applied previously;

• a confirmation that the applicant was not awarded any TLD string pursuant to the 2000 proof-of-concept application round and that the applicant has no legal claims arising from the 2000 proof-of-concept process; and

• submission of an application, which may be modified from the application originally submitted in 2000, for the same TLD string that such entity applied for in the 2000 proof-of-concept application round.

Each participant in the 2000 proof-of-concept application process is eligible for at most one credit. A maximum of one credit may be claimed for any new gTLD application submitted according to the process in this guidebook. Eligibility for this credit is determined by ICANN.

1.5.2 Fees Required in Some Cases

Applicants may be required to pay additional fees in certain cases where specialized process steps are applicable. Those possible additional fees\(^{10}\) include:

• **Registry Services Review Fee** - If applicable, this fee is payable for additional costs incurred in referring an application to the Registry Services Technical Evaluation Panel (RSTEP) for an extended review. Applicants will be notified if such a fee is due. The fee for a three-member RSTEP review team is anticipated to be USD 50,000. In some cases, five-member panels might be required, or there might be increased scrutiny at a greater cost. The amount of the fee will cover the cost of the RSTEP review. In the event that reviews of proposed registry services can be consolidated across multiple applications or applicants, ICANN will apportion the fees in an equitable manner. In every case, the applicant will be advised of the cost before initiation of the review. Refer to subsection 2.2.3 of Module 2 on Registry Services review.

\(^{10}\) The estimated fee amounts provided in this section 1.5.2 will be updated upon engagement of panel service providers and establishment of fees.
• **Dispute Resolution Filing Fee** - This amount must accompany any filing of a formal objection and any response that an applicant files to an objection. This fee is payable directly to the applicable dispute resolution service provider in accordance with the provider's payment instructions. ICANN estimates that filing fees could range from approximately USD 1,000 to USD 5,000 (or more) per party per proceeding. Refer to the appropriate provider for the relevant amount. Refer to Module 3 for dispute resolution procedures.

• **Advance Payment of Costs** - In the event of a formal objection, this amount is payable directly to the applicable dispute resolution service provider in accordance with that provider's procedures and schedule of costs. Ordinarily, both parties in the dispute resolution proceeding will be required to submit an advance payment of costs in an estimated amount to cover the entire cost of the proceeding. This may be either an hourly fee based on the estimated number of hours the panelists will spend on the case (including review of submissions, facilitation of a hearing, if allowed, and preparation of a decision), or a fixed amount. In cases where disputes are consolidated and there are more than two parties involved, the advance payment will occur according to the dispute resolution service provider's rules.

The prevailing party in a dispute resolution proceeding will have its advance payment refunded, while the non-prevailing party will not receive a refund and thus will bear the cost of the proceeding. In cases where disputes are consolidated and there are more than two parties involved, the refund of fees will occur according to the dispute resolution service provider's rules.

ICANN estimates that adjudication fees for a proceeding involving a fixed amount could range from USD 2,000 to USD 8,000 (or more) per proceeding. ICANN further estimates that an hourly rate based proceeding with a one-member panel could range from USD 32,000 to USD 56,000 (or more) and with a three-member panel it could range from USD 70,000 to USD 122,000 (or more). These estimates may be lower if the panel does not call for written submissions beyond the objection and response, and does not allow a hearing. Please
refer to the appropriate provider for the relevant amounts or fee structures.

- **Community Priority Evaluation Fee** – In the event that the applicant participates in a community priority evaluation, this fee is payable as a deposit in an amount to cover the cost of the panel’s review of that application (currently estimated at USD 10,000). The deposit is payable to the provider appointed to handle community priority evaluations. Applicants will be notified if such a fee is due. Refer to Section 4.2 of Module 4 for circumstances in which a community priority evaluation may take place. An applicant who scores at or above the threshold for the community priority evaluation will have its deposit refunded.

ICANN will notify the applicants of due dates for payment in respect of additional fees (if applicable). This list does not include fees (annual registry fees) that will be payable to ICANN following execution of a registry agreement.

### 1.5.3 Payment Methods

Payments to ICANN should be submitted by wire transfer. Instructions for making a payment by wire transfer will be available in TAS.\(^{11}\)

Payments to Dispute Resolution Service Providers should be submitted in accordance with the provider’s instructions.

### 1.5.4 Requesting a Remittance Form

The TAS interface allows applicants to request issuance of a remittance form for any of the fees payable to ICANN. This service is for the convenience of applicants that require an invoice to process payments.

### 1.6 Questions about this Applicant Guidebook

For assistance and questions an applicant may have in the process of completing the application form, applicants should use the customer support resources available via the ASC. Applicants who are unsure of the information being sought in a question or the parameters for acceptable documentation are encouraged to communicate these questions through the appropriate

\(^{11}\) Wire transfer is the preferred method of payment as it offers a globally accessible and dependable means for international transfer of funds. This enables ICANN to receive the fee and begin processing applications as quickly as possible.
support channels before the application is submitted. This helps avoid the need for exchanges with evaluators to clarify information, which extends the timeframe associated with processing the application.

Currently, questions may be submitted via <newgtld@icann.org>. To provide all applicants equitable access to information, ICANN will make all questions and answers publicly available.

All requests to ICANN for information about the process or issues surrounding preparation of an application must be submitted to the ASC. ICANN will not grant requests from applicants for personal or telephone consultations regarding the preparation of an application. Applicants that contact ICANN for clarification about aspects of the application will be referred to the ASC.

Answers to inquiries will only provide clarification about the application forms and procedures. ICANN will not provide consulting, financial, or legal advice.
Applicants submit applications and evaluation fees

ICANN starts Administrative Completeness Check

ICANN posts applications

ICANN ends Administrative Completeness Check

Background Screening

Application Comment & Early Warning Periods Close

Applicant receives Early Warning?

Yes

Applicant decision?

Withdraw

Ineligible for further review

No

Continue

Applicants have 21 days from close of Early Warning Period to decide.

String Similarity

DNS Stability

Geographic Names

Technical & Operational Capability

Financial Capability

Registry Services

IE results posted

- Objection filing period closes

- Receipt of GAC Advice expected

Board Consideration

Is applicant subject to GAC Advice?

Yes

No

A

ICANN posts applications - Objection filing period closes

Application Comment & Early Warning Periods Close

Application period closes

Application period opens

Applicants register in TAS and pay deposit

Applicants submit applications and evaluation fees
Applicant elects to proceed to Extended Evaluation (EE)

- Applicant enters EE for any combination of the four elements below:
  - Technical & Operational
  - Financial
  - Geographic Names
  - Registry Services

Applicant passes all elements of Extended Evaluation?

No

Applicant passes all elements of Initial Evaluation?

No

Are there any objections?

Yes

Does applicant clear all objections?

No

String Confusion proceedings

Legal Rights proceedings

Limited Public Interest proceedings

Community Objection proceedings

Is there string contention?

No

Auction proceedings

Successful applicant secures string

Yes

Is there a clear winner?

Yes

Contract execution

Pre-delegation check

Delegation

Community Priority Evaluation

One or more community-based applicant(s) elected Community Priority?

No

Are applicants with contending strings able to self-resolve contention?

Yes

No

Applicant enters EE for any combination of the four elements below:

- Technical & Operational
- Financial
- Geographic Names
- Registry Services

Applicant elects to proceed to Extended Evaluation (EE)

No

Ineligible for further review

The application can be objected to based upon any combination of the four objection grounds at the same time. Additionally, the application may face multiple objections on the same objection ground.
gTLD Applicant Guidebook
(v. 2012-06-04)
Module 2

4 June 2012
Module 2
Evaluation Procedures

This module describes the evaluation procedures and criteria used to determine whether applied-for gTLDs are approved for delegation. All applicants will undergo an Initial Evaluation and those that do not pass all elements may request Extended Evaluation.

The first, required evaluation is the Initial Evaluation, during which ICANN assesses an applied-for gTLD string, an applicant’s qualifications, and its proposed registry services.

The following assessments are performed in the Initial Evaluation:

- **String Reviews**
  - String similarity
  - Reserved names
  - DNS stability
  - Geographic names
- **Applicant Reviews**
  - Demonstration of technical and operational capability
  - Demonstration of financial capability
  - Registry services reviews for DNS stability issues

An application must pass all these reviews to pass the Initial Evaluation. Failure to pass any one of these reviews will result in a failure to pass the Initial Evaluation.

**Extended Evaluation** may be applicable in cases in which an applicant does not pass the Initial Evaluation. See Section 2.3 below.

### 2.1 Background Screening

Background screening will be conducted in two areas:

(a) General business diligence and criminal history; and
(b) History of cybersquatting behavior.
The application must pass both background screening areas to be eligible to proceed. Background screening results are evaluated according to the criteria described in section 1.2.1. Due to the potential sensitive nature of the material, applicant background screening reports will not be published.

The following sections describe the process ICANN will use to perform background screening.

2.1.1 General business diligence and criminal history

Applying entities that are publicly traded corporations listed and in good standing on any of the world’s largest 25 stock exchanges (as listed by the World Federation of Exchanges) will be deemed to have passed the general business diligence and criminal history screening. The largest 25 will be based on the domestic market capitalization reported at the end of the most recent calendar year prior to launching each round.\(^1\)

Before an entity is listed on an exchange, it must undergo significant due diligence including an investigation by the exchange, regulators, and investment banks. As a publicly listed corporation, an entity is subject to ongoing scrutiny from shareholders, analysts, regulators, and exchanges. All exchanges require monitoring and disclosure of material information about directors, officers, and other key personnel, including criminal behavior. In totality, these requirements meet or exceed the screening ICANN will perform.

For applicants not listed on one of these exchanges, ICANN will submit identifying information for the entity, officers, directors, and major shareholders to an international background screening service. The service provider(s) will use the criteria listed in section 1.2.1 and return results that match these criteria. Only publicly available information will be used in this inquiry.

ICANN is in discussions with INTERPOL to identify ways in which both organizations can collaborate in background screenings of individuals, entities and their identity documents consistent with both organizations’ rules and regulations. Note that the applicant is expected to disclose potential problems in meeting the criteria in the application, and provide any clarification or explanation at the time of application submission. Results returned from

the background screening process will be matched with the disclosures provided by the applicant and those cases will be followed up to resolve issues of discrepancies or potential false positives.

If no hits are returned, the application will generally pass this portion of the background screening.

### 2.1.2 History of cybersquatting

ICANN will screen applicants against UDRP cases and legal databases as financially feasible for data that may indicate a pattern of cybersquatting behavior pursuant to the criteria listed in section 1.2.1.

The applicant is required to make specific declarations regarding these activities in the application. Results returned during the screening process will be matched with the disclosures provided by the applicant and those instances will be followed up to resolve issues of discrepancies or potential false positives.

If no hits are returned, the application will generally pass this portion of the background screening.

### 2.2 Initial Evaluation

The Initial Evaluation consists of two types of review. Each type is composed of several elements.

**String review:** The first review focuses on the applied-for gTLD string to test:

- Whether the applied-for gTLD string is so similar to other strings that it would create a probability of user confusion;
- Whether the applied-for gTLD string might adversely affect DNS security or stability; and
- Whether evidence of requisite government approval is provided in the case of certain geographic names.

**Applicant review:** The second review focuses on the applicant to test:

- Whether the applicant has the requisite technical, operational, and financial capability to operate a registry; and
- Whether the registry services offered by the applicant might adversely affect DNS security or stability.
2.2.1 String Reviews

In the Initial Evaluation, ICANN reviews every applied-for gTLD string. Those reviews are described in greater detail in the following subsections.

2.2.1.1 String Similarity Review

This review involves a preliminary comparison of each applied-for gTLD string against existing TLDs, Reserved Names (see subsection 2.2.1.2), and other applied-for strings. The objective of this review is to prevent user confusion and loss of confidence in the DNS resulting from delegation of many similar strings.

Note: In this Applicant Guidebook, “similar” means strings so similar that they create a probability of user confusion if more than one of the strings is delegated into the root zone.

The visual similarity check that occurs during Initial Evaluation is intended to augment the objection and dispute resolution process (see Module 3, Dispute Resolution Procedures) that addresses all types of similarity.

This similarity review will be conducted by an independent String Similarity Panel.

2.2.1.1.1 Reviews Performed

The String Similarity Panel’s task is to identify visual string similarities that would create a probability of user confusion.

The panel performs this task of assessing similarities that would lead to user confusion in four sets of circumstances, when comparing:

- Applied-for gTLD strings against existing TLDs and reserved names;
- Applied-for gTLD strings against other applied-for gTLD strings;
- Applied-for gTLD strings against strings requested as IDN ccTLDs;
- Applied-for 2-character IDN gTLD strings against:
  - Every other single character.
  - Any other 2-character ASCII string (to protect possible future ccTLD delegations).
Similarity to Existing TLDs or Reserved Names - This review involves cross-checking between each applied-for string and the lists of existing TLD strings and Reserved Names to determine whether two strings are so similar to one another that they create a probability of user confusion.

In the simple case in which an applied-for gTLD string is identical to an existing TLD or reserved name, the online application system will not allow the application to be submitted.

Testing for identical strings also takes into consideration the code point variants listed in any relevant IDN table. For example, protocols treat equivalent labels as alternative forms of the same label, just as “foo” and “Foo” are treated as alternative forms of the same label (RFC 3490).

All TLDs currently in the root zone can be found at http://iana.org/domains/root/db/.

IDN tables that have been submitted to ICANN are available at http://www.iana.org/domains/idn-tables/.

Similarity to Other Applied-for gTLD Strings (String Contention Sets) - All applied-for gTLD strings will be reviewed against one another to identify any similar strings. In performing this review, the String Similarity Panel will create contention sets that may be used in later stages of evaluation.

A contention set contains at least two applied-for strings identical or similar to one another. Refer to Module 4, String Contention Procedures, for more information on contention sets and contention resolution.

ICANN will notify applicants who are part of a contention set as soon as the String Similarity review is completed. (This provides a longer period for contending applicants to reach their own resolution before reaching the contention resolution stage.) These contention sets will also be published on ICANN’s website.

Similarity to TLD strings requested as IDN ccTLDs -- Applied-for gTLD strings will also be reviewed for similarity to TLD strings requested in the IDN ccTLD Fast Track process (see http://www.icann.org/en/topics/idn/fast-track/). Should a conflict with a prospective fast-track IDN ccTLD be identified, ICANN will take the following approach to resolving the conflict.
If one of the applications has completed its respective process before the other is lodged, that TLD will be delegated. A gTLD application that has successfully completed all relevant evaluation stages, including dispute resolution and string contention, if applicable, and is eligible for entry into a registry agreement will be considered complete, and therefore would not be disqualified by a newly-filed IDN ccTLD request. Similarly, an IDN ccTLD request that has completed evaluation (i.e., is validated) will be considered complete and therefore would not be disqualified by a newly-filed gTLD application.

In the case where neither application has completed its respective process, where the gTLD application does not have the required approval from the relevant government or public authority, a validated request for an IDN ccTLD will prevail and the gTLD application will not be approved. The term “validated” is defined in the IDN ccTLD Fast Track Process Implementation, which can be found at http://www.icann.org/en/topics/idn.

In the case where a gTLD applicant has obtained the support or non-objection of the relevant government or public authority, but is eliminated due to contention with a string requested in the IDN ccTLD Fast Track process, a full refund of the evaluation fee is available to the applicant if the gTLD application was submitted prior to the publication of the ccTLD request.

**Review of 2-character IDN strings** — In addition to the above reviews, an applied-for gTLD string that is a 2-character IDN string is reviewed by the String Similarity Panel for visual similarity to:

a) Any one-character label (in any script), and

b) Any possible two-character ASCII combination.

An applied-for gTLD string that is found to be too similar to a) or b) above will not pass this review.

**2.2.1.2 Review Methodology**

The String Similarity Panel is informed in part by an algorithmic score for the visual similarity between each applied-for string and each of other existing and applied-for TLDs and reserved names. The score will provide one objective measure for consideration by the panel, as part of the process of identifying strings likely to result in user confusion. In general, applicants should expect that a higher visual similarity score suggests a higher probability
that the application will not pass the String Similarity review. However, it should be noted that the score is only indicative and that the final determination of similarity is entirely up to the Panel’s judgment.

The algorithm, user guidelines, and additional background information are available to applicants for testing and informational purposes. Applicants will have the ability to test their strings and obtain algorithmic results through the application system prior to submission of an application.

The algorithm supports the common characters in Arabic, Chinese, Cyrillic, Devanagari, Greek, Japanese, Korean, and Latin scripts. It can also compare strings in different scripts to each other.

The panel will also take into account variant characters, as defined in any relevant language table, in its determinations. For example, strings that are not visually similar but are determined to be variant TLD strings based on an IDN table would be placed in a contention set. Variant TLD strings that are listed as part of the application will also be subject to the string similarity analysis.

The panel will examine all the algorithm data and perform its own review of similarities between strings and whether they rise to the level of string confusion. In cases of strings in scripts not yet supported by the algorithm, the panel’s assessment process is entirely manual.

The panel will use a common standard to test for whether string confusion exists, as follows:

**Standard for String Confusion** - String confusion exists where a string so nearly resembles another visually that it is likely to deceive or cause confusion. For the likelihood of confusion to exist, it must be probable, not merely possible that confusion will arise in the mind of the average, reasonable Internet user. Mere association, in the sense that the string brings another string to mind, is insufficient to find a likelihood of confusion.

2.2.1.1.3 Outcomes of the String Similarity Review

An application that fails the String Similarity review due to similarity to an existing TLD will not pass the Initial Evaluation,

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3 In the case where an applicant has listed Declared Variants in its application (see subsection 1.3.3), the panel will perform an analysis of the listed strings to confirm that the strings are variants according to the applicant’s IDN table. This analysis may include comparison of applicant IDN tables with other existing tables for the same language or script, and forwarding any questions to the applicant.
and no further reviews will be available. Where an application does not pass the String Similarity review, the applicant will be notified as soon as the review is completed.

An application for a string that is found too similar to another applied-for gTLD string will be placed in a contention set.

An application that passes the String Similarity review is still subject to objection by an existing TLD operator or by another gTLD applicant in the current application round. That process requires that a string confusion objection be filed by an objector having the standing to make such an objection. Such category of objection is not limited to visual similarity. Rather, confusion based on any type of similarity (including visual, aural, or similarity of meaning) may be claimed by an objector. Refer to Module 3, Dispute Resolution Procedures, for more information about the objection process.

An applicant may file a formal objection against another gTLD application on string confusion grounds. Such an objection may, if successful, change the configuration of the preliminary contention sets in that the two applied-for gTLD strings will be considered in direct contention with one another (see Module 4, String Contention Procedures). The objection process will not result in removal of an application from a contention set.

### 2.2.1.2 Reserved Names and Other Unavailable Strings

Certain names are not available as gTLD strings, as detailed in this section.

#### 2.2.1.2.1 Reserved Names

All applied-for gTLD strings are compared with the list of top-level Reserved Names to ensure that the applied-for gTLD string does not appear on that list.

**Top-Level Reserved Names List**

<table>
<thead>
<tr>
<th>AFRINIC</th>
<th>IANA-SERVERS</th>
<th>NRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALAC</td>
<td>ICANN</td>
<td>RFC-EDITOR</td>
</tr>
<tr>
<td>APNIC</td>
<td>IESG</td>
<td>RIPE</td>
</tr>
<tr>
<td>ARIN</td>
<td>IETF</td>
<td>ROOT-SERVERS</td>
</tr>
<tr>
<td>ASO</td>
<td>INTERNIC</td>
<td>RSSAC</td>
</tr>
<tr>
<td>CCNSO</td>
<td>INVALID</td>
<td>SSAC</td>
</tr>
<tr>
<td>EXAMPLE*</td>
<td>IRTF</td>
<td>TEST*</td>
</tr>
<tr>
<td>GAC</td>
<td>ISTF</td>
<td>TLD</td>
</tr>
<tr>
<td></td>
<td>GNSO</td>
<td>LACNIC</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>GTLD-SERVERS</td>
<td>LOCAL</td>
<td>WWW</td>
</tr>
<tr>
<td>IAB</td>
<td>LOCALHOST</td>
<td></td>
</tr>
<tr>
<td>IANA</td>
<td>NIC</td>
<td></td>
</tr>
</tbody>
</table>

*Note that in addition to the above strings, ICANN will reserve translations of the terms "test" and "example" in multiple languages. The remainder of the strings are reserved only in the form included above.

If an applicant enters a Reserved Name as its applied-for gTLD string, the application system will recognize the Reserved Name and will not allow the application to be submitted.

In addition, applied-for gTLD strings are reviewed during the String Similarity review to determine whether they are similar to a Reserved Name. An application for a gTLD string that is identified as too similar to a Reserved Name will not pass this review.

2.2.1.2.2 Declared Variants

Names appearing on the Declared Variants List (see section 1.3.3) will be posted on ICANN’s website and will be treated essentially the same as Reserved Names, until such time as variant management solutions are developed and variant TLDs are delegated. That is, an application for a gTLD string that is identical or similar to a string on the Declared Variants List will not pass this review.

2.2.1.2.3 Strings Ineligible for Delegation

The following names are prohibited from delegation as gTLDs in the initial application round. Future application rounds may differ according to consideration of further policy advice.

These names are not being placed on the Top-Level Reserved Names List, and thus are not part of the string similarity review conducted for names on that list. Refer to subsection 2.2.1.1: where applied-for gTLD strings are reviewed for similarity to existing TLDs and reserved names, the strings listed in this section are not reserved names and accordingly are not incorporated into this review.

Applications for names appearing on the list included in this section will not be approved.
### International Olympic Committee

<table>
<thead>
<tr>
<th>OLYMPIC</th>
<th>OLYMPIAD</th>
<th>OLYMPIQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLYMPIADE</td>
<td>OLYMPISCH</td>
<td>OLIIMPICO</td>
</tr>
<tr>
<td>OLIMPIADA</td>
<td>أولمبياد</td>
<td>أولمبيا</td>
</tr>
<tr>
<td>奥林匹克</td>
<td>奥林匹亚</td>
<td>奥林匹克</td>
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<td>奧林匹亞</td>
<td>奧林匹亞</td>
<td>奧林匹亞</td>
</tr>
<tr>
<td>올림픽</td>
<td>올림피아드</td>
<td>올림피아드</td>
</tr>
<tr>
<td>Олимпийки</td>
<td>Олимпийский</td>
<td>Олимпийски</td>
</tr>
<tr>
<td>Ολυμπιάδα</td>
<td>Ολυμπιάδα</td>
<td>Ολυμπιάδα</td>
</tr>
</tbody>
</table>

### International Red Cross and Red Crescent Movement

<table>
<thead>
<tr>
<th>REDCROSS</th>
<th>REDCRESCENT</th>
<th>REDCRYSTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>REDLIONANDSUN</td>
<td>MAGENDDAVADOM</td>
<td>REDSTAROFDAVID</td>
</tr>
<tr>
<td>CROIXROUGE</td>
<td>CROIX-ROUGE</td>
<td>CROISSANTROUGE</td>
</tr>
<tr>
<td>CROISSANT-ROUGE</td>
<td>CRISTALROUGE</td>
<td>CRISTAL-ROUGE</td>
</tr>
<tr>
<td>كرازروج</td>
<td>MEDIALUNAROJA</td>
<td></td>
</tr>
<tr>
<td>KRASNOY</td>
<td>Красный Крест</td>
<td>Красный Полумесяц</td>
</tr>
<tr>
<td>Красный Кристалл</td>
<td></td>
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<tr>
<td>十字</td>
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<td>十字</td>
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<tr>
<td>紅水晶</td>
<td>紅水晶</td>
<td>紅水晶</td>
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</tbody>
</table>

2.2.1.3 **DNS Stability Review**

This review determines whether an applied-for gTLD string might cause instability to the DNS. In all cases, this will involve a review for conformance with technical and other requirements for gTLD strings (labels). In some exceptional cases, an extended review may be necessary to investigate possible technical stability problems with the applied-for gTLD string.
Note: All applicants should recognize issues surrounding invalid TLD queries at the root level of the DNS.

Any new TLD registry operator may experience unanticipated queries, and some TLDs may experience a non-trivial load of unanticipated queries. For more information, see the Security and Stability Advisory Committee (SSAC)'s report on this topic at http://www.icann.org/en/committees/security/sac045.pdf. Some publicly available statistics are also available at http://stats.l.root-servers.org/.

ICANN will take steps to alert applicants of the issues raised in SAC045, and encourage the applicant to prepare to minimize the possibility of operational difficulties that would pose a stability or availability problem for its registrants and users. However, this notice is merely an advisory to applicants and is not part of the evaluation, unless the string raises significant security or stability issues as described in the following section.

2.2.1.3.1 DNS Stability: String Review Procedure

New gTLD labels must not adversely affect the security or stability of the DNS. During the Initial Evaluation period, ICANN will conduct a preliminary review on the set of applied-for gTLD strings to:

- ensure that applied-for gTLD strings comply with the requirements provided in section 2.2.1.3.2, and
- determine whether any strings raise significant security or stability issues that may require further review.

There is a very low probability that extended analysis will be necessary for a string that fully complies with the string requirements in subsection 2.2.1.3.2 of this module. However, the string review process provides an additional safeguard if unanticipated security or stability issues arise concerning an applied-for gTLD string.

In such a case, the DNS Stability Panel will perform an extended review of the applied-for gTLD string during the Initial Evaluation period. The panel will determine whether the string fails to comply with relevant standards or creates a condition that adversely affects the throughput, response time, consistency, or coherence of responses to Internet servers or end systems, and will report on its findings.

If the panel determines that the string complies with relevant standards and does not create the conditions
described above, the application will pass the DNS Stability review.

If the panel determines that the string does not comply with relevant technical standards, or that it creates a condition that adversely affects the throughput, response time, consistency, or coherence of responses to Internet servers or end systems, the application will not pass the Initial Evaluation, and no further reviews are available. In the case where a string is determined likely to cause security or stability problems in the DNS, the applicant will be notified as soon as the DNS Stability review is completed.

2.2.1.3.2 String Requirements

ICANN will review each applied-for gTLD string to ensure that it complies with the requirements outlined in the following paragraphs.

If an applied-for gTLD string is found to violate any of these rules, the application will not pass the DNS Stability review. No further reviews are available.

Part I -- Technical Requirements for all Labels (Strings) - The technical requirements for top-level domain labels follow.

1.1 The ASCII label (i.e., the label as transmitted on the wire) must be valid as specified in technical standards Domain Names: Implementation and Specification (RFC 1035), and Clarifications to the DNS Specification (RFC 2181) and any updates thereto. This includes the following:

1.1.1 The label must have no more than 63 characters.

1.1.2 Upper and lower case characters are treated as identical.

1.2 The ASCII label must be a valid host name, as specified in the technical standards DOD Internet Host Table Specification (RFC 952), Requirements for Internet Hosts — Application and Support (RFC 1123), and Application Techniques for Checking and Transformation of Names (RFC 3696), Internationalized Domain Names in Applications (IDNA)(RFCs 5890-5894), and any updates thereto. This includes the following:

1.2.1 The ASCII label must consist entirely of letters (alphabetic characters a-z), or
1.2.2 The label must be a valid IDNA A-label (further restricted as described in Part II below).

Part II -- Requirements for Internationalized Domain Names
- These requirements apply only to prospective top-level domains that contain non-ASCII characters. Applicants for these internationalized top-level domain labels are expected to be familiar with the Internet Engineering Task Force (IETF) IDNA standards, Unicode standards, and the terminology associated with Internationalized Domain Names.

2.1 The label must be an A-label as defined in IDNA, converted from (and convertible to) a U-label that is consistent with the definition in IDNA, and further restricted by the following, non-exhaustive, list of limitations:

2.1.1 Must be a valid A-label according to IDNA.

2.1.2 The derived property value of all codepoints used in the U-label, as defined by IDNA, must be PVALID or CONTEXT (accompanied by unambiguous contextual rules).\(^{4}\)

2.1.3 The general category of all codepoints, as defined by IDNA, must be one of (Ll, Lo, Lm, Mn, Mc).

2.1.4 The U-label must be fully compliant with Normalization Form C, as described in Unicode Standard Annex #15: Unicode Normalization Forms. See also examples in http://unicode.org/faq/normalization.html.

2.1.5 The U-label must consist entirely of characters with the same directional property, or fulfill the requirements of the Bidi rule per RFC 5893.

2.2 The label must meet the relevant criteria of the ICANN Guidelines for the Implementation of Internationalised Domain Names. See http://www.icann.org/en/topics/idn/implementation.

\(^{4}\) It is expected that conversion tools for IDNA will be available before the Application Submission period begins, and that labels will be checked for validity under IDNA. In this case, labels valid under the previous version of the protocol (IDNA2003) but not under IDNA will not meet this element of the requirements. Labels that are valid under both versions of the protocol will meet this element of the requirements. Labels valid under IDNA but not under IDNA2003 may meet the requirements; however, applicants are strongly advised to note that the duration of the transition period between the two protocols cannot presently be estimated nor guaranteed in any specific timeframe. The development of support for IDNA in the broader software applications environment will occur gradually. During that time, TLD labels that are valid under IDNA, but not under IDNA2003, will have limited functionality.
n-guidelines.htm. This includes the following, non-exhaustive, list of limitations:

2.2.1 All code points in a single label must be taken from the same script as determined by the Unicode Standard Annex #24: Unicode Script Property (See http://www.unicode.org/reports/tr24/).

2.2.2 Exceptions to 2.2.1 are permissible for languages with established orthographies and conventions that require the commingled use of multiple scripts. However, even with this exception, visually confusable characters from different scripts will not be allowed to co-exist in a single set of permissible code points unless a corresponding policy and character table are clearly defined.

Part III - Policy Requirements for Generic Top-Level Domains – These requirements apply to all prospective top-level domain strings applied for as gTLDs.

3.1 Applied-for gTLD strings in ASCII must be composed of three or more visually distinct characters. Two-character ASCII strings are not permitted, to avoid conflicting with current and future country codes based on the ISO 3166-1 standard.

3.2 Applied-for gTLD strings in IDN scripts must be composed of two or more visually distinct characters in the script, as appropriate. Note, however, that a two-character IDN string will not be approved if:

3.2.1 It is visually similar to any one-character label (in any script); or

3.2.2 It is visually similar to any possible two-character ASCII combination.

See the String Similarity review in subsection 2.2.1.1 for additional information on this requirement.

Note that the Joint ccNSO-GNSO IDN Working Group (JIG) has made recommendations that this section be revised to allow for single-character IDN gTLD labels. See the JIG Final Report at http://gnso.icann.org/drafts/jig-final-report-30mar11-en.pdf. Implementation models for these recommendations are being developed for community discussion.
2.2.1.4 Geographic Names Review

Applications for gTLD strings must ensure that appropriate consideration is given to the interests of governments or public authorities in geographic names. The requirements and procedure ICANN will follow in the evaluation process are described in the following paragraphs. Applicants should review these requirements even if they do not believe their intended gTLD string is a geographic name. All applied-for gTLD strings will be reviewed according to the requirements in this section, regardless of whether the application indicates it is for a geographic name.

2.2.1.4.1 Treatment of Country or Territory Names

Applications for strings that are country or territory names will not be approved, as they are not available under the New gTLD Program in this application round. A string shall be considered to be a country or territory name if:

i. it is an alpha-3 code listed in the ISO 3166-1 standard.

ii. it is a long-form name listed in the ISO 3166-1 standard, or a translation of the long-form name in any language.

iii. it is a short-form name listed in the ISO 3166-1 standard, or a translation of the short-form name in any language.

iv. it is the short- or long-form name association with a code that has been designated as “exceptionally reserved” by the ISO 3166 Maintenance Agency.

v. it is a separable component of a country name designated on the “Separable Country Names List,” or is a translation of a name appearing on the list, in any language. See the Annex at the end of this module.

vi. it is a permutation or transposition of any of the names included in items (i) through (v). Permutations include removal of spaces, insertion of punctuation, and addition or...

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6 Country and territory names are excluded from the process based on advice from the Governmental Advisory Committee in recent communiqués providing interpretation of Principle 2.2 of the GAC Principles regarding New gTLDs to indicate that strings which are a meaningful representation or abbreviation of a country or territory name should be handled through the forthcoming ccPDP, and other geographic strings could be allowed in the gTLD space if in agreement with the relevant government or public authority.
removal of grammatical articles like “the.” A transposition is considered a change in the sequence of the long or short–form name, for example, “RepublicCzech” or “IslandsCayman.”

vii. it is a name by which a country is commonly known, as demonstrated by evidence that the country is recognized by that name by an intergovernmental or treaty organization.

2.2.1.4.2 Geographic Names Requiring Government Support

The following types of applied-for strings are considered geographic names and must be accompanied by documentation of support or non-objection from the relevant governments or public authorities:

1. An application for any string that is a representation, in any language, of the capital city name of any country or territory listed in the ISO 3166-1 standard.

2. An application for a city name, where the applicant declares that it intends to use the gTLD for purposes associated with the city name.

City names present challenges because city names may also be generic terms or brand names, and in many cases city names are not unique. Unlike other types of geographic names, there are no established lists that can be used as objective references in the evaluation process. Thus, city names are not universally protected. However, the process does provide a means for cities and applicants to work together where desired.

An application for a city name will be subject to the geographic names requirements (i.e., will require documentation of support or non-objection from the relevant governments or public authorities) if:

(a) It is clear from applicant statements within the application that the applicant will use the TLD primarily for purposes associated with the city name; and
(b) The applied-for string is a city name as listed on official city documents.\(^7\)

3. An application for any string that is an exact match of a **sub-national place name**, such as a county, province, or state, listed in the ISO 3166-2 standard.

4. An application for a string listed as a **UNESCO region**\(^9\) or appearing on the “Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings” list.\(^8\)

In the case of an application for a string appearing on either of the lists above, documentation of support will be required from at least 60% of the respective national governments in the region, and there may be no more than one written statement of objection to the application from relevant governments in the region and/or public authorities associated with the continent or the region.

Where the 60% rule is applied, and there are common regions on both lists, the regional composition contained in the “Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings” takes precedence.

An applied-for gTLD string that falls into any of 1 through 4 listed above is considered to represent a geographic name. In the event of any doubt, it is in the applicant’s interest to consult with relevant governments and public authorities and enlist their support or non-objection prior to submission of the application, in order to preclude possible objections and pre-address any ambiguities concerning the string and applicable requirements.

Strings that include but do not match a geographic name (as defined in this section) will not be considered geographic names as defined by section 2.2.1.4.2, and therefore will not require documentation of government support in the evaluation process.

\(^7\) City governments with concerns about strings that are duplicates, nicknames or close renderings of a city name should not rely on the evaluation process as the primary means of protecting their interests in a string. Rather, a government may elect to file a formal objection to an application that is opposed by the relevant community, or may submit its own application for the string.


For each application, the Geographic Names Panel will determine which governments are relevant based on the inputs of the applicant, governments, and its own research and analysis. In the event that there is more than one relevant government or public authority for the applied-for gTLD string, the applicant must provide documentation of support or non-objection from all the relevant governments or public authorities. It is anticipated that this may apply to the case of a sub-national place name.

It is the applicant’s responsibility to:

- identify whether its applied-for gTLD string falls into any of the above categories; and
- identify and consult with the relevant governments or public authorities; and
- identify which level of government support is required.

Note: the level of government and which administrative agency is responsible for the filing of letters of support or non-objection is a matter for each national administration to determine. Applicants should consult within the relevant jurisdiction to determine the appropriate level of support.

The requirement to include documentation of support for certain applications does not preclude or exempt applications from being the subject of objections on community grounds (refer to subsection 3.1.1 of Module 3), under which applications may be rejected based on objections showing substantial opposition from the targeted community.

### 2.2.1.4.3 Documentation Requirements

The documentation of support or non-objection should include a signed letter from the relevant government or public authority. Understanding that this will differ across the respective jurisdictions, the letter could be signed by the minister with the portfolio responsible for domain name administration, ICT, foreign affairs, or the Office of the Prime Minister or President of the relevant jurisdiction; or a senior representative of the agency or department responsible for domain name administration, ICT, foreign affairs, or the Office of the Prime Minister. To assist the applicant in determining who the relevant government or public authority may be for a potential geographic name, the applicant may wish to consult with the relevant
Governmental Advisory Committee (GAC) representative.\(^{10}\)

The letter must clearly express the government’s or public authority’s support for or non-objection to the applicant’s application and demonstrate the government’s or public authority’s understanding of the string being requested and its intended use.

The letter should also demonstrate the government’s or public authority’s understanding that the string is being sought through the gTLD application process and that the applicant is willing to accept the conditions under which the string will be available, i.e., entry into a registry agreement with ICANN requiring compliance with consensus policies and payment of fees. (See Module 5 for a discussion of the obligations of a gTLD registry operator.)

A sample letter of support is available as an attachment to this module.

Applicants and governments may conduct discussions concerning government support for an application at any time. Applicants are encouraged to begin such discussions at the earliest possible stage, and enable governments to follow the processes that may be necessary to consider, approve, and generate a letter of support or non-objection.

It is important to note that a government or public authority is under no obligation to provide documentation of support or non-objection in response to a request by an applicant.

It is also possible that a government may withdraw its support for an application at a later time, including after the new gTLD has been delegated, if the registry operator has deviated from the conditions of original support or non-objection. Applicants should be aware that ICANN has committed to governments that, in the event of a dispute between a government (or public authority) and a registry operator that submitted documentation of support from that government or public authority, ICANN will comply with a legally binding order from a court in the jurisdiction of the government or public authority that has given support to an application.

2.2.1.4.4 Review Procedure for Geographic Names

A Geographic Names Panel (GNP) will determine whether each applied-for gTLD string represents a geographic

\(^{10}\) See [https://gacweb.icann.org/display/gacweb/GAC+Members](https://gacweb.icann.org/display/gacweb/GAC+Members)
name, and verify the relevance and authenticity of the supporting documentation where necessary.

The GNP will review all applications received, not only those where the applicant has noted its applied-for gTLD string as a geographic name. For any application where the GNP determines that the applied-for gTLD string is a country or territory name (as defined in this module), the application will not pass the Geographic Names review and will be denied. No additional reviews will be available.

For any application where the GNP determines that the applied-for gTLD string is not a geographic name requiring government support (as described in this module), the application will pass the Geographic Names review with no additional steps required.

For any application where the GNP determines that the applied-for gTLD string is a geographic name requiring government support, the GNP will confirm that the applicant has provided the required documentation from the relevant governments or public authorities, and that the communication from the government or public authority is legitimate and contains the required content. ICANN may confirm the authenticity of the communication by consulting with the relevant diplomatic authorities or members of ICANN’s Governmental Advisory Committee for the government or public authority concerned on the competent authority and appropriate point of contact within their administration for communications.

The GNP may communicate with the signing entity of the letter to confirm their intent and their understanding of the terms on which the support for an application is given.

In cases where an applicant has not provided the required documentation, the applicant will be contacted and notified of the requirement, and given a limited time frame to provide the documentation. If the applicant is able to provide the documentation before the close of the Initial Evaluation period, and the documentation is found to meet the requirements, the applicant will pass the Geographic Names review. If not, the applicant will have additional time to obtain the required documentation; however, if the applicant has not produced the required documentation by the required date (at least 90 calendar days from the date of notice), the application will be considered incomplete and will be ineligible for further review. The applicant may reapply in subsequent application rounds, if desired, subject to the fees and requirements of the specific application rounds.
If there is more than one application for a string representing a certain geographic name as described in this section, and the applications have requisite government approvals, the applications will be suspended pending resolution by the applicants. If the applicants have not reached a resolution by either the date of the end of the application round (as announced by ICANN), or the date on which ICANN opens a subsequent application round, whichever comes first, the applications will be rejected and applicable refunds will be available to applicants according to the conditions described in section 1.5.

However, in the event that a contention set is composed of multiple applications with documentation of support from the same government or public authority, the applications will proceed through the contention resolution procedures described in Module 4 when requested by the government or public authority providing the documentation.

If an application for a string representing a geographic name is in a contention set with applications for similar strings that have not been identified as geographical names, the string contention will be resolved using the string contention procedures described in Module 4.

### 2.2.2 Applicant Reviews

Concurrent with the applied-for gTLD string reviews described in subsection 2.2.1, ICANN will review the applicant’s technical and operational capability, its financial capability, and its proposed registry services. Those reviews are described in greater detail in the following subsections.

#### 2.2.2.1 Technical/Operational Review

In its application, the applicant will respond to a set of questions (see questions 24 – 44 in the Application Form) intended to gather information about the applicant’s technical capabilities and its plans for operation of the proposed gTLD.

Applicants are not required to have deployed an actual gTLD registry to pass the Technical/Operational review. It will be necessary, however, for an applicant to demonstrate a clear understanding and accomplishment of some groundwork toward the key technical and operational aspects of a gTLD registry operation. Subsequently, each applicant that passes the technical evaluation and all other steps will be required to complete
2.2.2.2 Financial Review

In its application, the applicant will respond to a set of questions (see questions 45-50 in the Application Form) intended to gather information about the applicant’s financial capabilities for operation of a gTLD registry and its financial planning in preparation for long-term stability of the new gTLD.

Because different registry types and purposes may justify different responses to individual questions, evaluators will pay particular attention to the consistency of an application across all criteria. For example, an applicant’s scaling plans identifying system hardware to ensure its capacity to operate at a particular volume level should be consistent with its financial plans to secure the necessary equipment. That is, the evaluation criteria scale with the applicant plans to provide flexibility.

2.2.2.3 Evaluation Methodology

Dedicated technical and financial evaluation panels will conduct the technical/operational and financial reviews, according to the established criteria and scoring mechanism included as an attachment to this module. These reviews are conducted on the basis of the information each applicant makes available to ICANN in its response to the questions in the Application Form.

The evaluators may request clarification or additional information during the Initial Evaluation period. For each application, clarifying questions will be consolidated and sent to the applicant from each of the panels. The applicant will thus have an opportunity to clarify or supplement the application in those areas where a request is made by the evaluators. These communications will occur via TAS. Unless otherwise noted, such communications will include a 2-week deadline for the applicant to respond. Any supplemental information provided by the applicant will become part of the application.

It is the applicant’s responsibility to ensure that the questions have been fully answered and the required documentation is attached. Evaluators are entitled, but not obliged, to request further information or evidence from an applicant, and are not obliged to take into account any information or evidence that is not made
available in the application and submitted by the due
date, unless explicitly requested by the evaluators.

2.2.3 Registry Services Review

Concurrent with the other reviews that occur during the
Initial Evaluation period, ICANN will review the applicant’s
proposed registry services for any possible adverse impact
on security or stability. The applicant will be required to
provide a list of proposed registry services in its application.

2.2.3.1 Definitions

Registry services are defined as:

1. operations of the registry critical to the following
tasks: the receipt of data from registrars concerning
registrations of domain names and name servers;
provision to registrars of status information relating
to the zone servers for the TLD; dissemination of TLD
zone files; operation of the registry zone servers; and
dissemination of contact and other information
concerning domain name server registrations in the
TLD as required by the registry agreement;

2. other products or services that the registry operator
is required to provide because of the establishment
of a consensus policy; and

3. any other products or services that only a registry
operator is capable of providing, by reason of its
designation as the registry operator.

Proposed registry services will be examined to determine if
they might raise significant stability or security issues.
Examples of services proposed by existing registries can be
found at http://www.icann.org/en/registries/rsep/.
In most
cases, these proposed services successfully pass this inquiry.

Registry services currently provided by gTLD registries can
be found in registry agreement appendices. See

A full definition of registry services can be found at

For purposes of this review, security and stability are
defined as follows:

Security – an effect on security by the proposed registry
service means (1) the unauthorized disclosure, alteration,
insertion or destruction of registry data, or (2) the
unauthorized access to or disclosure of information or
resources on the Internet by systems operating in accordance with all applicable standards.

**Stability** - an effect on stability means that the proposed registry service (1) does not comply with applicable relevant standards that are authoritative and published by a well-established, recognized, and authoritative standards body, such as relevant standards-track or best current practice RFCs sponsored by the IETF, or (2) creates a condition that adversely affects the throughput, response time, consistency, or coherence of responses to Internet servers or end systems, operating in accordance with applicable relevant standards that are authoritative and published by a well-established, recognized and authoritative standards body, such as relevant standards-track or best current practice RFCs and relying on registry operator’s delegation information or provisioning services.

### 2.2.3.2 Customary Services

The following registry services are customary services offered by a registry operator:

- Receipt of data from registrars concerning registration of domain names and name servers
- Dissemination of TLD zone files
- Dissemination of contact or other information concerning domain name registrations (e.g., port-43 WHOIS, Web-based Whois, RESTful Whois)
- DNS Security Extensions

The applicant must describe whether any of these registry services are intended to be offered in a manner unique to the TLD.

Any additional registry services that are unique to the proposed gTLD registry should be described in detail. Directions for describing the registry services are provided at [http://www.icann.org/en/registries/rsep/rs_sample.html](http://www.icann.org/en/registries/rsep/rs_sample.html).

### 2.2.3.3 TLD Zone Contents

ICANN receives a number of inquiries about use of various record types in a registry zone, as entities contemplate different business and technical models. Permissible zone contents for a TLD zone are:

- Apex SOA record.
- Apex NS records and in-bailiwick glue for the TLD’s DNS servers.
- NS records and in-bailiwick glue for DNS servers of registered names in the TLD.
- DS records for registered names in the TLD.
- Records associated with signing the TLD zone (i.e., RRSIG, DNSKEY, NSEC, and NSEC3).

An applicant wishing to place any other record types into its TLD zone should describe in detail its proposal in the registry services section of the application. This will be evaluated and could result in an extended evaluation to determine whether the service would create a risk of a meaningful adverse impact on security or stability of the DNS. Applicants should be aware that a service based on use of less-common DNS resource records in the TLD zone, even if approved in the registry services review, might not work as intended for all users due to lack of application support.

### Methodology

Review of the applicant’s proposed registry services will include a preliminary determination of whether any of the proposed registry services could raise significant security or stability issues and require additional consideration.

If the preliminary determination reveals that there may be significant security or stability issues (as defined in subsection 2.2.3.1) surrounding a proposed service, the application will be flagged for an extended review by the Registry Services Technical Evaluation Panel (RSTEP), see [http://www.icann.org/en/registries/rsep/rstep.html](http://www.icann.org/en/registries/rsep/rstep.html). This review, if applicable, will occur during the Extended Evaluation period (refer to Section 2.3).

In the event that an application is flagged for extended review of one or more registry services, an additional fee to cover the cost of the extended review will be due from the applicant. Applicants will be advised of any additional fees due, which must be received before the additional review begins.

### Applicant’s Withdrawal of an Application

An applicant who does not pass the Initial Evaluation may withdraw its application at this stage and request a partial refund (refer to subsection 1.5 of Module 1).
2.3 **Extended Evaluation**

An applicant may request an Extended Evaluation if the application has failed to pass the Initial Evaluation elements concerning:

- Geographic names (refer to subsection 2.2.1.4). There is no additional fee for an extended evaluation in this instance.
- Demonstration of technical and operational capability (refer to subsection 2.2.2.1). There is no additional fee for an extended evaluation in this instance.
- Demonstration of financial capability (refer to subsection 2.2.2.2). There is no additional fee for an extended evaluation in this instance.
- Registry services (refer to subsection 2.2.3). Note that this investigation incurs an additional fee (the Registry Services Review Fee) if the applicant wishes to proceed. See Section 1.5 of Module 1 for fee and payment information.

An Extended Evaluation does not imply any change of the evaluation criteria. The same criteria used in the Initial Evaluation will be used to review the application in light of clarifications provided by the applicant.

From the time an applicant receives notice of failure to pass the Initial Evaluation, eligible applicants will have 15 calendar days to submit to ICANN the Notice of Request for Extended Evaluation. If the applicant does not explicitly request the Extended Evaluation (and pay an additional fee in the case of a Registry Services inquiry) the application will not proceed.

2.3.1 **Geographic Names Extended Evaluation**

In the case of an application that has been identified as a geographic name requiring government support, but where the applicant has not provided sufficient evidence of support or non-objection from all relevant governments or public authorities by the end of the Initial Evaluation period, the applicant has additional time in the Extended Evaluation period to obtain and submit this documentation.

If the applicant submits the documentation to the Geographic Names Panel by the required date, the GNP will perform its review of the documentation as detailed in
section 2.2.1.4. If the applicant has not provided the documentation by the required date (at least 90 calendar days from the date of the notice), the application will not pass the Extended Evaluation, and no further reviews are available.

2.3.2 Technical/Operational or Financial Extended Evaluation

The following applies to an Extended Evaluation of an applicant's technical and operational capability or financial capability, as described in subsection 2.2.2.

An applicant who has requested Extended Evaluation will again access the online application system (TAS) and clarify its answers to those questions or sections on which it received a non-passing score (or, in the case of an application where individual questions were passed but the total score was insufficient to pass Initial Evaluation, those questions or sections on which additional points are possible). The answers should be responsive to the evaluator report that indicates the reasons for failure, or provide any amplification that is not a material change to the application. Applicants may not use the Extended Evaluation period to substitute portions of new information for the information submitted in their original applications, i.e., to materially change the application.

An applicant participating in an Extended Evaluation on the Technical/Operational or Financial reviews will have the option to have its application reviewed by the same evaluation panelists who performed the review during the Initial Evaluation period, or to have a different set of panelists perform the review during Extended Evaluation.

The Extended Evaluation allows an additional exchange of information between the evaluators and the applicant to further clarify information contained in the application. This supplemental information will become part of the application record. Such communications will include a deadline for the applicant to respond.

ICANN will notify applicants at the end of the Extended Evaluation period as to whether they have passed. If an application passes Extended Evaluation, it continues to the next stage in the process. If an application does not pass Extended Evaluation, it will proceed no further. No further reviews are available.
2.3.3 Registry Services Extended Evaluation

This section applies to Extended Evaluation of registry services, as described in subsection 2.2.3.

If a proposed registry service has been referred to the Registry Services Technical Evaluation Panel (RSTEP) for an extended review, the RSTEP will form a review team of members with the appropriate qualifications.

The review team will generally consist of three members, depending on the complexity of the registry service proposed. In a 3-member panel, the review could be conducted within 30 to 45 calendar days. In cases where a 5-member panel is needed, this will be identified before the extended evaluation starts. In a 5-member panel, the review could be conducted in 45 calendar days or fewer.

The cost of an RSTEP review will be covered by the applicant through payment of the Registry Services Review Fee. Refer to payment procedures in section 1.5 of Module 1. The RSTEP review will not commence until payment has been received.

If the RSTEP finds that one or more of the applicant’s proposed registry services may be introduced without risk of a meaningful adverse effect on security or stability, these services will be included in the applicant’s registry agreement with ICANN. If the RSTEP finds that the proposed service would create a risk of a meaningful adverse effect on security or stability, the applicant may elect to proceed with its application without the proposed service, or withdraw its application for the gTLD. In this instance, an applicant has 15 calendar days to notify ICANN of its intent to proceed with the application. If an applicant does not explicitly provide such notice within this time frame, the application will proceed no further.

2.4 Parties Involved in Evaluation

A number of independent experts and groups play a part in performing the various reviews in the evaluation process. A brief description of the various panels, their evaluation roles, and the circumstances under which they work is included in this section.
2.4.1 Panels and Roles

The **String Similarity Panel** will assess whether a proposed gTLD string creates a probability of user confusion due to similarity with any reserved name, any existing TLD, any requested IDN ccTLD, or any new gTLD string applied for in the current application round. This occurs during the String Similarity review in Initial Evaluation. The panel may also review IDN tables submitted by applicants as part of its work.

The **DNS Stability Panel** will determine whether a proposed string might adversely affect the security or stability of the DNS. This occurs during the DNS Stability String review in Initial Evaluation.

The **Geographic Names Panel** will review each application to determine whether the applied-for gTLD represents a geographic name, as defined in this guidebook. In the event that the string is a geographic name requiring government support, the panel will ensure that the required documentation is provided with the application and verify that the documentation is from the relevant governments or public authorities and is authentic.

The **Technical Evaluation Panel** will review the technical components of each application against the criteria in the Applicant Guidebook, along with proposed registry operations, in order to determine whether the applicant is technically and operationally capable of operating a gTLD registry as proposed in the application. This occurs during the Technical/Operational reviews in Initial Evaluation, and may also occur in Extended Evaluation if elected by the applicant.

The **Financial Evaluation Panel** will review each application against the relevant business, financial and organizational criteria contained in the Applicant Guidebook, to determine whether the applicant is financially capable of maintaining a gTLD registry as proposed in the application. This occurs during the Financial review in Initial Evaluation, and may also occur in Extended Evaluation if elected by the applicant.

The **Registry Services Technical Evaluation Panel (RSTEP)** will review proposed registry services in the application to determine if they pose a risk of a meaningful adverse impact on security or stability. This occurs, if applicable, during the Extended Evaluation period.
Members of all panels are required to abide by the established Code of Conduct and Conflict of Interest guidelines included in this module.

2.4.2 Panel Selection Process

ICANN has selected qualified third-party providers to perform the various reviews, based on an extensive selection process. In addition to the specific subject matter expertise required for each panel, specified qualifications are required, including:

- The provider must be able to convene - or have the capacity to convene - globally diverse panels and be able to evaluate applications from all regions of the world, including applications for IDN gTLDs.

- The provider should be familiar with the IETF IDNA standards, Unicode standards, relevant RFCs and the terminology associated with IDNs.

- The provider must be able to scale quickly to meet the demands of the evaluation of an unknown number of applications. At present it is not known how many applications will be received, how complex they will be, and whether they will be predominantly for ASCII or non-ASCII gTLDs.

- The provider must be able to evaluate the applications within the required timeframes of Initial and Extended Evaluation.

2.4.3 Code of Conduct Guidelines for Panelists

The purpose of the New gTLD Program (“Program”) Code of Conduct (“Code”) is to prevent real and apparent conflicts of interest and unethical behavior by any Evaluation Panelist (“Panelist”).

Panelists shall conduct themselves as thoughtful, competent, well prepared, and impartial professionals throughout the application process. Panelists are expected to comply with equity and high ethical standards while assuring the Internet community, its constituents, and the public of objectivity, integrity, confidentiality, and credibility. Unethical actions, or even the appearance of compromise, are not acceptable. Panelists are expected

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11 http://newgtlds.icann.org/about/evaluation-panels-selection-process
to be guided by the following principles in carrying out their respective responsibilities. This Code is intended to summarize the principles and nothing in this Code should be considered as limiting duties, obligations or legal requirements with which Panelists must comply.

**Bias** -- Panelists shall:

- not advance personal agendas or non-ICANN approved agendas in the evaluation of applications;
- examine facts as they exist and not be influenced by past reputation, media accounts, or unverified statements about the applications being evaluated;
- exclude themselves from participating in the evaluation of an application if, to their knowledge, there is some predisposing factor that could prejudice them with respect to such evaluation; and
- exclude themselves from evaluation activities if they are philosophically opposed to or are on record as having made generic criticism about a specific type of applicant or application.

**Compensation/Gifts** -- Panelists shall not request or accept any compensation whatsoever or any gifts of substance from the Applicant being reviewed or anyone affiliated with the Applicant. (Gifts of substance would include any gift greater than USD 25 in value).

If the giving of small tokens is important to the Applicant’s culture, Panelists may accept these tokens; however, the total of such tokens must not exceed USD 25 in value. If in doubt, the Panelist should err on the side of caution by declining gifts of any kind.

**Conflicts of Interest** -- Panelists shall act in accordance with the “New gTLD Program Conflicts of Interest Guidelines” (see subsection 2.4.3.1).

**Confidentiality** -- Confidentiality is an integral part of the evaluation process. Panelists must have access to sensitive information in order to conduct evaluations. Panelists must maintain confidentiality of information entrusted to them by ICANN and the Applicant and any other confidential information provided to them from whatever source,
except when disclosure is legally mandated or has been authorized by ICANN. “Confidential information” includes all elements of the Program and information gathered as part of the process – which includes but is not limited to: documents, interviews, discussions, interpretations, and analyses – related to the review of any new gTLD application.

**Affirmation** -- All Panelists shall read this Code prior to commencing evaluation services and shall certify in writing that they have done so and understand the Code.

### 2.4.3.1 Conflict of Interest Guidelines for Panelists

It is recognized that third-party providers may have a large number of employees in several countries serving numerous clients. In fact, it is possible that a number of Panelists may be very well known within the registry / registrar community and have provided professional services to a number of potential applicants.

To safeguard against the potential for inappropriate influence and ensure applications are evaluated in an objective and independent manner, ICANN has established detailed Conflict of Interest guidelines and procedures that will be followed by the Evaluation Panelists. To help ensure that the guidelines are appropriately followed ICANN will:

- Require each Evaluation Panelist (provider and individual) to acknowledge and document understanding of the Conflict of Interest guidelines.
- Require each Evaluation Panelist to disclose all business relationships engaged in at any time during the past six months.
- Where possible, identify and secure primary and backup providers for evaluation panels.
- In conjunction with the Evaluation Panelists, develop and implement a process to identify conflicts and re-assign applications as appropriate to secondary or contingent third party providers to perform the reviews.

**Compliance Period** -- All Evaluation Panelists must comply with the Conflict of Interest guidelines beginning with the opening date of the Application Submission period and ending with the public announcement by ICANN of the
final outcomes of all the applications from the Applicant in question.

**Guidelines** -- The following guidelines are the minimum standards with which all Evaluation Panelists must comply. It is recognized that it is impossible to foresee and cover all circumstances in which a potential conflict of interest might arise. In these cases the Evaluation Panelist should evaluate whether the existing facts and circumstances would lead a reasonable person to conclude that there is an actual conflict of interest.

**Evaluation Panelists and Immediate Family Members:**

- Must not be under contract, have or be included in a current proposal to provide Professional Services for or on behalf of the Applicant during the Compliance Period.
- Must not currently hold or be committed to acquire any interest in a privately-held Applicant.
- Must not currently hold or be committed to acquire more than 1% of any publicly listed Applicant’s outstanding equity securities or other ownership interests.
- Must not be involved or have an interest in a joint venture, partnership or other business arrangement with the Applicant.
- Must not have been named in a lawsuit with or against the Applicant.
- Must not be a:
  - Director, officer, or employee, or in any capacity equivalent to that of a member of management of the Applicant;
  - Promoter, underwriter, or voting trustee of the Applicant; or
  - Trustee for any pension or profit-sharing trust of the Applicant.

**Definitions**--

Evaluation Panelist: An Evaluation Panelist is any individual associated with the review of an application. This includes
any primary, secondary, and contingent third party Panelists engaged by ICANN to review new gTLD applications.

Immediate Family Member: Immediate Family Member is a spouse, spousal equivalent, or dependent (whether or not related) of an Evaluation Panelist.

Professional Services: include, but are not limited to legal services, financial audit, financial planning / investment, outsourced services, consulting services such as business / management / internal audit, tax, information technology, registry / registrar services.

2.4.3.2 Code of Conduct Violations

Evaluation panelist breaches of the Code of Conduct, whether intentional or not, shall be reviewed by ICANN, which may make recommendations for corrective action, if deemed necessary. Serious breaches of the Code may be cause for dismissal of the person, persons or provider committing the infraction.

In a case where ICANN determines that a Panelist has failed to comply with the Code of Conduct, the results of that Panelist’s review for all assigned applications will be discarded and the affected applications will undergo a review by new panelists.

Complaints about violations of the Code of Conduct by a Panelist may be brought to the attention of ICANN via the public comment and applicant support mechanisms, throughout the evaluation period. Concerns of applicants regarding panels should be communicated via the defined support channels (see subsection 1.4.2). Concerns of the general public (i.e., non-applicants) can be raised via the public comment forum, as described in Module 1.

2.4.4 Communication Channels

Defined channels for technical support or exchanges of information with ICANN and with evaluation panels are available to applicants during the Initial Evaluation and Extended Evaluation periods. Contacting individual ICANN staff members, Board members, or individuals engaged by ICANN to perform an evaluation role in order to lobby for a particular outcome or to obtain confidential information about applications under review is not appropriate. In the interests of fairness and equivalent treatment for all applicants, any such individual contacts will be referred to the appropriate communication channels.
Initial Evaluation – String Review

String Similarity
String Similarity Panel reviews applied-for strings to ensure they are not too similar to existing TLDs or Reserved Names.

Panel compares all applied-for strings and creates contention sets.

DNS Stability
All strings reviewed and in extraordinary cases, DNS Stability Panel may perform extended review for possible technical stability issues.

Panel confirms supporting documentation where required.

Geographic Names
Geographic Names Panel determines if applied-for string is geographic name requiring government support.

Panel confirms supporting documentation where required.

Does applicant pass all elements of Initial Evaluation?

Extended Evaluation can be for any or all of the four elements below:
- Technical and Operational Capability
- Financial Capability
- Geographical Names
- Registry Services
But NOT for String Similarity or DNS Stability

Initial Evaluation – Applicant Review

Technical and Operational Capability
Technical and Operational panel reviews applicant’s answers to questions and supporting documentation.

Financial Capability
Financial panel reviews applicant’s answers to questions and supporting documentation.

Registry Services
Preliminary review of applicant’s registry services and referral to RSTEP for further review during Extended Evaluation where necessary

Initial Evaluation – String Review

Background Screening
Third-party provider reviews applicant’s background.

Does applicant pass all elements of Extended Evaluation?

Does applicant pass all elements of Initial Evaluation?

Applicant elects to pursue Extended Evaluation?

Applicant continues to subsequent steps.
Annex: Separable Country Names List

gTLD application restrictions on country or territory names are tied to listing in property fields of the ISO 3166-1 standard. Notionally, the ISO 3166-1 standard has an “English short name” field which is the common name for a country and can be used for such protections; however, in some cases this does not represent the common name. This registry seeks to add additional protected elements which are derived from definitions in the ISO 3166-1 standard. An explanation of the various classes is included below.

<table>
<thead>
<tr>
<th>Code</th>
<th>English Short Name</th>
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**Maintenance**

A Separable Country Names Registry will be maintained and published by ICANN Staff.
Each time the ISO 3166-1 standard is updated with a new entry, this registry will be reappraised to identify if the changes to the standard warrant changes to the entries in this registry. Appraisal will be based on the criteria listing in the “Eligibility” section of this document.

Codes reserved by the ISO 3166 Maintenance Agency do not have any implication on this registry, only entries derived from normally assigned codes appearing in ISO 3166-1 are eligible.

If an ISO code is struck off the ISO 3166-1 standard, any entries in this registry deriving from that code must be struck.

Eligibility

Each record in this registry is derived from the following possible properties:

**Class A:** The ISO 3166-1 English Short Name is comprised of multiple, separable parts whereby the country is comprised of distinct sub-entities. Each of these separable parts is eligible in its own right for consideration as a country name. For example, “Antigua and Barbuda” is comprised of “Antigua” and “Barbuda.”

**Class B:** The ISO 3166-1 English Short Name (1) or the ISO 3166-1 English Full Name (2) contains additional language as to the type of country the entity is, which is often not used in common usage when referencing the country. For example, one such short name is “The Bolivarian Republic of Venezuela” for a country in common usage referred to as “Venezuela.”

** Macedonia is a separable name in the context of this list; however, due to the ongoing dispute listed in UN documents between the Hellenic Republic (Greece) and the Former Yugoslav Republic of Macedonia over the name, no country will be afforded attribution or rights to the name “Macedonia” until the dispute over the name has been resolved. See http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N93/240/37/IMG/N9324037.pdf.

**Class C:** The ISO 3166-1 Remarks column containing synonyms of the country name, or sub-national entities, as denoted by “often referred to as,” “includes”, “comprises”, “variant” or “principal islands”.

In the first two cases, the registry listing must be directly derivative from the English Short Name by excising words and articles. These registry listings do not include vernacular or other non-official terms used to denote the country.

Eligibility is calculated in class order. For example, if a term can be derived both from Class A and Class C, it is only listed as Class A.
[This letter should be provided on official letterhead]

ICANN
Suite 330, 4676 Admiralty Way
Marina del Rey, CA 90292

Attention: New gTLD Evaluation Process

Subject: Letter for support for [TLD requested]

This letter is to confirm that [government entity] fully supports the application for [TLD] submitted to ICANN by [applicant] in the New gTLD Program. As the [Minister/Secretary/position] I confirm that I have the authority of the [x government/public authority] to be writing to you on this matter. [Explanation of government entity, relevant department, division, office, or agency, and what its functions and responsibilities are]

The gTLD will be used to [explain your understanding of how the name will be used by the applicant. This could include policies developed regarding who can register a name, pricing regime and management structures.] [Government/public authority/department] has worked closely with the applicant in the development of this proposal.

The [x government/public authority] supports this application, and in doing so, understands that in the event that the application is successful, [applicant] will be required to enter into a Registry Agreement with ICANN. In doing so, they will be required to pay fees to ICANN and comply with consensus policies developed through the ICANN multi-stakeholder policy processes.

[Government/public authority] further understands that, in the event of a dispute between [government/public authority] and the applicant, ICANN will comply with a legally binding order from a court in the jurisdiction of [government/public authority].

[Optional] This application is being submitted as a community-based application, and as such it is understood that the Registry Agreement will reflect the community restrictions proposed in the application. In the event that we believe the registry is not complying with these restrictions, possible avenues of recourse include the Registry Restrictions Dispute Resolution Procedure.

[Optional] I can advise that in the event that this application is successful [government/public authority] will enter into a separate agreement with the applicant. This agreement will outline the conditions under which we support them in the operation of the TLD, and circumstances under which we would withdraw that support. ICANN will not be a party to this agreement, and enforcement of this agreement lies fully with [government/public authority].
[Government / public authority] understands that the Geographic Names Panel engaged by ICANN will, among other things, conduct due diligence on the authenticity of this documentation. I would request that if additional information is required during this process, that [name and contact details] be contacted in the first instance.

Thank you for the opportunity to support this application.

Yours sincerely

Signature from relevant government/public authority
Since ICANN was founded in 1998 as a not-for-profit, multi-stakeholder organization, one of its key mandates has been to promote competition in the domain name market. ICANN’s mission specifically calls for the corporation to maintain and build on processes that will ensure competition and consumer interests – without compromising Internet security and stability. This includes the consideration and implementation of new gTLDs. It is ICANN’s goal to make the criteria and evaluation as objective as possible.

While new gTLDs are viewed by ICANN as important to fostering choice, innovation and competition in domain registration services, the decision to launch these coming new gTLD application rounds followed a detailed and lengthy consultation process with all constituencies of the global Internet community.

Any public or private sector organization can apply to create and operate a new gTLD. However the process is not like simply registering or buying a second-level domain name. Instead, the application process is to evaluate and select candidates capable of running a registry, a business that manages top level domains such as, for example, .COM or .INFO. Any successful applicant will need to meet published operational and technical criteria in order to preserve Internet stability and interoperability.

I. Principles of the Technical and Financial New gTLD Evaluation Criteria

- **Principles of conservatism.** This is the first round of what is to be an ongoing process for the introduction of new TLDs, including Internationalized Domain Names. Therefore, the criteria in this round require applicants to provide a thorough and thoughtful analysis of the technical requirements to operate a registry and the proposed business model.

- **The criteria and evaluation should be as objective as possible.**
  - With that goal in mind, an important objective of the new TLD process is to diversify the namespace, with different registry business models and target audiences. In some cases, criteria that are objective, but that ignore the differences in business models and target audiences of new registries, will tend to make the process exclusionary. For example, the business model for a registry targeted to a small community need not possess the same robustness in funding and technical infrastructure as a registry intending to compete with large gTLDs. Therefore purely objective criteria such as a requirement for a certain amount of cash on hand will not provide for the flexibility to consider different business models. The process must provide for an objective evaluation framework, but allow for adaptation according to the differing models applicants will present. Within that framework, applicant responses will be evaluated against the criteria in light of the proposed model.
  - Therefore the criteria should be flexible: able to scale with the overall business approach, providing that the planned approach is consistent and coherent, and can withstand highs and lows.
Criteria can be **objective in areas of registrant protection**, for example:

- Providing for funds to continue operations in the event of a registry failure.
- Adherence to data escrow, registry failover, and continuity planning requirements.

The evaluation must strike the correct **balance** between establishing the business and technical competence of the applicant to operate a registry (to **serve the interests of registrants**), while not asking for the detailed sort of information or making the judgment that a venture capitalist would. ICANN is not seeking to certify business success but instead seeks to encourage innovation while providing certain safeguards for registrants.

New registries must be added in a way that maintains DNS **stability and security**. Therefore, ICANN asks several questions so that the applicant can demonstrate an understanding of the technical requirements to operate a registry. ICANN will ask the applicant to demonstrate actual operational technical compliance prior to delegation. This is in line with current prerequisites for the delegation of a TLD.

**Registrant protection** is emphasized in both the criteria and the scoring. Examples of this include asking the applicant to:

- Plan for the occurrence of contingencies and registry failure by putting in place financial resources to fund the ongoing resolution of names while a replacement operator is found or extended notice can be given to registrants,
- Demonstrate a capability to understand and plan for business contingencies to afford some protections through the marketplace,
- Adhere to DNS stability and security requirements as described in the technical section, and
- Provide access to the widest variety of services.

**II. Aspects of the Questions Asked in the Application and Evaluation Criteria**

The technical and financial questions are intended to inform and guide the applicant in aspects of registry start-up and operation. The established registry operator should find the questions straightforward while inexperienced applicants should find them a natural part of planning.

Evaluation and scoring (detailed below) will emphasize:

- **How thorough are the answers? Are they well thought through and do they provide a sufficient basis for evaluation?**

- **Demonstration of the ability to operate and fund the registry on an ongoing basis**
  - Funding sources to support technical operations in a manner that ensures stability and security and supports planned expenses,
  - Resilience and sustainability in the face of ups and downs, anticipation of contingencies,
  - Funding to carry on operations in the event of failure.
• Demonstration that the technical plan will likely deliver on best practices for a registry and identification of aspects that might raise DNS stability and security issues.

• Ensures plan integration, consistency and compatibility (responses to questions are not evaluated individually but in comparison to others):
  ▪ Funding adequately covers technical requirements,
  ▪ Funding covers costs,
  ▪ Risks are identified and addressed, in comparison to other aspects of the plan.

III. Scoring

Evaluation

• The questions, criteria, scoring and evaluation methodology are to be conducted in accordance with the principles described earlier in section I. With that in mind, globally diverse evaluation panelists will staff evaluation panels. The diversity of evaluators and access to experts in all regions of the world will ensure application evaluations take into account cultural, technical and business norms in the regions from which applications originate.

• Evaluation teams will consist of two independent panels. One will evaluate the applications against the financial criteria. The other will evaluate the applications against the technical & operational criteria. Given the requirement that technical and financial planning be well integrated, the panels will work together and coordinate information transfer where necessary. Other relevant experts (e.g., technical, audit, legal, insurance, finance) in pertinent regions will provide advice as required.

• Precautions will be taken to ensure that no member of the Evaluation Teams will have any interest or association that may be viewed as a real or potential conflict of interest with an applicant or application. All members must adhere to the Code of Conduct and Conflict of Interest guidelines that are found in Module 2.

• Communications between the evaluation teams and the applicants will be through an online interface. During the evaluation, evaluators may pose a set of clarifying questions to an applicant, to which the applicant may respond through the interface.

Confidentiality: ICANN will post applications after the close of the application submission period. The application form notes which parts of the application will be posted.

Scoring

• Responses will be evaluated against each criterion. A score will be assigned according to the scoring schedule linked to each question or set of questions. In several questions, 1 point is the maximum score that may be awarded. In several other questions, 2 points are awarded for a response that exceeds requirements, 1 point is awarded for a response that meets requirements and 0 points are awarded for a response that fails to meet requirements. Each question must receive at least a score of “1,” making each a “pass/fail” question.

• In the Continuity question in the financial section (see Question #50), up to 3 points are awarded if an applicant provides, at the application stage, a financial instrument that will guarantee ongoing registry operations in the event of a business failure. This extra
point can serve to guarantee passing the financial criteria for applicants who score the minimum passing score for each of the individual criteria. The purpose of this weighting is to reward applicants who make early arrangements for the protection of registrants and to accept relatively riskier business plans where registrants are protected.

- There are 21 Technical & Operational questions. Each question has a criterion and scoring associated with it. The scoring for each is 0, 1, or 2 points as described above. One of the questions (IDN implementation) is optional. Other than the optional questions, all Technical & Operational criteria must be scored a 1 or more or the application will fail the evaluation.

- The total technical score must be equal to or greater than 22 for the application to pass. That means the applicant can pass by:
  - Receiving a 1 on all questions, including the optional question, and a 2 on at least one mandatory question; or
  - Receiving a 1 on all questions, excluding the optional question and a 2 on at least two mandatory questions.

  This scoring methodology requires a minimum passing score for each question and a slightly higher average score than the per question minimum to pass.

- There are six Financial questions and six sets of criteria that are scored by rating the answers to one or more of the questions. For example, the question concerning registry operation costs requires consistency between the technical plans (described in the answers to the Technical & Operational questions) and the costs (described in the answers to the costs question).

- The scoring for each of the Financial criteria is 0, 1 or 2 points as described above with the exception of the Continuity question, for which up to 3 points are possible. All questions must receive at least a 1 or the application will fail the evaluation.

- The total financial score on the six criteria must be 8 or greater for the application to pass. That means the applicant can pass by:
  - Scoring a 3 on the continuity criteria, or
  - Scoring a 2 on any two financial criteria.

- Applications that do not pass Initial Evaluation can enter into an extended evaluation process as described in Module 2. The scoring is the same.
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<th>#</th>
<th>Question</th>
<th>Included in public posting</th>
<th>Notes</th>
<th>Scoring Range</th>
<th>Criteria</th>
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<td>Proof of Legal Establishment</td>
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<td>(b) State the specific national or other jurisdiction that defines the type of entity identified in 8(a).</td>
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<td></td>
<td>(c) Attach evidence of the applicant’s establishment as the type of entity identified in Question 8(a) above, in accordance with the applicable laws identified in Question 8(b).</td>
<td>Y</td>
<td></td>
<td></td>
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<td></td>
<td>9 (a) If the applying entity is publicly traded, provide the exchange and symbol.</td>
<td>Y</td>
<td></td>
<td></td>
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<td></td>
<td>(b) If the applying entity is a subsidiary, provide the parent company.</td>
<td>Y</td>
<td></td>
<td></td>
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<td></td>
<td>(c) If the applying entity is a joint venture, list all joint venture partners.</td>
<td>Y</td>
<td></td>
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<tr>
<td></td>
<td>10 Business ID, Tax ID, VAT registration number, or equivalent of the Applicant.</td>
<td>N</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Applicant Background</td>
<td>11 (a) Enter the full name, date and country of birth, contact information (permanent residence), and position of all directors (i.e., members of the applicant’s Board of Directors, if applicable).</td>
<td>Partial</td>
<td></td>
<td></td>
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<td></td>
<td>Applicants should be aware that the names and positions of the individuals listed in response to this question will be published as part of the application. The contact information listed for individuals is for identification purposes only and will not be published as part of the application.</td>
<td>Partial</td>
<td></td>
<td></td>
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<td></td>
<td>Background checks may be conducted on individuals named in the applicant’s response to question 11. Any material misstatement or misrepresentation (or omission of material information) may cause the application to be rejected.</td>
<td>Partial</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>The applicant certifies that it has obtained permission for the posting of the names and positions of individuals included in this application.</td>
<td>Partial</td>
<td></td>
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<td></td>
<td>(b) Enter the full name, date and country of birth, contact information (permanent residence), and position of all officers and partners. Officers are high-level management officials of a corporation or business, for example, a CEO, vice president, secretary, chief financial officer. Partners would be listed in the context of a partnership or other such form of legal entity.</td>
<td>Partial</td>
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<td></td>
<td>(c) Enter the full name and contact information of all shareholders holding at least 15% of shares, and percentage held by each. For a shareholder entity, enter the principal place of business. For a shareholder individual, enter the date and country of birth and contact information (permanent residence).</td>
<td>Partial</td>
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<tr>
<td></td>
<td>(d) For an applying entity that does not have directors, officers, partners, or shareholders, enter the full name, date and country of birth, contact information (permanent residence), and position of all individuals having overall legal or executive responsibility for the applying entity.</td>
<td>Partial</td>
<td></td>
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<td></td>
<td>(e) Indicate whether the applicant or any of the individuals named above:</td>
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<td></td>
<td>i. within the past ten years, has been convicted of any crime related to financial or corporate governance activities, or has been judged by a court to have committed fraud or breach of fiduciary duty, or has been the subject of a judicial determination that is the substantive equivalent of any of these;</td>
<td>N</td>
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<td>ii. within the past ten years, has been disciplined by any government or industry regulatory body for conduct involving dishonesty or misuse of funds of others;</td>
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<td>iii. within the past ten years has been convicted of any willful tax-related fraud or willful evasion of tax liabilities;</td>
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<td>iv. within the past ten years has been convicted of perjury, forswearing, failing to cooperate with a law enforcement investigation, or making false statements to a law enforcement agency or representative;</td>
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<td></td>
<td>ICANN may deny an otherwise qualified application based on the background screening process. See section 1.2.1 of the guidebook.</td>
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<td>v.</td>
<td>has ever been convicted of any crime involving the use of computers, telephony systems, telecommunications or the Internet to facilitate the commission of crimes;</td>
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<td>vi.</td>
<td>has ever been convicted of any crime involving the use of a weapon, force, or the threat of force;</td>
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<td>vii.</td>
<td>has ever been convicted of any violent or sexual offense victimizing children, the elderly, or individuals with disabilities;</td>
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<td>viii.</td>
<td>has ever been convicted of the illegal sale, manufacture, or distribution of pharmaceutical drugs, or been convicted or successfully extradited for any offense described in Article 3 of the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988;</td>
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<tr>
<td>ix.</td>
<td>has ever been convicted or successfully extradited for any offense described in the United Nations Convention against Transnational Organized Crime (all Protocols);</td>
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<tr>
<td>x.</td>
<td>has been convicted, within the respective timeframes, of aiding, abetting, facilitating, enabling, conspiring to commit, or failing to report any of the listed crimes (i.e., within the past 10 years for crimes listed in (i) - (iv) above, or ever for the crimes listed in (v) – (ix) above);</td>
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<td>xi.</td>
<td>has entered a guilty plea as part of a plea agreement or has a court case in any jurisdiction with a disposition of Adjudicated Guilty or Adjudication Withheld (or regional equivalents) within the respective timeframes listed above for any of the listed crimes (i.e., within the past 10 years for crimes listed in (i) – (iv) above, or ever for the crimes listed in (v) – (ix) above);</td>
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<td>xii.</td>
<td>is the subject of a disqualification imposed by ICANN and in effect at the time of this application.</td>
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If any of the above events have occurred, please provide details.
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<tr>
<td>(f)</td>
<td>Indicate whether the applicant or any of the individuals named above have been involved in any decisions indicating that the applicant or individual named in the application was engaged in cybersquatting, as defined in the Uniform Domain Name Dispute Resolution Policy (UDRP), Anti-cybersquatting Consumer Protection Act (ACPA), or other equivalent legislation, or was engaged in reverse domain name hijacking under the UDRP or bad faith or reckless disregard under the ACPA or equivalent legislation.</td>
<td>N</td>
<td>ICANN may deny an otherwise qualified application based on the background screening process. See section 1.2.1 of the guidebook for details.</td>
<td></td>
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<tr>
<td>(g)</td>
<td>Disclose whether the applicant or any of the individuals named above has been involved in any administrative or other legal proceeding in which allegations of intellectual property infringement relating to registration or use of a domain name have been made. Provide an explanation related to each such instance.</td>
<td>N</td>
<td>ICANN may deny an otherwise qualified application based on the background screening process. See section 1.2.1 of the guidebook for details.</td>
<td></td>
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<tr>
<td>(h)</td>
<td>Provide an explanation for any additional background information that may be found concerning the applicant or any individual named in the application, which may affect eligibility, including any criminal convictions not identified above.</td>
<td>N</td>
<td></td>
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</table>

Evaluation Fee

<p>|   | (a) Enter the confirmation information for payment of the evaluation fee (e.g., wire transfer confirmation number). | N                           | The evaluation fee is paid in the form of a deposit at the time of user registration, and submission of the remaining amount at the time the full application is submitted. The information in question 12 is required for each payment. The full amount in USD must be received by ICANN. Applicant is responsible for all transaction fees and exchange rate fluctuation. Fedwire is the preferred wire mechanism; SWIFT is also acceptable. ACH is not recommended as these funds will take longer to clear and could affect timing of the application processing. |                |          |         |
|   | (b) Payer name | N                           |                                                                        |                |          |         |
|   | (c) Payer address | N                           |                                                                        |                |          |         |</p>
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<tr>
<td>(d)</td>
<td>Wiring bank</td>
<td>N</td>
<td></td>
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<tr>
<td>(e)</td>
<td>Bank address</td>
<td>N</td>
<td></td>
<td></td>
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<tr>
<td>(f)</td>
<td>Wire date</td>
<td>N</td>
<td></td>
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<tr>
<td>Applied-for gTLD string</td>
<td>13  Provide the applied-for gTLD string. If applying for an IDN, provide the U-label.</td>
<td>Y</td>
<td>Responses to Questions 13-17 are not scored, but are used for database and validation purposes. The U-label is an IDNA-valid string of Unicode characters, including at least one non-ASCII character.</td>
<td></td>
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<tr>
<td>14</td>
<td>(a) If applying for an IDN, provide the A-label (beginning with &quot;xn--&quot;).</td>
<td>Y</td>
<td></td>
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<td></td>
<td>(b) If an IDN, provide the meaning, or restatement of the string in English, that is, a description of the literal meaning of the string in the opinion of the applicant.</td>
<td>Y</td>
<td></td>
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<td></td>
<td>(c) If an IDN, provide the language of the label (both in English and as referenced by ISO-639-1).</td>
<td>Y</td>
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<td></td>
<td>(d) If an IDN, provide the script of the label (both in English and as referenced by ISO 15924).</td>
<td>Y</td>
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<tr>
<td></td>
<td>(e) If an IDN, list all code points contained in the U-label according to Unicode form.</td>
<td>Y</td>
<td>For example, the string &quot;HELLO&quot; would be listed as U+0048 U+0065 U+006C U+006C U+006F.</td>
<td></td>
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<tr>
<td>15</td>
<td>(a) If an IDN, upload IDN tables for the proposed registry. An IDN table must include: 1. the applied-for gTLD string relevant to the tables, 2. the script or language designator (as defined in BCP 47), 3. table version number, 4. effective date (DD Month YYYY), and 5. contact name, email address, and phone number. Submission of IDN tables in a standards-based format is encouraged.</td>
<td>Y</td>
<td>In the case of an application for an IDN gTLD, IDN tables must be submitted for the language or script for the applied-for gTLD string. IDN tables must also be submitted for each language or script in which the applicant intends to offer IDN registrations at the second level (see question 44). IDN tables should be submitted in a machine-readable format. The model format described in Section 5 of RFC 4290 would be ideal. The format used by RFC 3743 is an acceptable alternative. Variant generation algorithms that are more complex (such as those with contextual</td>
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<td>Question</td>
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<tr>
<td>(b)</td>
<td>Describe the process used for development of the IDN tables submitted, including consultations and sources used.</td>
<td>Y</td>
<td></td>
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<tr>
<td>(c)</td>
<td>List any variants to the applied-for gTLD string according to the relevant IDN tables.</td>
<td>Y</td>
<td>Variant TLD strings will not be delegated as a result of this application. Variant strings will be checked for consistency and, if the application is approved, will be entered on a Declared IDN Variants List to allow for future allocation once a variant management mechanism is established for the top level. Inclusion of variant TLD strings in this application is for information only and confers no right or claim to these strings upon the applicant.</td>
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</table>

16 Describe the applicant’s efforts to ensure that there are no known operational or rendering problems concerning the applied-for gTLD string. If such issues are known, describe steps that will be taken to mitigate these issues in software and other applications. | Y | |

17 **OPTIONAL.** Provide a representation of the label according to the International Phonetic Alphabet ([http://www.langsci.ucl.ac.uk/ipa](http://www.langsci.ucl.ac.uk/ipa)). If provided, this information will be used as a guide to ICANN in communications regarding the application. | Y | |

**Mission/Purpose**

18 (a) Describe the mission/purpose of your proposed gTLD. | Y | The information gathered in response to Question 18 is intended to inform the post-launch review of the New gTLD Program, from the perspective of assessing the relative costs and benefits achieved in the expanded gTLD space. For the application to be considered complete, answers to this section must be fulsome and sufficiently quantitative and detailed to inform future study on plans vs. results. | |
The New gTLD Program will be reviewed, as specified in section 9.3 of the Affirmation of Commitments. This will include consideration of the extent to which the introduction or expansion of gTLDs has promoted competition, consumer trust and consumer choice, as well as effectiveness of (a) the application and evaluation process, and (b) safeguards put in place to mitigate issues involved in the introduction or expansion.

The information gathered in this section will be one source of input to help inform this review. This information is not used as part of the evaluation or scoring of the application, except to the extent that the information may overlap with questions or evaluation areas that are scored.

An applicant wishing to designate this application as community-based should ensure that these responses are consistent with its responses for question 20 below.

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<tbody>
<tr>
<td></td>
<td>(b) How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?</td>
<td>Y</td>
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<td></td>
<td>Answers should address the following points:</td>
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<td></td>
<td>i. What is the goal of your proposed gTLD in terms of areas of specialty, service levels, or reputation?</td>
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<td>ii. What do you anticipate your proposed gTLD will add to the current space, in terms of competition, differentiation, or innovation?</td>
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<td>iii. What goals does your proposed gTLD have in terms of user experience?</td>
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<td></td>
<td>iv. Provide a complete description of the applicant’s intended registration policies in support of the goals listed above.</td>
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<td></td>
<td>v. Will your proposed gTLD impose any measures for</td>
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<td>#</td>
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<td>18</td>
<td>(c) What operating rules will you adopt to eliminate or minimize social costs (e.g., time or financial resource costs, as well as various types of consumer vulnerabilities)? What other steps will you take to minimize negative consequences/costs imposed upon consumers?</td>
<td>Y</td>
<td>Answers should address the following points:</td>
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<tr>
<td></td>
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<td></td>
<td>i. How will multiple applications for a particular domain name be resolved, for example, by auction or on a first-come/first-serve basis?</td>
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<td>ii. Explain any cost benefits for registrants you intend to implement (e.g., advantageous pricing, introductory discounts, bulk registration discounts).</td>
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<td>iii. Note that the Registry Agreement requires that registrars be offered the option to obtain initial domain name registrations for periods of one to ten years at the discretion of the registrar, but no greater than ten years. Additionally, the Registry Agreement requires advance written notice of price increases. Do you intend to make contractual commitments to registrants regarding the magnitude of price escalation? If so, please describe your plans.</td>
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**Community-based Designation**

19 | Is the application for a community-based TLD? | Y | There is a presumption that the application is a standard application (as defined in the Applicant Guidebook) if this question is left unanswered. | | | |
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| 20 | (a) Provide the name and full description of the community that the applicant is committing to serve. In the event that this application is included in a community priority evaluation, it will be scored based on the community identified in response to this question. The name of the community does not have to be formally adopted for the application to be designated as community-based. | Y                          | Descriptions should include:  
- How the community is delineated from Internet users generally. Such descriptions may include, but are not limited to, the following: membership, registration, or licensing processes, operation in a particular industry, use of a language.  
- How the community is structured and organized. For a community consisting of an alliance of groups, details about the constituent parts are required.  
- When the community was established, including the date(s) of formal organization, if any, as well as a description of community activities to date.  
- The current estimated size of the community, both as to membership and geographic extent. | Responses to Question 20 will be regarded as firm commitments to the specified community and reflected in the Registry Agreement, provided the application is successful. Responses are not scored in the Initial Evaluation. Responses may be scored in a community priority evaluation, if applicable. Criteria and scoring methodology for the community priority evaluation are described in Module 4 of the Applicant Guidebook. |         |
|    | (b) Explain the applicant's relationship to the community identified in 20(a). | Y                          | Explanations should clearly state:  
- Relations to any community organizations.  
- Relations to the community and its constituent parts/groups.  
- Accountability mechanisms of the applicant to the community. |               |                                                                         |         |
|    | (c) Provide a description of the community-based purpose of the applied-for gTLD. | Y                          | Descriptions should include:  
- Intended registrants in the TLD.  
- Intended end-users of the TLD.  
- Related activities the applicant has carried out or intends to carry out in service of this purpose.  
- Explanation of how the purpose is of a lasting nature. |               |                                                                         |         |
|    | (d) Explain the relationship between the applied-for gTLD string and the community identified in 20(a). | Y                          | Explanations should clearly state:  
- relationship to the established name, if any, of the community. |               |                                                                         |         |
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|   | (e) Provide a complete description of the applicant’s intended registration policies in support of the community-based purpose of the applied-for gTLD. Policies and enforcement mechanisms are expected to constitute a coherent set. | Y | Descriptions should include proposed policies, if any, on the following:  
- Eligibility: who is eligible to register a second-level name in the gTLD, and how will eligibility be determined.  
- Name selection: what types of second-level names may be registered in the gTLD.  
- Content/Use: what restrictions, if any, the registry operator will impose on how a registrant may use its registered name.  
- Enforcement: what investigation practices and mechanisms exist to enforce the policies above, what resources are allocated for enforcement, and what appeal mechanisms are available to registrants. |   |   |   |
|   | (f) Attach any written endorsements for the application from established institutions representative of the community identified in 20(a). An applicant may submit written endorsements by multiple institutions, if relevant to the community. | Y | At least one such endorsement is required for a complete application. The form and content of the endorsement are at the discretion of the party providing the endorsement; however, the letter must identify the applied-for gTLD string and the applying entity, include an express statement support for the application, and supply the contact information of the entity providing the endorsement.  
Endorsements from institutions not mentioned in the response to 20(b) should be accompanied by a clear description of each such institution’s relationship to the community.  
Endorsements presented as supporting documentation for this question should be submitted in the original language. |   |   |   |
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<td>(a) Is the application for a geographic name?</td>
<td>Y</td>
<td>An applied-for gTLD string is considered a geographic name requiring government support if it is: (a) the capital city name of a country or territory listed in the ISO 3166-1 standard; (b) a city name, where it is clear from statements in the application that the applicant intends to use the gTLD for purposes associated with the city name; (c) a sub-national place name listed in the ISO 3166-2 standard; or (d) a name listed as a UNESCO region or appearing on the “Composition of macro geographic (continental) or regions, geographic sub-regions, and selected economic and other groupings” list. See Module 2 for complete definitions and criteria. An application for a country or territory name, as defined in the Applicant Guidebook, will not be approved.</td>
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<td>(b) If a geographic name, attach documentation of support or non-objection from all relevant governments or public authorities.</td>
<td>N</td>
<td>See the documentation requirements in Module 2 of the Applicant Guidebook. Documentation presented in response to this question should be submitted in the original language.</td>
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<td>Describe proposed measures for protection of geographic names at the second and other levels in the applied-for gTLD. This should include any applicable rules and procedures for reservation and/or release of such names.</td>
<td>Y</td>
<td>Applicants should consider and describe how they will incorporate Governmental Advisory Committee (GAC) advice in their management of second-level domain name registrations. See “Principles regarding New gTLDs” at <a href="https://gacweb.icann.org/display/GACADV/New+gTLDs">https://gacweb.icann.org/display/GACADV/New+gTLDs</a>. For reference, applicants may draw on existing methodology developed for the reservation and release of country names in the .INFO top-level domain. See the Dot Info Circular at <a href="https://gacweb.icann.org/display/GACADV/New+gTLDs">https://gacweb.icann.org/display/GACADV/New+gTLDs</a>. Proposed measures will be posted for public comment as part of the application. However, note that procedures for release of geographic names at the second level</td>
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<td>must be separately approved according to Specification 5 of the Registry Agreement. That is, approval of a gTLD application does not constitute approval for release of any geographic names under the Registry Agreement. Such approval must be granted separately by ICANN.</td>
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<td>Registry Services</td>
<td>23</td>
<td>Provide name and full description of all the Registry Services to be provided. Descriptions should include both technical and business components of each proposed service, and address any potential security or stability concerns. The following registry services are customary services offered by a registry operator: A. Receipt of data from registrars concerning registration of domain names and name servers. B. Dissemination of TLD zone files. C. Dissemination of contact or other information concerning domain name registrations (e.g., port-43 WHOIS, Web-based Whois, RESTful Whois service). D. Internationalized Domain Names, where offered. E. DNS Security Extensions (DNSSEC). The applicant must describe whether any of these registry services are intended to be offered in a manner unique to the TLD. Additional proposed registry services that are unique to the registry must also be described.</td>
<td>Y</td>
<td>Registry Services are defined as the following: (1) operations of the Registry critical to the following tasks: (i) the receipt of data from registrars concerning registrations of domain names and name servers; (ii) provision to registrars of status information relating to the zone servers for the TLD; (iii) dissemination of TLD zone files; (iv) operation of the Registry zone servers; and (v) dissemination of contact and other information concerning domain name server registrations in the TLD as required by the Registry Agreement; and (2) other products or services that the Registry Operator is required to provide because of the establishment of a Consensus Policy; (3) any other products or services that only a Registry Operator is capable of providing, by reason of its designation as the Registry Operator. A full definition of Registry Services can be found at <a href="http://www.icann.org/en/registries/rsep/rsep.html">http://www.icann.org/en/registries/rsep/rsep.html</a>.</td>
<td>Responses are not scored. A preliminary assessment will be made to determine if there are potential security or stability issues with any of the applicant's proposed Registry Services. If any such issues are identified, the application will be referred for an extended review. See the description of the Registry Services review process in Module 2 of the Applicant Guidebook. Any information contained in the application may be considered as part of the Registry Services review. If its application is approved, applicant may engage in only those registry services defined in the application, unless a new request is submitted to ICANN in accordance with the Registry Agreement.</td>
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| 24 | Shared Registration System (SRS) Performance: describe  
- the plan for operation of a robust and reliable SRS. SRS is a critical registry function for enabling multiple registrars to provide domain name registration services in the TLD. SRS must include the EPP interface to the registry, as well as any other interfaces intended to be provided, if they are critical to the functioning of the registry. Please refer to the requirements in Specification 6 (section 1.2) and Specification 10 (SLA Matrix) attached to the Registry Agreement; and  
- resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area). | Y | The questions in this section (24-44) are intended to give applicants an opportunity to demonstrate their technical and operational capabilities to run a registry. In the event that an applicant chooses to outsource one or more parts of its registry operations, the applicant should still provide the full details of the technical arrangements.  
Note that the resource plans provided in this section assist in validating the technical and operational plans as well as informing the cost estimates in the Financial section below.  
Questions 24-30(a) are designed to provide a description of the applicant’s intended technical and operational approach for those registry functions that are outward-facing, i.e., interactions with registrars, registrants, and various DNS users. Responses to these questions will be published to allow review by affected parties. | 0-1 | Complete answer demonstrates:  
1) a plan for operating a robust and reliable SRS, one of the five critical registry functions;  
2) scalability and performance consistent with the overall business approach, and planned size of the registry;  
3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; and  
4) evidence of compliance with Specification 6 (section 1.2) to the Registry Agreement. | 1 - meets requirements: Response includes  
1) An adequate description of SRS that substantially demonstrates the applicant’s capabilities and knowledge required to meet this element;  
2) Details of a well-developed plan to operate a robust and reliable SRS;  
3) SRS plans are sufficient to result in compliance with Specification 6 and Specification 10 to the Registry Agreement;  
4) SRS is consistent with the technical, operational and financial approach described in the application; and  
5) Demonstrates that adequate technical resources are already on hand, or committed or readily available to carry out this function. |
<p>| 0 - fails requirements: Does not meet all the requirements to score 1. |</p>
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<td>25</td>
<td>Extensible Provisioning Protocol (EPP): provide a detailed description of the interface with registrars, including how the applicant will comply with EPP in RFCs 3735 (if applicable), and 5730-5734. If intending to provide proprietary EPP extensions, provide documentation consistent with RFC 3735, including the EPP templates and schemas that will be used. Describe resourcing plans (number and description of personnel roles allocated to this area). A complete answer is expected to be no more than 5 pages if there are proprietary EPP extensions, and a complete answer is also expected to be no more than 5 pages per EPP extension.</td>
<td>Y</td>
<td>0-1</td>
<td>Complete answer demonstrates: (1) complete knowledge and understanding of this aspect of registry technical requirements; (2) a technical plan scope/scale consistent with the overall business approach and planned size of the registry; (3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; (4) ability to comply with relevant RFCs; (5) if applicable, a well-documented implementation of any proprietary EPP extensions; and (6) if applicable, how proprietary EPP extensions are consistent with the registration lifecycle as described in Question 27.</td>
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<td>26</td>
<td>Whois: describe how the applicant will comply with Whois specifications for data objects, bulk access, and lookups as defined in Specifications 4 and 10 to the Registry Agreement; how the Applicant’s Whois service will comply with RFC 3912; and resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area). A complete answer should include, but is not limited to:</td>
<td>Y</td>
<td>0-2</td>
<td>Complete answer demonstrates: (1) complete knowledge and understanding of this aspect of registry technical requirements, (one of the five critical registry functions); (2) a technical plan scope/scale consistent with the overall business approach and planned size of the registry; (3) a technical plan that is adequately resourced in the financial section.</td>
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<td>1 - meets requirements:</td>
<td>Response includes (1) Adequate description of EPP that substantially demonstrates the applicant's capability and knowledge required to meet this element; (2) Sufficient evidence that any proprietary EPP extensions are compliant with RFCs and provide all necessary functionalities for the provision of registry services; (3) EPP interface is consistent with the technical, operational, and financial approach as described in the application; and (4) Demonstrates that technical resources are already on hand, or committed or readily available. 0 - fails requirements: Does not meet all the requirements to score 1.</td>
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<td>2 - exceeds requirements:</td>
<td>Response meets all the attributes for a score of 1 and includes: (1) A Searchable Whois service: Whois service includes web-based search capabilities by domain name, registrant name, postal address, contact names, registrar IDs, and Internet Protocol addresses without arbitrary limit. Boolean search capabilities may be offered. The service shall include appropriate precautions to avoid abuse of this feature (e.g., limiting access to legitimate authorized users), and the</td>
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<td>• A high-level Whois system description;</td>
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<td>• Relevant network diagram(s);</td>
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<td>• IT and infrastructure resources (e.g., servers, switches, routers and other components);</td>
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<td>• Description of interconnectivity with other registry systems; and</td>
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<td>• Frequency of synchronization between servers.</td>
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<td>To be eligible for a score of 2, answers must also include:</td>
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<td>• Provision for Searchable Whois capabilities; and</td>
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<td>• A description of potential forms of abuse of this feature, how these risks will be mitigated, and the basis for these descriptions.</td>
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<td>A complete answer is expected to be no more than 5 pages.</td>
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<td>27</td>
<td>Registration Life Cycle: provide a detailed description of the proposed registration lifecycle for domain names in the proposed gTLD. The description must:</td>
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<td>• explain the various registration states as well as the criteria and procedures that are used to change state;</td>
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<td>• describe the typical registration lifecycle of create/update/delete and all intervening steps such as pending, locked, expired, and transferred that may apply;</td>
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<td>• clearly explain any time elements that are involved - for instance details of add-grace or redemption grace periods, or notice periods for renewals or transfers; and</td>
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<td>• describe resourcing plans for this aspect of the criteria (number and</td>
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1 - meets requirements: Response includes
(1) adequate description of the registration lifecycle that substantially demonstrates the applicant’s capabilities and knowledge required to meet this element;
(2) Details of a fully developed registration lifecycle with definition of various registration states, transition between the states, and trigger points;
(3) A registration lifecycle that is consistent with any commitments to registrants and with technical, operational, and financial plans described in the application; and
(4) Demonstrates an adequate level of

0 - fails requirements: Does not meet all the requirements to score 1.
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| 28 | Abuse Prevention and Mitigation: Applicants should describe the proposed policies and procedures to minimize abusive registrations and other activities that have a negative impact on Internet users. A complete answer should include, but is not limited to:  
   - An implementation plan to establish and publish on its website a single abuse point of contact responsible for addressing matters requiring expedited attention and providing a timely response to abuse complaints concerning all names registered in the TLD through all registrars of record, including those involving a reseller;  
   - Policies for handling complaints regarding abuse;  
   - Proposed measures for removal of orphan glue records for names removed from the zone when provided with evidence in written form that the glue is present in connection with malicious conduct (see Specification 6); and  
   - Resource planning for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).  
   To be eligible for a score of 2, answers must include measures to promote Whois accuracy as well as measures from one other area as resource that are already on hand or committed or readily available to carry out this function. |

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<td>Note that, while orphan glue often supports correct and ordinary operation of the DNS, registry operators will be required to take action to remove orphan glue records (as defined at <a href="http://www.icann.org/en/committees/security/security-activities.jsp">http://www.icann.org/en/committees/security/security-activities.jsp</a>) when provided with evidence in written form that such records are present in connection with malicious conduct.</td>
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| 28 | Complete answer demonstrates:  
(1) Comprehensive abuse policies, which include clear definitions of what constitutes abuse in the TLD, and procedures that will effectively minimize potential for abuse in the TLD;  
(2) Plans are adequately resourced in the planned costs detailed in the financial section;  
(3) Policies and procedures identify and address the abusive use of registered names at startup and on an ongoing basis; and  
(4) When executed in accordance with the Registry Agreement, plans will result in compliance with contractual requirements.  
2 – exceeds requirements: Response meets all the attributes for a score of 1 and includes:  
(1) Details of measures to promote Whois accuracy, using measures specified here or other measures commensurate in their effectiveness; and  
(2) Measures from at least one additional area to be eligible for 2 points as described in the question. |

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| 28 | 1 - meets requirements: Response includes:  
(1) An adequate description of abuse prevention and mitigation policies and procedures that substantially demonstrates the applicant’s capabilities and knowledge required to meet this element;  
(2) Details of well-developed abuse policies and procedures;  
(3) Plans are sufficient to result in compliance with contractual requirements;  
(4) Plans are consistent with the technical, operational, and financial approach described in the application, and any commitments made to registrants; and  
(5) Demonstrates an adequate level of resources that are on hand, committed, or readily available to carry out this function. |

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<td>0 - fails requirements: Does not meet all the requirements to score 1.</td>
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• Measures to promote Whois accuracy (can be undertaken by the registry directly or by registrars via requirements in the Registry-Registrar Agreement (RRA)) may include, but are not limited to:
  o Authentication of registrant information as complete and accurate at time of registration. Measures to accomplish this could include performing background checks, verifying all contact information of principals mentioned in registration data, reviewing proof of establishment documentation, and other means.
  o Regular monitoring of registration data for accuracy and completeness, employing authentication methods, and establishing policies and procedures to address domain names with inaccurate or incomplete Whois data; and
  o If relying on registrars to enforce measures, establishing policies and procedures to ensure compliance, which may include audits, financial incentives, penalties, or other means. Note that the requirements of the RAA will continue to apply to all ICANN-accredited registrars.

• A description of policies and procedures that define malicious or abusive behavior, capture metrics, and establish Service Level Requirements for resolution, including service levels for responding to law enforcement requests. This may include rapid takedown or suspension systems and sharing information regarding malicious or abusive behavior with industry partners;

• Adequate controls to ensure proper access to domain functions (can be undertaken by the registry directly or by registrars).
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<td>registrars via requirements in the Registry-Registrar Agreement (RRA)) may include, but are not limited to:</td>
<td>Y</td>
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<td>0-2</td>
<td>Complete answer describes mechanisms designed to:</td>
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<td>o Requiring multi-factor authentication (i.e., strong passwords, tokens, one-time passwords) from registrants to process update, transfers, and deletion requests;</td>
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<td>(1) prevent abusive registrations, and</td>
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<td>o Requiring multiple, unique points of contact to request and/or approve update, transfer, and deletion requests; and</td>
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<td>(2) identify and address the abusive use of registered names on an ongoing basis.</td>
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<td>o Requiring the notification of multiple, unique points of contact when a domain has been updated, transferred, or deleted.</td>
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<td>A complete answer is expected to be no more than 20 pages.</td>
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<td>29</td>
<td>Rights Protection Mechanisms: Applicants must describe how their registry will comply with policies and practices that minimize abusive registrations and other activities that affect the legal rights of others, such as the Uniform Domain Name Dispute Resolution Policy (UDRP), Uniform Rapid Suspension (URS) system, and Trademark Claims and Sunrise services at startup.</td>
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<td>A complete answer should include:</td>
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<td>• A description of how the registry operator will implement safeguards against allowing unqualified registrations (e.g., registrations made in violation of the registry’s eligibility restrictions or policies), and reduce opportunities for behaviors such as phishing or pharming. At a minimum, the registry operator must offer a Sunrise period and a Trademark Claims service during the required time periods, and implement decisions rendered under the URS on an ongoing basis; and</td>
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<td>• A description of resourcing plans for the</td>
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| 30 | Security Policy: provide a summary of the security policy for the proposed registry, including but not limited to: • indication of any independent assessment reports demonstrating security capabilities, and provisions for periodic independent assessment reports to test security capabilities; • description of any augmented security levels or capabilities commensurate with the nature of the applied for gTLD string, including the identification of any existing international or industry relevant security standards the applicant commits to following (reference site must be provided); • list of commitments made to registrants concerning security levels. To be eligible for a score of 2, answers must also include: • Evidence of an independent assessment report demonstrating effective security controls (e.g., ISO 27001). A summary of the above should be no more than 20 pages. Note that the complete security policy for the registry is required to be submitted in accordance with 30(b). | Y                           | Criterion 5 calls for security levels to be appropriate for the use and level of trust associated with the TLD string, such as, for example, financial services oriented TLDs. “Financial services” are activities performed by financial institutions, including: 1) the acceptance of deposits and other repayable funds; 2) lending; 3) payment and remittance services; 4) insurance or reinsurance services; 5) brokerage services; 6) investment services and activities; 7) financial leasing; 8) issuance of guarantees and commitments; 9) provision of financial advice; 10) portfolio management and advice; or 11) acting as a financial clearinghouse. Financial services is used as an example only; other strings with exceptional potential to cause harm to consumers would also be expected to deploy appropriate levels of security. Complete answer includes: 0-2 | 0-2 | 0 - fails requirements: Does not meet all the requirements to score a 1. 2 - exceeds requirements: Response meets all attributes for a score of 1 and includes: (1) Evidence of highly developed and detailed security capabilities, with various baseline security levels, independent benchmarking of security metrics, robust periodic security monitoring, and continuous enforcement; and (2) an independent assessment report is provided demonstrating effective security controls are either in place or have been designed, and are commensurate with the applied-for gTLD string. (This could be ISO 27001 certification or other well-established and recognized industry certifications for the registry operation. If new independent standards for demonstration of effective security controls are established, such as the High Security Top Level Domain (HSTLD) designation, this could also be included. An illustrative example of an independent standard is the proposed set of requirements described in http://www.icann.org/en/corporate/crocker-20dec11-en.pdf). 1 - meets requirements: Response includes:
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|    | Demonstrations of Technical & Operational Capability (Internal) | 30 | (b) Security Policy: provide the complete security policy and procedures for the proposed registry, including but not limited to:  
- system (data, server, application / services) and network access control, ensuring systems are maintained in a secure fashion, including details of how they are monitored, logged and backed up;  
- resources to secure integrity of updates between registry systems and nameservers, and between nameservers, if any;  
- independent assessment reports demonstrating security capabilities (submitted as attachments), if any;  
- provisioning and other measures that mitigate risks posed by denial of service attacks;  
- computer and network incident response | N | Questions 30(b) – 44 are designed to provide a description of the applicant’s intended technical and operational approach for those registry functions that are internal to the infrastructure and operations of the registry. To allow the applicant to provide full details and safeguard proprietary information, responses to these questions will not be published. | | | | | | | | (1) Adequate description of security policies and procedures that substantially demonstrates the applicant’s capability and knowledge required to meet this element;  
(2) A description of adequate security capabilities, including enforcement of logical access control, threat analysis, incident response and auditing. Ad-hoc oversight and governance and leading practices being followed;  
(3) Security capabilities consistent with the technical, operational, and financial approach as described in the application, and any commitments made to registrants;  
(4) Demonstrates that an adequate level of resources are on hand, committed or readily available to carry out this function; and  
(5) Proposed security measures are commensurate with the nature of the applied-for gTLD string.  
0 - fails requirements: Does not meet all the requirements to score 1. |
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<td>policies, plans, and processes:</td>
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<td>0-1</td>
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<td>• plans to minimize the risk of unauthorized access to its systems or tampering with registry data;</td>
<td>N</td>
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<td>0-1</td>
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<td></td>
<td>• intrusion detection mechanisms, a threat analysis for the proposed registry, the defenses that will be deployed against those threats, and provision for periodic threat analysis updates;</td>
<td>N</td>
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<td></td>
<td>• details for auditing capability on all network access;</td>
<td>N</td>
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<td></td>
<td>• physical security approach;</td>
<td>N</td>
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<td></td>
<td>• identification of department or group responsible for the registry's security organization;</td>
<td>N</td>
<td></td>
<td>0-1</td>
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<td></td>
<td>• background checks conducted on security personnel;</td>
<td>N</td>
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<td>0-1</td>
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<td></td>
<td>• description of the main security threats to the registry operation that have been identified; and</td>
<td>N</td>
<td></td>
<td>0-1</td>
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<td></td>
<td>• resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).</td>
<td>N</td>
<td></td>
<td>0-1</td>
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<td></td>
<td>31 Technical Overview of Proposed Registry:</td>
<td>N</td>
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<td>0-1</td>
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<td></td>
<td>provide a technical overview of the proposed registry.</td>
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<td></td>
<td>The technical plan must be adequately resourced, with appropriate expertise and allocation of costs. The applicant will provide financial descriptions of resources in the next section and those resources must be reasonably related to these technical requirements.</td>
<td>N</td>
<td></td>
<td>0-1</td>
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<td>The overview should include information on the estimated scale of the registry’s technical operation, for example, estimates for the number of registration transactions and DNS queries per month should be provided for the first two years of operation.</td>
<td>N</td>
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<td>0-1</td>
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<td>In addition, the overview should account for geographic dispersion of incoming network traffic such as DNS, Whois, and registrar transactions.</td>
<td>N</td>
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To the extent this answer is affected by the applicant’s intent to outsource various registry operations, the applicant should describe these plans (e.g., taking advantage of economies of scale or existing facilities). However, the response must include specifying the technical plans, estimated scale, and geographic dispersion as required by the question.

Complete answer demonstrates:

1. A description that substantially demonstrates the applicant’s capabilities and knowledge required to meet this element;
2. Technical plans consistent with the technical, operational, and financial approach as described in the application;
3. Demonstrates an adequate level of resources that are on hand, committed, or readily available to carry out this function.

0 - fails requirements: Does not meet all the requirements to score 1.
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<th>Scoring Range</th>
<th>Criteria</th>
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<td></td>
<td>If the registry serves a highly localized registrant base, then traffic might be expected to come mainly from one area.</td>
<td>N</td>
<td>0-2</td>
<td>Complete answer demonstrates: (1) detailed and coherent network architecture; (2) architecture providing resiliency for registry systems; (3) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry; and (4) a technical plan that is adequately resourced in the planned costs detailed in the financial section.</td>
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<td></td>
<td>This high-level summary should not repeat answers to questions below. Answers should include a visual diagram(s) to highlight dataflows, to provide context for the overall technical infrastructure. Detailed diagrams for subsequent questions should be able to map back to this high-level diagram(s). The visual diagram(s) can be supplemented with documentation, or a narrative, to explain how all of the Technical &amp; Operational components conform.</td>
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<td>(6) consistency with subsequent technical questions.</td>
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<td>A complete answer is expected to be no more than 10 pages.</td>
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<td>32</td>
<td>Architecture: provide documentation for the system and network architecture that will support registry operations for the proposed scale of the registry. System and network architecture documentation must clearly demonstrate the applicant’s ability to operate, manage, and monitor registry systems. Documentation should include multiple diagrams or other components including but not limited to: • Detailed network diagram(s) showing the full interplay of registry elements, including but not limited to SRS, DNS, Whois, data escrow, and registry database functions; • Network and associated systems necessary to support registry operations, including: ▪ Anticipated TCP / IP addressing scheme, ▪ Hardware (i.e., servers, routers, networking components, virtual machines and key characteristics (CPU and RAM, Disk space, internal network connectivity, and make and model)), ▪ Operating system and versions, and ▪ Software and applications (with version information) necessary to support registry operations, management, and monitoring • General overview of capacity planning, including bandwidth allocation plans; • List of providers / carriers; and • Resourcing plans for the initial</td>
<td>N</td>
<td></td>
<td>(1) Evidence of highly developed and detailed network architecture that is able to scale well above stated projections for high registration volumes, thereby significantly reducing the risk from unexpected volume surges and demonstrates an ability to adapt quickly to support new technologies and services that are not necessarily envisaged for initial registry startup; and (2) Evidence of a highly available, robust, and secure infrastructure.</td>
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</table>

2 - exceeds requirements: Response meets all attributes for a score of 1 and includes
(1) Evidence of highly developed and detailed network architecture that is able to scale well above stated projections for high registration volumes, thereby significantly reducing the risk from unexpected volume surges and demonstrates an ability to adapt quickly to support new technologies and services that are not necessarily envisaged for initial registry startup; and (2) Evidence of a highly available, robust, and secure infrastructure.

1 - meets requirements: Response includes
(1) An adequate description of the architecture that substantially demonstrates the applicant’s capabilities and knowledge required to meet this element; (2) Plans for network architecture describe all necessary elements; (3) Descriptions demonstrate adequate network architecture providing robustness and security of the...
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<td></td>
<td>implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).</td>
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<td>To be eligible for a score of 2, answers must also include evidence of a network architecture design that greatly reduces the risk profile of the proposed registry by providing a level of scalability and adaptability (e.g., protection against DDoS attacks) that far exceeds the minimum configuration necessary for the expected volume.</td>
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<td>A complete answer is expected to be no more than 10 pages.</td>
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<td>33</td>
<td>Database Capabilities: provide details of database capabilities including but not limited to:</td>
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<td>• database software;</td>
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<td>• storage capacity (both in raw terms [e.g., MB, GB] and in number of registrations / registration transactions);</td>
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<td>• maximum transaction throughput (in total and by type of transaction);</td>
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<td></td>
<td>• scalability;</td>
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<td>• procedures for object creation, editing, and deletion, and user and credential management;</td>
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<td>• high availability;</td>
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<td>• change management procedures;</td>
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<td>• reporting capabilities; and</td>
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<td>• resource plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).</td>
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<td>A registry database data model can be included to provide additional clarity to this response.</td>
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<td>Note: Database capabilities described should be in reference to registry services and not necessarily related support functions such as Personnel or Accounting, unless such services are inherently intertwined with the delivery of registry services.</td>
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<td>To be eligible for a score of 2, answers must also include evidence of a network architecture design that greatly reduces the risk profile of the proposed registry by providing a level of scalability and adaptability (e.g., protection against DDoS attacks) that far exceeds the minimum configuration necessary for the expected volume.</td>
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<td>34</td>
<td>Geographic Diversity: provide a description of plans for geographic diversity of:</td>
<td>N</td>
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<td>a. name servers, and</td>
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<td>b. operations centers.</td>
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<td>Answers should include, but are not limited to:</td>
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<td>• the intended physical locations of systems, primary and back-up</td>
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<td>operations centers (including security attributes), and other</td>
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<td>infrastructure;</td>
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<td>• any registry plans to use Anycast or other topological and geographical</td>
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<td>diversity measures, in which case, the configuration of the relevant</td>
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<td>service must be included;</td>
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<td>• resourcing plans for the initial implementation of, and ongoing</td>
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<td>maintenance for, this aspect of the criteria (number and description</td>
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<td>of personnel roles allocated to this area).</td>
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<td>To be eligible for a score of 2, answers must also include evidence of</td>
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<td></td>
<td>a geographic diversity plan that greatly reduces the risk profile of</td>
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<td>the proposed registry by ensuring the continuance of all vital</td>
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<td>business functions (as identified in the applicant’s continuity plan</td>
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<td>in Question 39) in the event of a natural or other disaster) at the</td>
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<td>principal place of business or point of presence.</td>
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0 - fails requirements: Does not meet all the requirements to score 1.

1 - meets requirements: Response includes
(1) An adequate description of Geographic Diversity that substantially demonstrates the applicant’s capabilities and knowledge required to meet this element;
(2) Plans provide adequate geo-diversity of name servers and operations to continue critical registry functions in the event of a temporary outage at the principal place of business or point of presence;
(3) Geo-diversity plans are consistent...

2 - exceeds requirements: Response meets all attributes for a score of 1 and includes
(1) Evidence of highly developed measures for geo-diversity of operations, with locations and functions to continue all vital business functions in the event of a natural or other disaster at the principal place of business or point of presence; and
(2) A high level of availability, security, and bandwidth.

Scoring:
- Describe all necessary elements:
- Descriptions demonstrate adequate database capabilities, with database throughput, scalability, and database operations with limited operational governance;
- Database capabilities are consistent with the technical, operational, and financial approach as described in the application; and
- Demonstrates that an adequate level of resources that are on hand, or committed or readily available to carry out this function.

Scoring Range: 0-2

Criteria:
- Complete answer demonstrates:
  (1) geographic diversity of nameservers and operations centers;
  (2) proposed geo-diversity measures are consistent with the overall business approach and planned size of the registry; and
  (3) a technical plan that is adequately resourced in the planned costs detailed in the financial section.
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<td>35</td>
<td>A complete answer is expected to be no more than 5 pages.</td>
<td></td>
<td>N</td>
<td>0-1</td>
<td>Complete answer demonstrates: (1) adequate description of configurations of nameservers and compliance with respective DNS protocol-related RFCs; (2) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry; (3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; (4) evidence of compliance with Specification 6 to the Registry Agreement; and (5) evidence of complete knowledge and understanding of requirements for DNS service, one of the five critical registry functions.</td>
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<td></td>
<td>DNS Service: describe the configuration and operation of nameservers, including how the applicant will comply with relevant RFCs. All name servers used for the new gTLD must be operated in compliance with the DNS protocol specifications defined in the relevant RFCs, including but not limited to: 1034, 1035, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 3901, 4343, and 4472.</td>
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<td>0 - fails requirements: Does not meet all the requirements to score 1.</td>
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<td>function - describe how the proposed infrastructure will be able to deliver the performance described in Specification 10 (section 2) attached to the Registry Agreement.</td>
<td>N</td>
<td>IANA nameserver requirements are available at <a href="http://www.iana.org/procedures/nameserver-requirements.html">http://www.iana.org/procedures/nameserver-requirements.html</a></td>
<td>0-1</td>
<td>Complete answer demonstrates: (1) complete knowledge and understanding of this aspect of registry technical requirements; (2) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry; (3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; and (4) evidence of compliance with Specification 6 to the Registry Agreement.</td>
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<td>36</td>
<td>IPv6 Reachability: provide a description of plans for providing IPv6 transport including, but not limited to: • How the registry will support IPv6 access to Whois, Web-based Whois and any other Registration Data Publication Service as described in Specification 6 (section 1.5) to the Registry Agreement. • How the registry will comply with the requirement in Specification 6 for having at least two nameservers reachable over IPv6. • List all services that will be provided over IPv6, and describe the IPv6 connectivity and provider diversity that will be used. • Resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area). A complete answer is expected to be no more than 5 pages.</td>
<td>N</td>
<td></td>
<td></td>
<td>1 - meets requirements: Response includes (1) Adequate description of IPv6 reachability that substantially demonstrates the applicant's capability and knowledge required to meet this element; (2) A description of an adequate implementation plan addressing requirements for IPv6 reachability, indicating IPv6 reachability allowing IPv6 transport in the network over two independent IPv6 capable networks in compliance to IPv4 IANA specifications, and Specification 10; (3) IPv6 plans consistent with the technical, operational, and financial approach as described in the application; and (4) Demonstrates an adequate level of resources that are on hand, committed or readily available to carry out this function. 0 - fails requirements: Does not meet all the requirements to score 1.</td>
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<td>37</td>
<td>Data Backup Policies &amp; Procedures: provide</td>
<td>N</td>
<td></td>
<td>0-1</td>
<td>Complete answer demonstrates:</td>
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<td></td>
<td>- details of frequency and procedures for backup of data,</td>
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<td>(1) detailed backup and retrieval processes deployed;</td>
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<td></td>
<td>- hardware, and systems used for backup,</td>
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<td>(2) backup and retrieval process and frequency are consistent with the overall business approach and</td>
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<td>- data format,</td>
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<td>planned size of the registry; and</td>
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<td>- data backup features,</td>
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<td>(3) a technical plan that is adequately resourced in the planned costs detailed in the financial section.</td>
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<td>- backup testing procedures,</td>
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<td>- procedures for retrieval of data/rebuild of database,</td>
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<td>- storage controls and procedures, and</td>
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<td>- resourcing plans for the initial implementation of, and</td>
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<td>ongoing maintenance for, this aspect of the criteria</td>
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<td>(number and description of personnel roles allocated to this area).</td>
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<td>A complete answer is expected to be no more than 5 pages.</td>
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<td>38</td>
<td>Data Escrow: describe</td>
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<td>0-1</td>
<td>Complete answer demonstrates:</td>
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<td>- how the applicant will comply with the data escrow requirements</td>
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<td>(1) complete knowledge and understanding of data escrow, one of the five critical registry functions;</td>
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<td>documented in the Registry Data Escrow Specification (Specification 2</td>
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<td>(2) compliance with Specification 2 of the Registry Agreement;</td>
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<td>of the Registry Agreement); and</td>
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<td>(3) a technical plan that is adequately resourced in the planned costs detailed in the financial section;</td>
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<td>- resourcing plans for the initial implementation of, and</td>
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<td>(4) the escrow arrangement is consistent with the overall business approach and size/scope of the registry.</td>
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<td>ongoing maintenance for, this aspect of the criteria</td>
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<td>(number and description of personnel roles allocated to this area).</td>
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<td>A complete answer is expected to be no more than 5 pages.</td>
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<td>39</td>
<td>Registry Continuity: describe how the applicant will comply with registry continuity obligations as described in Specification 6 (section 3) to the registry agreement. This includes conducting registry operations using diverse, redundant servers to ensure continued operation of critical functions in the case of technical failure. Describe resource plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area). The response should include, but is not limited to, the following elements of the business continuity plan: • Identification of risks and threats to compliance with registry continuity obligations; • Identification and definitions of vital business functions (which may include registry services beyond the five critical registry functions) versus other registry functions and supporting operations and technology; • Definitions of Recovery Point Objectives and Recovery Time Objective; and • Descriptions of testing plans to promote compliance with relevant obligations. To be eligible for a score of 2, answers must also include: • A highly detailed plan that provides for leading practice levels of availability; and • Evidence of concrete steps such as a contract with a backup provider (in addition to any currently designated service operator) or a maintained hot site. A complete answer is expected to be no more than 15 pages.</td>
<td>N</td>
<td>For reference, applicants should review the ICANN gTLD Registry Continuity Plan at <a href="http://www.icann.org/en/registries/continuity/gtds-registry-continuity-plan-25apr09-en.pdf">http://www.icann.org/en/registries/continuity/gtds-registry-continuity-plan-25apr09-en.pdf</a>. A Recovery Point Objective (RPO) refers to the point in time to which data should be recovered following a business disruption or disaster. The RPO allows an organization to define a window of time before a disruption or disaster during which data may be lost and is independent of the time it takes to get a system back on-line. If the RPO of a company is two hours, then when a system is brought back on-line after a disruption/disaster, all data must be restored to a point within two hours before the disaster. A Recovery Time Objective (RTO) is the duration of time within which a process must be restored after a business disruption or disaster to avoid what the entity may deem as unacceptable consequences. For example, pursuant to the draft Registry Agreement DNS service must not be down for longer than 4 hours. At 4 hours ICANN may invoke the use of an Emergency Back End Registry Operator to take over this function. The entity may deem this to be an unacceptable consequence therefore they may set their RTO to be something less than 4 hours and would build continuity plans accordingly. Vital business functions are functions that are critical to the success of the operation. For example, if a registry operator provides an additional service beyond the five critical registry functions, that it deems as central to its TLD, or supports an operation that is central to the TLD, this might be identified as a vital business function.</td>
<td>0-2</td>
<td>Complete answer demonstrates: (1) detailed description showing plans for compliance with registry continuity obligations; (2) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry; (3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; and (4) evidence of compliance with Specification 6 to the Registry Agreement.</td>
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<td>40</td>
<td>Registry Transition: provide a Service Migration plan (as described in the Registry Transition Processes) that could be followed in the event</td>
<td>N</td>
<td>0-1</td>
<td>Complete answer demonstrates: (1) complete knowledge and (2) evidence of impact on mission-critical business operations.</td>
<td>1 - meets requirements: Response includes (1) Adequate description of a registry</td>
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<td>understanding of the Registry Transition Processes; and</td>
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<td>(2) a technical plan scope/scale consistent with the overall business</td>
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<td>approach and planned size of the registry.</td>
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<td>41</td>
<td>Failover Testing: provide a description of the failover testing plan,</td>
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<td>0-1</td>
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<td>including mandatory annual testing of the plan. Examples may include a</td>
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<td>description of plans to test failover of data centers or operations to</td>
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<td>alternate sites, from a hot to a cold facility, registry data escrow</td>
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<td>testing, or other mechanisms. The plan must take into account and be</td>
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<td>consistent with the vital business functions identified in Question 39;</td>
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<td>and resourcing plans for the initial implementation of, and ongoing</td>
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<td>maintenance for, this aspect of the criteria (number and description of</td>
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<td>personnel roles allocated to this area). The failover testing plan</td>
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<td>should include, but is not limited to, the following elements:</td>
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<td>• Types of testing (e.g., walkthroughs, takedown of sites) and the frequency</td>
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<td>of testing;</td>
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<td>• How results are captured, what is done</td>
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<td>42</td>
<td>Monitoring and Fault Escalation Processes: provide • a description of the proposed (or actual) arrangements for monitoring critical registry systems (including SRS, database systems, DNS servers, Whois service, network connectivity, routers and firewalls). This description should explain how these systems are monitored and the mechanisms that will be used for fault escalation and reporting, and should provide details of the proposed support arrangements for these registry systems. • resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area). To be eligible for a score of 2, answers must also include: • Meeting the fault tolerance / monitoring guidelines described • Evidence of commitment to provide a 24x7 fault response team. A complete answer is expected to be no more than 10 pages.</td>
<td>N</td>
<td>0-2</td>
<td>Complete answer demonstrates: (1) complete knowledge and understanding of this aspect of registry technical requirements; (2) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry; (3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; and (4) consistency with the commitments made to registrants and registrars regarding system maintenance.</td>
<td>2 - exceeds requirements: Response meets all attributes for a score of 1 and includes (1) Evidence showing highly developed and detailed fault tolerance/monitoring and redundant systems deployed with real-time monitoring tools / dashboard (metrics) deployed and reviewed regularly; (2) A high level of availability that allows for the ability to respond to faults through a 24x7 response team.</td>
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<td>43</td>
<td>DNSSEC: Provide</td>
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<td>Complete answer demonstrates:</td>
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<td>• The registry’s DNSSEC policy statement (DPS), which should include the policies and procedures the proposed registry will follow, for example, for signing the zone file, for verifying and accepting DS records from child domains, and for generating, exchanging, and storing keying material;</td>
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<td>• Describe how the DNSSEC implementation will comply with relevant RFCs, including but not limited to: RFCs 4033, 4034, 4035, 5910, 4509, 4641, and 5155 (the latter will only be required if Hashed Authenticated Denial of Existence will be offered); and</td>
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<td>• resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).</td>
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<td>A complete answer is expected to be no more than 5 pages. Note, the DPS is required to be submitted as part of the application</td>
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<td>1 - meets requirements: Response includes</td>
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<td>(1) complete knowledge and understanding of this aspect of registry technical requirements, one of the five critical registry functions;</td>
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<td>(2) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry;</td>
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<td>(3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; and</td>
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<td>(4) an ability to comply with relevant RFCs.</td>
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<td>0 - fails requirements: Does not meet all the requirements to score 1.</td>
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<td>committed or readily available to carry out this function.</td>
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<td>Complete answer demonstrates:</td>
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<td>(1) complete knowledge and understanding of this aspect of registry technical requirements, one of the five critical registry functions;</td>
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<td>(2) a technical plan scope/scale that is consistent with the overall business approach and planned size of the registry;</td>
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<td>(3) a technical plan that is adequately resourced in the planned costs detailed in the financial section; and</td>
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<td>(4) an ability to comply with relevant RFCs.</td>
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| 44 | OPTIONAL: IDNs:  
- State whether the proposed registry will support the registration of IDN labels in the TLD, and if so, how. For example, explain which characters will be supported, and provide the associated IDN Tables with variant characters identified, along with a corresponding registration policy. This includes public interfaces to the databases such asWhois and EPP.  
- Describe how the IDN implementation will comply with RFCs 5809-5893 as well as the ICANN IDN Guidelines at http://www.icann.org/en/topics/idn/implementation-guidelines.htm.  
- Describe resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area). | N | IDNs are an optional service at time of launch. Absence of IDN implementation or plans will not detract from an applicant's score. Applicants who respond to this question with plans for implementation of IDNs at time of launch will be scored according to the criteria indicated here. IDN tables should be submitted in a machine-readable format. The model format described in Section 5 of RFC 4290 would be ideal. The format used by RFC 3743 is an acceptable alternative. Variant generation algorithms that are more complex (such as those with contextual rules) and cannot be expressed using these table formats should be specified in a manner that could be re-implemented programmatically by ICANN. Ideally, for any complex table formats, a reference code implementation should be provided in conjunction with a description of the generation rules. | 0-1 | IDNs are an optional service. Complete answer demonstrates: (1) complete knowledge and understanding of this aspect of registry technical requirements; (2) a technical plan that is adequately resourced in the planned costs detailed in the financial section; (3) consistency with the commitments made to registrants and the technical, operational, and financial approach described in the application; (4) issues regarding use of scripts are settled and IDN tables are complete and publicly available; and (5) ability to comply with relevant RFCs. | 1 - meets requirements for this optional element: Response includes all the requirements to score 1. (1) Adequate description of IDN implementation that substantially demonstrates the applicant’s capability and knowledge required to meet this element; (2) An adequate description of the IDN procedures, including complete IDN tables, compliance with IDNA/IDN guidelines and RFCs, and periodic monitoring of IDN operations; (3) Evidence of ability to resolve rendering and known IDN issues or spoofing attacks; (4) IDN plans are consistent with the technical, operational, and financial approach as described in the application; and (5) Demonstrates an adequate level of resources that are on hand, committed readily available to carry out this function. 0 - fails requirements: Does not meet all the requirements to score a 1. |

**Demonstration of Financial Capability**

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| 45 | Financial Statements: provide  
- audited or independently certified financial statements for the most recently completed fiscal year for the applicant, and  
- audited or unaudited financial statements for the most recently ended interim financial period for the applicant for which this information may be released.  
For newly-formed applicants, or where financial statements are not audited, provide:  
- the latest available unaudited financial statements; and  
- an explanation as to why audited or independently certified financial statements are not available.  
At a minimum, the financial statements should be provided for the legal entity listed as the applicant. | N | The questions in this section (45-50) are intended to give applicants an opportunity to demonstrate their financial capabilities to run a registry.  
Supporting documentation for this question should be submitted in the original language. | 0-1 | Audited or independently certified financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) adopted by the International Accounting Standards Board (IASB) or nationally recognized accounting standards (e.g., GAAP). This will include a balance sheet and income statement reflecting the applicant’s financial position and results of operations, a statement of shareholders equity/partner capital, and a cash flow statement. In the event the applicant is an entity newly formed for the purpose of applying for a gTLD and with little to no operating history | 1 - meets requirements: Complete audited or independently certified financial statements are provided, at the highest level available in the applicant’s jurisdiction. Where such audited or independently certified financial statements are not available, such as for newly-formed entities, the applicant has provided an explanation and has provided, at a minimum, unaudited financial statements. 0 - fails requirements: Does not meet all the requirements to score 1. |
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|  46  | Financial statements are used in the analysis of projections and costs. A complete answer should include:  
  • balance sheet;  
  • income statement;  
  • statement of shareholders equity/partner capital;  
  • cash flow statement, and  
  • letter of auditor or independent certification, if applicable.                                                                                     | N                            |       |               | (less than one year), the applicant must submit, at a minimum, pro forma financial statements including all components listed in the question. Where audited or independently certified financial statements are not available, applicant has provided an adequate explanation as to the accounting practices in its jurisdiction and has provided, at a minimum, unaudited financial statements. |         |
| 47  | Projections Template: provide financial projections for costs and funding using Template 1, Most Likely Scenario (attached). Note, if certain services are outsourced, reflect this in the relevant cost section of the template. The template is intended to provide commonality among TLD applications and thereby facilitate the evaluation process. A complete answer is expected to be no more than 10 pages in addition to the template. | N                            | This question is based on the template submitted in question 46. | 0-1  | Applicant has provided a thorough model that demonstrates a sustainable business (even if break-even is not achieved through the first three years of operation). Applicant’s description of projections development is sufficient to show due diligence. |         |
|  47  | Costs and capital expenditures: in conjunction with the financial projections template, describe and explain:  
  • the expected operating costs and capital expenditures of setting up and operating the proposed registry;  
  • any functions to be outsourced, as indicated in the cost section of the template, and the reasons for outsourcing;  
  • any significant variances between years in any category of expected costs; and  
  • a description of the basis / key assumptions including rationale for the costs provided in the projections template. This may include an N | This question is based on the template submitted in question 46. |       | 0-2           | Costs identified are consistent with the proposed registry services, adequately fund technical requirements, and are consistent with proposed mission/purpose of the registry. Costs projected are reasonable for a registry of size and scope described in the application. Costs identified include the funding costs (interest expenses and fees) related to the continued operations described in Question 50 below. |         |
|    |                                                                                                                                                                                                     |                              |       |               | 2 - exceeds requirements: Response meets all of the attributes for a score of 1 and:  
  (1) Estimated costs and assumptions are conservative and consistent with an operation of the registry volume/scope/size as described by the applicant;  
  (2) Estimates are derived from actual examples of previous or existing registry operations or equivalent; and  
  (3) Conservative estimates are based on those experiences and describe a range of anticipated costs and use the high end of those estimates. |         |
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|     | executive summary or summary outcome of studies, reference data, or other steps taken to develop the responses and validate any assumptions made. As described in the Applicant Guidebook, the information provided will be considered in light of the entire application and the evaluation criteria. Therefore, this answer should agree with the information provided in Template 1 to: 1) maintain registry operations, 2) provide registry services described above, and 3) satisfy the technical requirements described in the Demonstration of Technical & Operational Capability section. Costs should include both fixed and variable costs. To be eligible for a score of two points, answers must demonstrate a conservative estimate of costs based on actual examples of previous or existing registry operations with similar approach and projections for growth and costs or equivalent. Attach reference material for such examples. A complete answer is expected to be no more than 10 pages. | | | Key assumptions and their rationale are clearly described and may include, but are not limited to:  
- Key components of capital expenditures;  
- Key components of operating costs, unit operating costs, headcount, number of technical/operating/equipment units, marketing, and other costs; and  
- Costs of outsourcing, if any. | | 1 - meets requirements:  
(1) Cost elements are reasonable and complete (i.e., cover all of the aspects of registry operations: registry services, technical requirements and other aspects as described by the applicant);  
(2) Estimated costs and assumptions are consistent and defensible with an operation of the registry volume/scope/size as described by the applicant; and  
(3) Projections are reasonably aligned with the historical financial statements provided in Question 45.  
0 - fails requirements: Does not meet all the requirements to score a 1. |
| 48  | (a) Funding and Revenue: Funding can be derived from several sources (e.g., existing capital or proceeds/revenue from operation of the proposed registry). Describe:  
i) How existing funds will provide resources for both: a) start-up of operations, and b) ongoing operations;  
ii) the revenue model including projections for transaction volumes and price (if the applicant does not intend to rely on registration revenue in order to cover the costs of the registry's | N | Supporting documentation for this question should be submitted in the original language. | 0-2 | Funding resources are clearly identified and adequately provide for registry cost projections. Sources of capital funding are clearly identified, held apart from other potential uses of those funds and available. The plan for transition of funding sources from available capital to revenue from operations (if applicable) is described. | 2 - exceeds requirements: Response meets all the attributes for a score of 1 and  
(1) Existing funds (specifically all funds required for start-up) are quantified, on hand, segregated in an account available only to the applicant for purposes of the application only;  
(2) If on-going operations are to be at least partially resourced from existing funds (rather than revenue from on-going operations) that funding is segregated and |
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<td>operation, it must clarify how the funding for the operation will be developed and maintained in a stable and sustainable manner;</td>
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<td>Outside sources of funding are documented and verified. Examples of evidence for funding sources include, but are not limited to:</td>
<td>earmarked for this purpose only in an amount adequate for three years operation;</td>
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<td>iii) outside sources of funding (the applicant must, where applicable, provide evidence of the commitment by the party committing the funds). Secured vs unsecured funding should be clearly identified, including associated sources of funding (i.e., different types of funding, level and type of security/collateral, and key items) for each type of funding;</td>
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<td>(3) If ongoing operations are to be at least partially resourced from revenues, assumptions made are conservative and take into consideration studies, reference data, or other steps taken to develop the response and validate any assumptions made; and</td>
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<td>iv) Any significant variances between years in any category of funding and revenue; and</td>
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<td>(4) Cash flow models are prepared which link funding and revenue assumptions to projected actual business activity.</td>
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<td>V) A description of the basis / key assumptions including rationale for the funding and revenue provided in the projections template. This may include an executive summary or summary outcome of studies, reference data, or other steps taken to develop the responses and validate any assumptions made; and</td>
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<td>1 - meets requirements:</td>
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<td>VI) Assurances that funding and revenue projections cited in this application are consistent with other public and private claims made to promote the business and generate support. To be eligible for a score of 2 points, answers must demonstrate:</td>
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<td>(1) Assurances provided that materials provided to investors and/or lenders are consistent with the projections and assumptions included in the projections templates;</td>
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<td>i) A conservative estimate of funding and revenue; and</td>
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<td>(2) Existing funds (specifically all funds required for start-up) are quantified, committed, identified as available to the applicant;</td>
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<td>ii) Ongoing operations that are not dependent on projected revenue.</td>
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<td>(3) If on-going operations are to be at least partially resourced from existing funds (rather than revenue from on-going operations) that funding is quantified and its sources identified in an amount adequate for three years operation;</td>
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<td>A complete answer is expected to be no more than 10 pages.</td>
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<td>(4) If ongoing operations are to be at least partially resourced from revenues, assumptions made are reasonable and are directly related to projected business volumes, market size and penetration; and</td>
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<td>(5) Projections are reasonably aligned with the historical financial statements provided in Question 45. 0 - fails requirements: Does not meet all the requirements to score a 1.</td>
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<td>49</td>
<td>(a) Contingency Planning: describe your contingency planning:</td>
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<td>0-2</td>
<td>Contingencies and risks are identified, quantified, and included in the cost, revenue, and funding analyses. Action plans are identified in the event contingencies occur. The model is resilient in the event those contingencies occur. Responses address the probability and resource impact of the contingencies identified.</td>
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<td>Contingency Planning</td>
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<td>• Identify any projected barriers/risks to implementation of the business approach described in the application and how they affect cost, funding, revenue, or timeline in your planning;</td>
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<td>• Identify the impact of any particular regulation, law or policy that might impact the Registry Services offering; and</td>
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<td>• Describe the measures to mitigate the key risks as described in this question.</td>
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<td>A complete answer should include, for each contingency, a clear description of the impact to projected revenue, funding, and costs for the 3-year period presented in Template 1 (Most Likely Scenario).</td>
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<td>To be eligible for a score of 2 points, answers must demonstrate that action plans and operations are adequately resourced in the existing funding and revenue plan even if contingencies occur.</td>
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<td>A complete answer is expected to be no more than 10 pages.</td>
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<td>(b) Describe your contingency planning where funding sources are so significantly reduced that material deviations from the implementation model are required. In particular, describe:</td>
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<td>• how on-going technical requirements will be met; and</td>
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<td>• what alternative funding can be reasonably raised at a later time.</td>
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<td>Provide an explanation if you do not believe there is any chance of reduced funding.</td>
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<td>Complete a financial projections template (Template 2, Worst Case Scenario)</td>
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<td>A complete answer is expected to be no more than 10 pages, in addition to the template.</td>
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<td>50</td>
<td>(c) Describe your contingency planning where activity volumes so significantly exceed the high projections that material deviation from the implementation model are required. In particular, how will on-going technical requirements be met?</td>
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<td>A complete answer is expected to be no more than 10 pages.</td>
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<td>(a) Provide a cost estimate for funding critical registry functions on an annual basis, and a rationale for these cost estimates commensurate with the technical, operational, and financial approach described in the application.</td>
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<td>The critical functions of a registry which must be supported even if an applicant’s business and/or funding fails are:</td>
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<td>(1) DNS resolution for registered domain names</td>
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<td>Applicants should consider ranges of volume of daily DNS queries (e.g., 0-100M, 100M-1B, 1B+), the incremental costs associated with increasing levels of such queries, and the ability to meet SLA performance metrics.</td>
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<td>(2) Operation of the Shared Registration System</td>
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<td>Applicants should consider ranges of volume of daily EPP transactions (e.g., 0-200K, 200K-2M, 2M+), the incremental costs associated with</td>
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<td>Registrant protection is critical and thus new gTLD applicants are requested to provide evidence indicating that the critical functions will continue to be performed even if the registry fails. Registrant needs are best protected by a clear demonstration that the basic registry functions are sustained for an extended period even in the face of registry failure. Therefore, this section is weighted heavily as a clear, objective measure to protect and serve registrants.</td>
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<td>The applicant has two tasks associated with adequately making this demonstration of continuity for critical registry functions. First, costs for maintaining critical registrant protection functions are to be estimated (Part a). In evaluating the application, the evaluators will adjudge whether the estimate is reasonable given the systems architecture and overall business approach described elsewhere in the application.</td>
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<td>The Continuing Operations Instrument (COI) is invoked by ICANN if necessary to pay for an Emergency Back End Registry Operator (EBERO) to maintain the five critical registry functions for a period of three to five years. Thus, the cost estimates are tied to the cost for a third party to provide the functions, not</td>
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<td>Figures provided are based on an accurate estimate of costs. Documented evidence or detailed plan for ability to fund on-going critical registry functions for registrants for a period of three years in the event of registry failure, default or until a successor operator can be designated. Evidence of financial wherewithal to fund this requirement prior to delegation. This requirement must be met prior to or concurrent with the execution of the Registry Agreement.</td>
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<td>3 - exceeds requirements: Response meets all the attributes for a score of 1 and:</td>
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<td>(1) Financial instrument is secured and in place to provide for on-going operations for at least three years in the event of failure.</td>
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<td>1 - meets requirements: (1) Costs are commensurate with technical, operational, and financial approach as described in the application; and (2) Funding is identified and instrument is described to provide for on-going operations of at least three years in the event of failure.</td>
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<td>0 - fails requirements: Does not meet all the requirements to score a 1.</td>
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<td>increasing levels of such queries, and the ability to meet SLA performance metrics.</td>
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<td>to the applicant's actual in-house or subcontracting costs for provision of these functions.</td>
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<td>(3) Provision of Whois service</td>
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<td>Refer to guidelines at <a href="http://www.icann.org/en/announcements/announcement-3-23dec11-en.htm">http://www.icann.org/en/announcements/announcement-3-23dec11-en.htm</a> regarding estimation of costs. However, the applicant must provide its own estimates and explanation in response to this question.</td>
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<td>Applicants should consider ranges of volume of daily Whois queries (e.g., 0-100K, 100K-1M, 1M+), the incremental costs associated with increasing levels of such queries, and the ability to meet SLA performance metrics for both web-based and port-43 services.</td>
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<td>(4) Registry data escrow deposits</td>
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<td>Applicants should consider administration, retention, and transfer fees as well as daily deposit (e.g., full or incremental) handling. Costs may vary depending on the size of the files in escrow (i.e., the size of the registry database).</td>
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<td>(5) Maintenance of a properly signed zone in accordance with DNSSEC requirements.</td>
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<td>Applicants should consider ranges of volume of daily DNS queries (e.g., 0-100M, 100M-1B, 1B+), the incremental costs associated with increasing levels of such queries, and the ability to meet SLA performance metrics.</td>
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<td>List the estimated annual cost for each of these functions (specify currency used).</td>
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<td>A complete answer is expected to be no more than 10 pages.</td>
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<td>(b) Applicants must provide evidence as to how the funds required for performing these critical registry functions will be available and guaranteed to fund registry operations (for the protection of registrants in the new gTLD) for a</td>
<td>N</td>
<td>Second (Part b), methods of securing the funds required to perform those functions for at least three years are to be described by the applicant in accordance with the criteria below. Two types of instruments will fulfill</td>
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minimum of three years following the termination of the Registry Agreement. ICANN has identified two methods to fulfill this requirement: (i) Irrevocable standby letter of credit (LOC) issued by a reputable financial institution.

- The amount of the LOC must be equal to or greater than the amount required to fund the registry operations specified above for at least three years. In the event of a draw upon the letter of credit, the actual payout would be tied to the cost of running those functions.
- The LOC must name ICANN or its designee as the beneficiary. Any funds paid out would be provided to the designee who is operating the required registry functions.
- The LOC must have a term of at least five years from the delegation of the TLD. The LOC may be structured with an annual expiration date if it contains an evergreen provision providing for annual extensions, without amendment, for an indefinite number of periods until the issuing bank informs the beneficiary of its final expiration or until the beneficiary releases the LOC as evidenced in writing. If the expiration date occurs prior to the fifth anniversary of the delegation of the TLD, applicant will be required to obtain a replacement instrument.

- The LOC must be issued by a reputable financial institution insured at the highest level in its jurisdiction. Documentation should indicate by whom the issuing institution is insured (i.e., as opposed to by whom the institution is rated).
- The LOC will provide that ICANN or its designee shall be unconditionally entitled to a release of funds (full or partial) thereunder upon delivery of written notice by ICANN or its designee.
- Applicant should attach an original copy of the executed letter of credit or a draft of the letter of credit containing the full terms and conditions. If not yet executed, the Applicant will be required to provide ICANN with an original copy of the executed LOC prior to or concurrent with the execution of the Registry Agreement.
- The LOC must contain at least the following required elements:
  - Issuing bank and date of issue.
  - Beneficiary: ICANN / 4676 Admiralty

- Financial Institution Ratings: The instrument must be issued or held by a financial institution with a rating beginning with “A” (or the equivalent) by any of the following rating agencies: A.M. Best, Dominion Bond Rating Service, Egan-Jones, Fitch Ratings, Kroll Bond Rating Agency, Moody’s, Morningstar, Standard & Poor’s, and Japan Credit Rating Agency.

- If an applicant cannot access a financial institution with a rating beginning with “A,” but a branch or subsidiary of such an institution exists in the jurisdiction of the applying entity, then the instrument may be issued by the branch or subsidiary or by a local financial institution with an equivalent or higher rating to the branch or subsidiary.

- If an applicant cannot access any such financial institutions, the instrument may be issued by the highest-rated financial institution in the national jurisdiction of the applying entity, if accepted by ICANN.

- Execution by ICANN: For any financial instruments that contemplate ICANN being a party, upon the written request of the applicant, ICANN may (but is not obligated to) execute such agreement prior to submission of the applicant's application if the agreement is on terms acceptable to ICANN. ICANN encourages applicants to deliver a written copy of any such agreement (only if it requires ICANN's signature) to ICANN as soon as possible to facilitate ICANN's review. If the financial instrument requires ICANN's signature, then the applicant will receive 3 points for question 50 (for the instrument being “secured and in place”) only if ICANN executes the agreement prior to submission of the application. ICANN will determine, in
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<td>Way, Suite 330 / Marina del Rey, CA 90292 / US, or its designee.</td>
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<td>- Applicant’s complete name and address.</td>
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<td>- LOC identifying number.</td>
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<td>- Exact amount in USD.</td>
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<td>- Expiry date.</td>
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<td>- Address, procedure, and required forms whereby presentation for payment is to be made.</td>
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<td>- Conditions:</td>
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<td>- Partial drawings from the letter of credit may be made provided that such payment shall reduce the amount under the standby letter of credit.</td>
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<td>- All payments must be marked with the issuing bank name and the bank’s standby letter of credit number.</td>
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<td>- LOC may not be modified, amended, or amplified by reference to any other document, agreement, or instrument.</td>
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<td>- The LOC is subject to the International Standby Practices (ISP 98) International Chamber of Commerce (Publication No. 590), or to an alternative standard that has been demonstrated to be reasonably equivalent.</td>
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<td>(ii) A deposit into an irrevocable cash escrow account held by a reputable financial institution.</td>
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<td>- The amount of the deposit must be equal to or greater than the amount required to fund registry operations for at least three years.</td>
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<td>- Cash is to be held by a third party financial institution which will not allow the funds to be commingled with the Applicant’s operating funds or other funds and may only be accessed by ICANN or its designee if certain conditions are met.</td>
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<td>- The account must be held by a reputable financial institution insured at the highest level in its jurisdiction. Documentation should indicate by whom the issuing institution is insured (i.e., as opposed to by whom the institution is rated).</td>
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<td>- The escrow agreement relating to the escrow account will provide that ICANN or its designee shall be unconditionally entitled to a release of funds (full or partial) thereunder upon delivery of written notice by ICANN or its designee.</td>
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<td>- The escrow agreement must have a term</td>
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<td>of five years from the delegation of the TLD.  • The funds in the deposit escrow account are not considered to be an asset of ICANN.  • Any interest earnings less bank fees are to accrue to the deposit, and will be paid back to the applicant upon liquidation of the account to the extent not used to pay the costs and expenses of maintaining the escrow.  • The deposit plus accrued interest, less any bank fees in respect of the escrow, is to be returned to the applicant if the funds are not used to fund registry functions due to a triggering event or after five years, whichever is greater.  • The Applicant will be required to provide ICANN an explanation as to the amount of the deposit, the institution that will hold the deposit, and the escrow agreement for the account at the time of submitting an application.  • Applicant should attach evidence of deposited funds in the escrow account, or evidence of provisional arrangement for deposit of funds. Evidence of deposited funds and terms of escrow agreement must be provided to ICANN prior to or concurrent with the execution of the Registry Agreement.</td>
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Instructions: TLD Applicant – Financial Projections

The application process requires the applicant to submit two cash basis Financial Projections.

The first projection (Template 1) should show the Financial Projections associated with the Most Likely scenario expected. This projection should include the forecasted registration volume, registration fee, and all costs and capital expenditures expected during the start-up period and during the first three years of operations. Template 1 relates to Question 46 (Projections Template) in the application.

We also ask that applicants show as a separate projection (Template 2) the Financial Projections associated with a realistic Worst Case scenario. Template 2 relates to Question 49 (Contingency Planning) in the application.

For each Projection prepared, please include Comments and Notes on the bottom of the projection (in the area provided) to provide those reviewing these projections with information regarding:

1. Assumptions used, significant variances in Operating Cash Flows and Capital Expenditures from year-to-year;
2. How you plan to fund operations;
3. Contingency planning

As you complete Template 1 and Template 2, please reference data points and/or formulas used in your calculations (where appropriate).

Section I – Projected Cash inflows and outflows

**Projected Cash Inflows**

**Lines A and B.** Provide the number of forecasted registrations and the registration fee for years 1, 2, and 3. Leave the Start-up column blank. The start-up period is for cash costs and capital expenditures only; there should be no cash projections input to this column.

**Line C.** Multiply lines A and B to arrive at the Registration Cash Inflow for line C.

**Line D.** Provide projected cash inflows from any other revenue source for years 1, 2, and 3. For any figures provided on line D, please disclose the source in the Comments/Notes box of Section I. Note, do not include funding in Line D as that is covered in Section VI.

**Line E.** Add lines C and D to arrive at the total cash inflow.

**Projected Operating Cash Outflows**

**Start up costs** - For all line items (F thru L) Please describe the total period of time this start-up cost is expected to cover in the Comments/Notes box.
Line F. Provide the projected labor costs for marketing, customer support, and technical support for start-up, year 1, year 2, and year 3. Note, other labor costs should be put in line L (Other Costs) and specify the type of labor and associated projected costs in the Comments/Notes box of this section.

Line G. Marketing Costs represent the amount spent on advertising, promotions, and other marketing activities. This amount should not include labor costs included in Marketing Labor (line F).

Lines H through K. Provide projected costs for facilities, G&A, interests and taxes, and Outsourcing for start-up as well as for years 1, 2, and 3. Be sure to list the type of activities that are being outsourced. You may combine certain activities from the same provider as long as an appropriate description of the services being combined is listed in the Comments/Notes box.

Line L. Provide any other projected operating costs for start-up, year 1, year 2, year 3. Be sure to specify the type of cost in the Comments/Notes box.

Line M. Add lines F through L to arrive at the total costs for line M.

Line N. Subtract line E from line M to arrive at the projected net operation number for line N.

Section IIA – Breakout of Fixed and Variable Operating Cash Outflows

Line A. Provide the projected variable operating cash outflows including labor and other costs that are not fixed in nature. Variable operating cash outflows are expenditures that fluctuate in relationship with increases or decreases in production or level of operations.

Line B. Provide the projected fixed operating cash outflows. Fixed operating cash outflows are expenditures that do not generally fluctuate in relationship with increases or decreases in production or level of operations. Such costs are generally necessary to be incurred in order to operate the base line operations of the organization or are expected to be incurred based on contractual commitments.

Line C – Add lines A and B to arrive at Total Fixed and Variable Operating Cash Outflows for line C. This must equal Total Operating Cash Outflows from Section I, Line M.

Section IIB – Breakout of Critical Registry Function Operating Cash Outflows

Lines A – E. Provide the projected cash outflows for the five critical registry functions. If these functions are outsourced, the component of the outsourcing fee representing these functions must be separately identified and provided. These costs are based on the applicant’s cost to manage these functions and should be calculated separately from the Continued Operations Instrument (COI) for Question 50.

Line F. If there are other critical registry functions based on the applicant’s registry business model then the projected cash outflow for this function must be provided with a description added to the Comment/Notes box. This projected cash outflow may also be included in the 3-year reserve.

Line G. Add lines A through F to arrive at the Total Critical Registry Function Cash Outflows.
Section III – Projected Capital Expenditures

Lines A through C. Provide projected hardware, software, and furniture & equipment capital expenditures for start-up as well as for years 1, 2, and 3. Please describe the total period of time the start-up cost is expected to cover in the Comments/Notes box.

Line D. Provide any projected capital expenditures as a result of outsourcing. This should be included for start-up and years 1, 2, and 3. Specify the type of expenditure and describe the total period of time the start-up cost is expected to cover in the Comments/Notes box of Section III.

Line E – Please describe “other” capital expenditures in the Comments/Notes box.

Line F. Add lines A through E to arrive at the Total Capital Expenditures.

Section IV – Projected Assets & Liabilities

Lines A through C. Provide projected cash, account receivables, and other current assets for start-up as well as for years 1, 2, and 3. For Other Current Assets, specify the type of asset and describe the total period of time the start-up cost is expected to cover in the Comments/Notes box.

Line D. Add lines A, B, C to arrive at the Total Current Assets.

Lines E through G. Provide projected accounts payable, short-term debt, and other current liabilities for start-up as well as for years 1, 2, and 3. For Other Current Liabilities, specify the type of liability and describe the total period of time the start-up cost is expected to cover in the Comments/Notes box.

Line H. Add lines E through G to arrive at the total current liabilities.

Lines I through K. Provide the projected fixed assets (PP&E), the 3-year reserve, and long-term assets for start-up as well as for years 1, 2, and 3. Please describe the total period of time the start-up cost is expected to cover in the Comments/Notes box.

Line L. Add lines I through K to arrive at the total long-term assets.

Line M. Provide the projected long-term debt for start-up as well as for years 1, 2, and 3. Please describe the total period of time the start-up cost is expected to cover in the Comments/Notes box.

Section V – Projected Cash Flow

Cash flow is driven by Projected Net Operations (Section I), Projected Capital Expenditures (Section III), and Projected Assets & Liabilities (Section IV).

Line A. Provide the projected net operating cash flows for start-up as well as for years 1, 2, and 3. Please describe the total period of time the start-up cost is expected to cover in the Comments/Notes box.
**Line B.** Provide the projected capital expenditures for start-up as well as for years 1, 2, and 3. Please describe the total period of time the start-up cost is expected to cover in the *Comments/Notes* box of Section V.

**Lines C through F.** Provide the projected change in non-cash current assets, total current liabilities, debt adjustments, and other adjustments for start-up as well as for years 1, 2, and 3. Please describe the total period of time the start-up cost is expected to cover in the *Comments/Notes* box.

**Line G.** Add lines A through F to arrive at the projected net cash flow for line *H*.

**Section VI – Sources of Funds**

**Lines A & B.** Provide projected funds from debt and equity at start-up. Describe the sources of debt and equity funding as well as the total period of time the start-up is expected to cover in the *Comments/Notes* box. Please also provide evidence the funding (e.g., letter of commitment).

**Line C.** Add lines A and B to arrive at the total sources of funds for line *C*.

**General Comments – Regarding Assumptions Used, Significant Variances Between Years, etc.**

Provide explanations for any significant variances between years (or expected in years beyond the timeframe of the template) in any category of costing or funding.

**General Comments – Regarding how the Applicant Plans to Fund Operations**

Provide general comments explaining how you will fund operations. Funding should be explained in detail in response to question 48.

**General Comments – Regarding Contingencies**

Provide general comments to describe your contingency planning. Contingency planning should be explained in detail in response to question 49.
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**Note:** The net operating income is zero for all years due to the assumption of fixed costs and zero income in the first three years.
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General Comments (Notes Regarding Assumptions Used, Significant Variance Between Years, etc.):

Comments regarding how the Applicant plans to fund operations:

General Comments regarding contingencies:
### Template 2 - Financial Projections: Worst Case

- **In local currency (unless noted otherwise)**
- **Use / Operational**
- **Comments / Notes**

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<td>7)</td>
<td>Projected Assets &amp; Liabilities</td>
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<tr>
<td>A)</td>
<td>Cash</td>
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<tr>
<td>B)</td>
<td>Accounts receivable</td>
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<tr>
<td>C)</td>
<td>Other current assets</td>
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<td></td>
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<tr>
<td>D)</td>
<td>Total Current Assets:</td>
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<tr>
<td>E)</td>
<td>Accounts payable</td>
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<tr>
<td>F)</td>
<td>Short-term Debt</td>
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<td>G)</td>
<td>Other Current Liabilities</td>
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<td>H)</td>
<td>Total Current Liabilities:</td>
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<tr>
<td>i)</td>
<td>Total Property, Plant &amp; Equipment (PP&amp;E)</td>
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<tr>
<td>j)</td>
<td>3-year Reserve</td>
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<td>k)</td>
<td>Other Long-term Assets</td>
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<td>l)</td>
<td>Total Long-term Assets:</td>
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<td>8)</td>
<td>Total Long-term Debt</td>
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<td>9)</td>
<td>Projected Cash flow (excl. 3-year Reserve)</td>
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<tr>
<td>A)</td>
<td>Net operating cash flows</td>
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<tr>
<td>C)</td>
<td>Capital expenditures</td>
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<tr>
<td>D)</td>
<td>Change in Non-Cash Current Assets</td>
<td>n/a</td>
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<tr>
<td>E)</td>
<td>Change in Total Current Liabilities</td>
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<tr>
<td>F)</td>
<td>Debt Adjustments</td>
<td>n/a</td>
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<tr>
<td>G)</td>
<td>Other Adjustments</td>
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<td>H)</td>
<td>Projected Net Cash flow</td>
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<td>10)</td>
<td>Sources of funds</td>
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<td>A)</td>
<td>Debt</td>
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<tr>
<td>i)</td>
<td>On-hand at time of application</td>
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<td>ii)</td>
<td>Contingent and/or committed but not yet on-hand</td>
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<tr>
<td>B)</td>
<td>Equity</td>
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<tr>
<td>i)</td>
<td>On-hand at time of application</td>
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<td>ii)</td>
<td>Contingent and/or committed but not yet on-hand</td>
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<td></td>
</tr>
<tr>
<td>C)</td>
<td>Total Sources of funds</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**General Comments (Notes Regarding Assumptions Used, Significant Variances Between Years, etc.):**

**Comments regarding how the Applicant plans to Fund operations:**

**General Comments regarding contingencies:**

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Module 3
Objection Procedures

This module describes two types of mechanisms that may affect an application:

I. The procedure by which ICANN’s Governmental Advisory Committee may provide GAC Advice on New gTLDs to the ICANN Board of Directors concerning a specific application. This module describes the purpose of this procedure, and how GAC Advice on New gTLDs is considered by the ICANN Board once received.

II. The dispute resolution procedure triggered by a formal objection to an application by a third party. This module describes the purpose of the objection and dispute resolution mechanisms, the grounds for lodging a formal objection to a gTLD application, the general procedures for filing or responding to an objection, and the manner in which dispute resolution proceedings are conducted.

This module also discusses the guiding principles, or standards, that each dispute resolution panel will apply in reaching its expert determination.

All applicants should be aware of the possibility that a formal objection may be filed against any application, and of the procedures and options available in the event of such an objection.

3.1 GAC Advice on New gTLDs

ICANN’s Governmental Advisory Committee was formed to consider and provide advice on the activities of ICANN as they relate to concerns of governments, particularly matters where there may be an interaction between ICANN’s policies and various laws and international agreements or where they may affect public policy issues.

The process for GAC Advice on New gTLDs is intended to address applications that are identified by governments to be problematic, e.g., that potentially violate national law or raise sensitivities.

GAC members can raise concerns about any application to the GAC. The GAC as a whole will consider concerns
raised by GAC members, and agree on GAC advice to forward to the ICANN Board of Directors.

The GAC can provide advice on any application. For the Board to be able to consider the GAC advice during the evaluation process, the GAC advice would have to be submitted by the close of the Objection Filing Period (see Module 1).

GAC Advice may take one of the following forms:

I. The GAC advises ICANN that it is the consensus of the GAC that a particular application should not proceed. This will create a strong presumption for the ICANN Board that the application should not be approved.

II. The GAC advises ICANN that there are concerns about a particular application “dot-example.” The ICANN Board is expected to enter into dialogue with the GAC to understand the scope of concerns. The ICANN Board is also expected to provide a rationale for its decision.

III. The GAC advises ICANN that an application should not proceed unless remediated. This will raise a strong presumption for the Board that the application should not proceed unless there is a remediation method available in the Guidebook (such as securing the approval of one or more governments), that is implemented by the applicant.

Where GAC Advice on New gTLDs is received by the Board concerning an application, ICANN will publish the Advice and endeavor to notify the relevant applicant(s) promptly. The applicant will have a period of 21 calendar days from the publication date in which to submit a response to the ICANN Board.

ICANN will consider the GAC Advice on New gTLDs as soon as practicable. The Board may consult with independent experts, such as those designated to hear objections in the New gTLD Dispute Resolution Procedure, in cases where the issues raised in the GAC advice are pertinent to one of the subject matter areas of the objection procedures. The receipt of GAC advice will not toll the processing of any application (i.e., an application will not be suspended but will continue through the stages of the application process).
3.2 Public Objection and Dispute Resolution Process

The independent dispute resolution process is designed to protect certain interests and rights. The process provides a path for formal objections during evaluation of the applications. It allows a party with standing to have its objection considered before a panel of qualified experts.

A formal objection can be filed only on four enumerated grounds, as described in this module. A formal objection initiates a dispute resolution proceeding. In filing an application for a gTLD, the applicant agrees to accept the applicability of this gTLD dispute resolution process. Similarly, an objector accepts the applicability of this gTLD dispute resolution process by filing its objection.

As described in section 3.1 above, ICANN’s Governmental Advisory Committee has a designated process for providing advice to the ICANN Board of Directors on matters affecting public policy issues, and these objection procedures would not be applicable in such a case. The GAC may provide advice on any topic and is not limited to the grounds for objection enumerated in the public objection and dispute resolution process.

3.2.1 Grounds for Objection

A formal objection may be filed on any one of the following four grounds:

String Confusion Objection - The applied-for gTLD string is confusingly similar to an existing TLD or to another applied-for gTLD string in the same round of applications.

Legal Rights Objection - The applied-for gTLD string infringes the existing legal rights of the objector.

Limited Public Interest Objection - The applied-for gTLD string is contrary to generally accepted legal norms of morality and public order that are recognized under principles of international law.

Community Objection - There is substantial opposition to the gTLD application from a significant portion of the community to which the gTLD string may be explicitly or implicitly targeted.

The rationales for these objection grounds are discussed in the final report of the ICANN policy development process for new gTLDs. For more information on this process, see
3.2.2 Standing to Object

Objectors must satisfy standing requirements to have their objections considered. As part of the dispute proceedings, all objections will be reviewed by a panel of experts designated by the applicable Dispute Resolution Service Provider (DRSP) to determine whether the objector has standing to object. Standing requirements for the four objection grounds are:

<table>
<thead>
<tr>
<th>Objection ground</th>
<th>Who may object</th>
</tr>
</thead>
<tbody>
<tr>
<td>String confusion</td>
<td>Existing TLD operator or gTLD applicant in current round.</td>
</tr>
<tr>
<td>Legal rights</td>
<td>Rightsholders</td>
</tr>
<tr>
<td>Limited public interest</td>
<td>No limitations on who may file – however, subject to a “quick look” designed for early conclusion of frivolous and/or abusive objections</td>
</tr>
<tr>
<td>Community</td>
<td>Established institution associated with a clearly delineated community</td>
</tr>
</tbody>
</table>

3.2.2.1 String Confusion Objection

Two types of entities have standing to object:

- An existing TLD operator may file a string confusion objection to assert string confusion between an applied-for gTLD and the TLD that it currently operates.

- Any gTLD applicant in this application round may file a string confusion objection to assert string confusion between an applied-for gTLD and the gTLD for which it has applied, where string confusion between the two applicants has not already been found in the Initial Evaluation. That is, an applicant does not have standing to object to another application with which it is already in a contention set as a result of the Initial Evaluation.

In the case where an existing TLD operator successfully asserts string confusion with an applicant, the application will be rejected.

In the case where a gTLD applicant successfully asserts string confusion with another applicant, the only possible
outcome is for both applicants to be placed in a contention set and to be referred to a contention resolution procedure (refer to Module 4, String Contention Procedures). If an objection by one gTLD applicant to another gTLD application is unsuccessful, the applicants may both move forward in the process without being considered in direct contention with one another.

### 3.2.2.2 Legal Rights Objection

A rightsholder has standing to file a legal rights objection. The source and documentation of the existing legal rights the objector is claiming (which may include either registered or unregistered trademarks) are infringed by the applied-for gTLD must be included in the filing.

An intergovernmental organization (IGO) is eligible to file a legal rights objection if it meets the criteria for registration of a .INT domain name:

- An international treaty between or among national governments must have established the organization; and
- The organization that is established must be widely considered to have independent international legal personality and must be the subject of and governed by international law.

The specialized agencies of the UN and the organizations having observer status at the UN General Assembly are also recognized as meeting the criteria.

### 3.2.2.3 Limited Public Interest Objection

Anyone may file a Limited Public Interest Objection. Due to the inclusive standing base, however, objectors are subject to a “quick look” procedure designed to identify and eliminate frivolous and/or abusive objections. An objection found to be manifestly unfounded and/or an abuse of the right to object may be dismissed at any time.

A Limited Public Interest objection would be manifestly unfounded if it did not fall within one of the categories that have been defined as the grounds for such an objection (see subsection 3.5.3).

A Limited Public Interest objection that is manifestly unfounded may also be an abuse of the right to object. An objection may be framed to fall within one of the

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1 See also [http://www.iana.org/domains/int/policy/](http://www.iana.org/domains/int/policy/).
accepted categories for Limited Public Interest objections, but other facts may clearly show that the objection is abusive. For example, multiple objections filed by the same or related parties against a single applicant may constitute harassment of the applicant, rather than a legitimate defense of legal norms that are recognized under general principles of international law. An objection that attacks the applicant, rather than the applied-for string, could be an abuse of the right to object.2

The quick look is the Panel’s first task, after its appointment by the DRSP and is a review on the merits of the objection. The dismissal of an objection that is manifestly unfounded and/or an abuse of the right to object would be an Expert Determination, rendered in accordance with Article 21 of the New gTLD Dispute Resolution Procedure.

In the case where the quick look review does lead to the dismissal of the objection, the proceedings that normally follow the initial submissions (including payment of the full advance on costs) will not take place, and it is currently contemplated that the filing fee paid by the applicant would be refunded, pursuant to Procedure Article 14(e).

3.2.2.4 Community Objection

Established institutions associated with clearly delineated communities are eligible to file a community objection. The community named by the objector must be a community strongly associated with the applied-for gTLD string in the application that is the subject of the objection. To qualify for standing for a community objection, the objector must prove both of the following:

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2 The jurisprudence of the European Court of Human Rights offers specific examples of how the term “manifestly ill-founded” has been interpreted in disputes relating to human rights. Article 35(3) of the European Convention on Human Rights provides: “The Court shall declare inadmissible any individual application submitted under Article 34 which it considers incompatible with the provisions of the Convention or the protocols thereto, manifestly ill-founded, or an abuse of the right of application.” The ECHR renders reasoned decisions on admissibility, pursuant to Article 35 of the Convention. (Its decisions are published on the Court’s website [http://www.echr.coe.int](http://www.echr.coe.int).) In some cases, the Court briefly states the facts and the law and then announces its decision, without discussion or analysis. E.g., Decision as to the Admissibility of Application No. 34328/96 by Egbert Peree against the Netherlands (1998). In other cases, the Court reviews the facts and the relevant legal rules in detail, providing an analysis to support its conclusion on the admissibility of an application. Examples of such decisions regarding applications alleging violations of Article 10 of the Convention (freedom of expression) include: Décision sur la recevabilité de la requête no 65831/01 présentée par Roger Garaudy contre la France (2003); Décision sur la recevabilité de la requête no 65297/01 présentée par Eduardo Fernando Alves Costa contre le Portugal (2004).

The jurisprudence of the European Court of Human Rights also provides examples of the abuse of the right of application being sanctioned, in accordance with ECHR Article 35(3). See, for example, Décision partielle sur la recevabilité de la requête no 61164/00 présentée par Gérard Duringer et autres contre la France et de la requête no 18589/02 contre la France (2003).
It is an established institution - Factors that may be considered in making this determination include, but are not limited to:

- Level of global recognition of the institution;
- Length of time the institution has been in existence; and
- Public historical evidence of its existence, such as the presence of a formal charter or national or international registration, or validation by a government, inter-governmental organization, or treaty. The institution must not have been established solely in conjunction with the gTLD application process.

It has an ongoing relationship with a clearly delineated community - Factors that may be considered in making this determination include, but are not limited to:

- The presence of mechanisms for participation in activities, membership, and leadership;
- Institutional purpose related to the benefit of the associated community;
- Performance of regular activities that benefit the associated community; and
- The level of formal boundaries around the community.

The panel will perform a balancing of the factors listed above, as well as other relevant information, in making its determination. It is not expected that an objector must demonstrate satisfaction of each and every factor considered in order to satisfy the standing requirements.

3.2.3 Dispute Resolution Service Providers

To trigger a dispute resolution proceeding, an objection must be filed by the posted deadline date, directly with the appropriate DRSP for each objection ground.

- The International Centre for Dispute Resolution has agreed to administer disputes brought pursuant to string confusion objections.
- The Arbitration and Mediation Center of the World Intellectual Property Organization has agreed to administer disputes brought pursuant to legal rights objections.
• The International Center of Expertise of the International Chamber of Commerce has agreed to administer disputes brought pursuant to Limited Public Interest and Community Objections.

ICANN selected DRSPs on the basis of their relevant experience and expertise, as well as their willingness and ability to administer dispute proceedings in the new gTLD Program. The selection process began with a public call for expressions of interest3 followed by dialogue with those candidates who responded. The call for expressions of interest specified several criteria for providers, including established services, subject matter expertise, global capacity, and operational capabilities. An important aspect of the selection process was the ability to recruit panelists who will engender the respect of the parties to the dispute.

3.2.4 Options in the Event of Objection

Applicants whose applications are the subject of an objection have the following options:

The applicant can work to reach a settlement with the objector, resulting in withdrawal of the objection or the application;

The applicant can file a response to the objection and enter the dispute resolution process (refer to Section 3.2); or

The applicant can withdraw, in which case the objector will prevail by default and the application will not proceed further.

If for any reason the applicant does not file a response to an objection, the objector will prevail by default.

3.2.5 Independent Objector

A formal objection to a gTLD application may also be filed by the Independent Objector (IO). The IO does not act on behalf of any particular persons or entities, but acts solely in the best interests of the public who use the global Internet.

In light of this public interest goal, the Independent Objector is limited to filing objections on the grounds of Limited Public Interest and Community.

Neither ICANN staff nor the ICANN Board of Directors has authority to direct or require the IO to file or not file any particular objection. If the IO determines that an objection should be filed, he or she will initiate and prosecute the objection in the public interest.

**Mandate and Scope** - The IO may file objections against “highly objectionable” gTLD applications to which no objection has been filed. The IO is limited to filing two types of objections: (1) Limited Public Interest objections and (2) Community objections. The IO is granted standing to file objections on these enumerated grounds, notwithstanding the regular standing requirements for such objections (see subsection 3.1.2).

The IO may file a Limited Public Interest objection against an application even if a Community objection has been filed, and vice versa.

The IO may file an objection against an application, notwithstanding the fact that a String Confusion objection or a Legal Rights objection was filed.

Absent extraordinary circumstances, the IO is not permitted to file an objection to an application where an objection has already been filed on the same ground.

The IO may consider public comment when making an independent assessment whether an objection is warranted. The IO will have access to application comments received during the comment period.

In light of the public interest goal noted above, the IO shall not object to an application unless at least one comment in opposition to the application is made in the public sphere.

**Selection** - The IO will be selected by ICANN, through an open and transparent process, and retained as an independent consultant. The Independent Objector will be an individual with considerable experience and respect in the Internet community, unaffiliated with any gTLD applicant.

Although recommendations for IO candidates from the community are welcomed, the IO must be and remain independent and unaffiliated with any of the gTLD applicants. The various rules of ethics for judges and international arbitrators provide models for the IO to declare and maintain his/her independence.
The IO's (renewable) tenure is limited to the time necessary to carry out his/her duties in connection with a single round of gTLD applications.

**Budget and Funding** - The IO's budget would comprise two principal elements: (a) salaries and operating expenses, and (b) dispute resolution procedure costs – both of which should be funded from the proceeds of new gTLD applications.

As an objector in dispute resolution proceedings, the IO is required to pay filing and administrative fees, as well as advance payment of costs, just as all other objectors are required to do. Those payments will be refunded by the DRSP in cases where the IO is the prevailing party.

In addition, the IO will incur various expenses in presenting objections before DRSP panels that will not be refunded, regardless of the outcome. These expenses include the fees and expenses of outside counsel (if retained) and the costs of legal research or factual investigations.

### 3.3 Filing Procedures

The information included in this section provides a summary of procedures for filing:

- Objections; and
- Responses to objections.

For a comprehensive statement of filing requirements applicable generally, refer to the New gTLD Dispute Resolution Procedure (“Procedure”) included as an attachment to this module. In the event of any discrepancy between the information presented in this module and the Procedure, the Procedure shall prevail.

Note that the rules and procedures of each DRSP specific to each objection ground must also be followed. See [http://newgtlds.icann.org/en/program-status/objection-dispute-resolution](http://newgtlds.icann.org/en/program-status/objection-dispute-resolution).

#### 3.3.1 Objection Filing Procedures

The procedures outlined in this subsection must be followed by any party wishing to file a formal objection to an application that has been posted by ICANN. Should an applicant wish to file a formal objection to another gTLD application, it would follow these same procedures.

- All objections must be filed electronically with the appropriate DRSP by the posted deadline date.
Objections will not be accepted by the DRSPs after this date.

- All objections must be filed in English.
- Each objection must be filed separately. An objector wishing to object to several applications must file a separate objection and pay the accompanying filing fees for each application that is the subject of an objection. If an objector wishes to object to an application on more than one ground, the objector must file separate objections and pay the accompanying filing fees for each objection ground.

Each objection filed by an objector must include:

- The name and contact information of the objector.
- A statement of the objector’s basis for standing; that is, why the objector believes it meets the standing requirements to object.
- A description of the basis for the objection, including:
  - A statement giving the specific ground upon which the objection is being filed.
  - A detailed explanation of the validity of the objection and why it should be upheld.
- Copies of any documents that the objector considers to be a basis for the objection.

Objections are limited to 5000 words or 20 pages, whichever is less, excluding attachments.

An objector must provide copies of all submissions to the DRSP associated with the objection proceedings to the applicant.

The DRSP will publish, and regularly update a list on its website identifying all objections as they are filed. ICANN will post on its website a notice of all objections filed once the objection filing period has closed.

### 3.3.2 Objection Filing Fees

At the time an objection is filed, the objector is required to pay a filing fee in the amount set and published by the relevant DRSP. If the filing fee is not paid, the DRSP will
dismiss the objection without prejudice. See Section 1.5 of Module 1 regarding fees.

Funding from ICANN for objection filing fees, as well as for advance payment of costs (see subsection 3.4.7 below) is available to the At-Large Advisory Committee (ALAC). Funding for ALAC objection filing and dispute resolution fees is contingent on publication by ALAC of its approved process for considering and making objections. At a minimum, the process for objecting to a gTLD application will include: bottom-up development of potential objections, discussion and approval of objections at the Regional At-Large Organization (RALO) level, and a process for consideration and approval of the objection by the At-Large Advisory Committee.

Funding from ICANN for objection filing fees, as well as for advance payment of costs, is available to individual national governments in the amount of USD 50,000 with the guarantee that a minimum of one objection per government will be fully funded by ICANN where requested. ICANN will develop a procedure for application and disbursement of funds.

Funding available from ICANN is to cover costs payable to the dispute resolution service provider and made directly to the dispute resolution service provider; it does not cover other costs such as fees for legal advice.

3.3.3 Response Filing Procedures

Upon notification that ICANN has published the list of all objections filed (refer to subsection 3.3.1), the DRSPs will notify the parties that responses must be filed within 30 calendar days of receipt of that notice. DRSPs will not accept late responses. Any applicant that fails to respond to an objection within the 30-day response period will be in default, which will result in the objector prevailing.

- All responses must be filed in English.
- Each response must be filed separately. That is, an applicant responding to several objections must file a separate response and pay the accompanying filing fee to respond to each objection.
- Responses must be filed electronically.

Each response filed by an applicant must include:

- The name and contact information of the applicant.
• A point-by-point response to the claims made by the objector.

• Any copies of documents that it considers to be a basis for the response.

Responses are limited to 5000 words or 20 pages, whichever is less, excluding attachments.

Each applicant must provide copies of all submissions to the DRSP associated with the objection proceedings to the objector.

3.3.4 Response Filing Fees

At the time an applicant files its response, it is required to pay a filing fee in the amount set and published by the relevant DRSP, which will be the same as the filing fee paid by the objector. If the filing fee is not paid, the response will be disregarded, which will result in the objector prevailing.

3.4 Objection Processing Overview

The information below provides an overview of the process by which DRSPs administer dispute proceedings that have been initiated. For comprehensive information, please refer to the New gTLD Dispute Resolution Procedure (included as an attachment to this module).

3.4.1 Administrative Review

Each DRSP will conduct an administrative review of each objection for compliance with all procedural rules within 14 calendar days of receiving the objection. Depending on the number of objections received, the DRSP may ask ICANN for a short extension of this deadline.

If the DRSP finds that the objection complies with procedural rules, the objection will be deemed filed, and the proceedings will continue. If the DRSP finds that the objection does not comply with procedural rules, the DRSP will dismiss the objection and close the proceedings without prejudice to the objector’s right to submit a new objection that complies with procedural rules. The DRSP’s review or rejection of the objection will not interrupt the time limit for filing an objection.

3.4.2 Consolidation of Objections

Once the DRSP receives and processes all objections, at its discretion the DRSP may elect to consolidate certain objections. The DRSP shall endeavor to decide upon
consolidation prior to issuing its notice to applicants that
the response should be filed and, where appropriate, shall
inform the parties of the consolidation in that notice.

An example of a circumstance in which consolidation
might occur is multiple objections to the same application
based on the same ground.

In assessing whether to consolidate objections, the DRSP
will weigh the efficiencies in time, money, effort, and
consistency that may be gained by consolidation against
the prejudice or inconvenience consolidation may cause.
The DRSPs will endeavor to have all objections resolved on
a similar timeline. It is intended that no sequencing of
objections will be established.

New gTLD applicants and objectors also will be permitted
to propose consolidation of objections, but it will be at the
DRSP’s discretion whether to agree to the proposal.

ICANN continues to strongly encourage all of the DRSPs to
consolidate matters whenever practicable.

3.4.3 Mediation

The parties to a dispute resolution proceeding are
encouraged—but not required—to participate in
mediation aimed at settling the dispute. Each DRSP has
experts who can be retained as mediators to facilitate this
process, should the parties elect to do so, and the DRSPs
will communicate with the parties concerning this option
and any associated fees.

If a mediator is appointed, that person may not serve on
the panel constituted to issue an expert determination in
the related dispute.

There are no automatic extensions of time associated with
the conduct of negotiations or mediation. The parties may
submit joint requests for extensions of time to the DRSP
according to its procedures, and the DRSP or the panel, if
appointed, will decide whether to grant the requests,
although extensions will be discouraged. Absent
exceptional circumstances, the parties must limit their
requests for extension to 30 calendar days.

The parties are free to negotiate without mediation at any
time, or to engage a mutually acceptable mediator of
their own accord.
3.4.4 Selection of Expert Panels

A panel will consist of appropriately qualified experts appointed to each proceeding by the designated DRSP. Experts must be independent of the parties to a dispute resolution proceeding. Each DRSP will follow its adopted procedures for requiring such independence, including procedures for challenging and replacing an expert for lack of independence.

There will be one expert in proceedings involving a string confusion objection.

There will be one expert, or, if all parties agree, three experts with relevant experience in intellectual property rights disputes in proceedings involving an existing legal rights objection.

There will be three experts recognized as eminent jurists of international reputation, with expertise in relevant fields as appropriate, in proceedings involving a Limited Public Interest objection.

There will be one expert in proceedings involving a community objection.

Neither the experts, the DRSP, ICANN, nor their respective employees, directors, or consultants will be liable to any party in any action for damages or injunctive relief for any act or omission in connection with any proceeding under the dispute resolution procedures.

3.4.5 Adjudication

The panel may decide whether the parties shall submit any written statements in addition to the filed objection and response, and may specify time limits for such submissions.

In order to achieve the goal of resolving disputes rapidly and at reasonable cost, procedures for the production of documents shall be limited. In exceptional cases, the panel may require a party to produce additional evidence.

Disputes will usually be resolved without an in-person hearing. The panel may decide to hold such a hearing only in extraordinary circumstances.

3.4.6 Expert Determination

The DRSPs' final expert determinations will be in writing and will include:

- A summary of the dispute and findings;
• An identification of the prevailing party; and
• The reasoning upon which the expert determination is based.

Unless the panel decides otherwise, each DRSP will publish all decisions rendered by its panels in full on its website.

The findings of the panel will be considered an expert determination and advice that ICANN will accept within the dispute resolution process.

### 3.4.7 Dispute Resolution Costs

Before acceptance of objections, each DRSP will publish a schedule of costs or statement of how costs will be calculated for the proceedings that it administers under this procedure. These costs cover the fees and expenses of the members of the panel and the DRSP’s administrative costs.

ICANN expects that string confusion and legal rights objection proceedings will involve a fixed amount charged by the panelists while Limited Public Interest and community objection proceedings will involve hourly rates charged by the panelists.

Within ten (10) calendar days of constituting the panel, the DRSP will estimate the total costs and request advance payment in full of its costs from both the objector and the applicant. Each party must make its advance payment within ten (10) calendar days of receiving the DRSP’s request for payment and submit to the DRSP evidence of such payment. The respective filing fees paid by the parties will be credited against the amounts due for this advance payment of costs.

The DRSP may revise its estimate of the total costs and request additional advance payments from the parties during the resolution proceedings.

Additional fees may be required in specific circumstances; for example, if the DRSP receives supplemental submissions or elects to hold a hearing.

If an objector fails to pay these costs in advance, the DRSP will dismiss its objection and no fees paid by the objector will be refunded.

If an applicant fails to pay these costs in advance, the DRSP will sustain the objection and no fees paid by the applicant will be refunded.
After the hearing has taken place and the panel renders its expert determination, the DRSP will refund the advance payment of costs to the prevailing party.

3.5 Dispute Resolution Principles (Standards)

Each panel will use appropriate general principles (standards) to evaluate the merits of each objection. The principles for adjudication on each type of objection are specified in the paragraphs that follow. The panel may also refer to other relevant rules of international law in connection with the standards.

The objector bears the burden of proof in each case.

The principles outlined below are subject to evolution based on ongoing consultation with DRSPs, legal experts, and the public.

3.5.1 String Confusion Objection

A DRSP panel hearing a string confusion objection will consider whether the applied-for gTLD string is likely to result in string confusion. String confusion exists where a string so nearly resembles another that it is likely to deceive or cause confusion. For a likelihood of confusion to exist, it must be probable, not merely possible, that confusion will arise in the mind of the average, reasonable Internet user. Mere association, in the sense that the string brings another string to mind, is insufficient to find a likelihood of confusion.

3.5.2 Legal Rights Objection

In interpreting and giving meaning to GNSO Recommendation 3 (“Strings must not infringe the existing legal rights of others that are recognized or enforceable under generally accepted and internationally recognized principles of law”), a DRSP panel of experts presiding over a legal rights objection will determine whether the potential use of the applied-for gTLD by the applicant takes unfair advantage of the distinctive character or the reputation of the objector’s registered or unregistered trademark or service mark (“mark”) or IGO name or acronym (as identified in the treaty establishing the organization), or unjustifiably impairs the distinctive character or the reputation of the objector’s mark or IGO name or acronym, or otherwise creates an impermissible likelihood of confusion between the applied-for gTLD and the objector’s mark or IGO name or acronym.
In the case where the objection is based on trademark rights, the panel will consider the following non-exclusive factors:

1. Whether the applied-for gTLD is identical or similar, including in appearance, phonetic sound, or meaning, to the objector’s existing mark.

2. Whether the objector’s acquisition and use of rights in the mark has been bona fide.

3. Whether and to what extent there is recognition in the relevant sector of the public of the sign corresponding to the gTLD, as the mark of the objector, of the applicant or of a third party.

4. Applicant’s intent in applying for the gTLD, including whether the applicant, at the time of application for the gTLD, had knowledge of the objector’s mark, or could not have reasonably been unaware of that mark, and including whether the applicant has engaged in a pattern of conduct whereby it applied for or operates TLDs or registrations in TLDs which are identical or confusingly similar to the marks of others.

5. Whether and to what extent the applicant has used, or has made demonstrable preparations to use, the sign corresponding to the gTLD in connection with a bona fide offering of goods or services or a bona fide provision of information in a way that does not interfere with the legitimate exercise by the objector of its mark rights.

6. Whether the applicant has marks or other intellectual property rights in the sign corresponding to the gTLD, and, if so, whether any acquisition of such a right in the sign, and use of the sign, has been bona fide, and whether the purported or likely use of the gTLD by the applicant is consistent with such acquisition or use.

7. Whether and to what extent the applicant has been commonly known by the sign corresponding to the gTLD, and if so, whether any purported or likely use of the gTLD by the applicant is consistent therewith and bona fide.

8. Whether the applicant’s intended use of the gTLD would create a likelihood of confusion with the objector’s mark as to the source, sponsorship, affiliation, or endorsement of the gTLD.
In the case where a legal rights objection has been filed by an IGO, the panel will consider the following non-exclusive factors:

1. Whether the applied-for gTLD is identical or similar, including in appearance, phonetic sound or meaning, to the name or acronym of the objecting IGO;

2. Historical coexistence of the IGO and the applicant’s use of a similar name or acronym. Factors considered may include:
   a. Level of global recognition of both entities;
   b. Length of time the entities have been in existence;
   c. Public historical evidence of their existence, which may include whether the objecting IGO has communicated its name or abbreviation under Article 6ter of the Paris Convention for the Protection of Industrial Property.

3. Whether and to what extent the applicant has used, or has made demonstrable preparations to use, the sign corresponding to the TLD in connection with a bona fide offering of goods or services or a bona fide provision of information in a way that does not interfere with the legitimate exercise of the objecting IGO’s name or acronym;

4. Whether and to what extent the applicant has been commonly known by the sign corresponding to the applied-for gTLD, and if so, whether any purported or likely use of the gTLD by the applicant is consistent therewith and bona fide; and

5. Whether the applicant’s intended use of the applied-for gTLD would create a likelihood of confusion with the objecting IGO’s name or acronym as to the source, sponsorship, affiliation, or endorsement of the TLD.

3.5.3 Limited Public Interest Objection

An expert panel hearing a Limited Public Interest objection will consider whether the applied-for gTLD string is contrary to general principles of international law for morality and public order.

Examples of instruments containing such general principles include:

- The Universal Declaration of Human Rights (UDHR)
• The International Covenant on Civil and Political Rights (ICCPR)
• The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)
• The International Convention on the Elimination of All Forms of Racial Discrimination
• Declaration on the Elimination of Violence against Women
• The International Covenant on Economic, Social, and Cultural Rights
• The Convention against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment
• The International Convention on the Protection of the Rights of all Migrant Workers and Members of their Families
• Slavery Convention
• Convention on the Prevention and Punishment of the Crime of Genocide
• Convention on the Rights of the Child

Note that these are included to serve as examples, rather than an exhaustive list. It should be noted that these instruments vary in their ratification status. Additionally, states may limit the scope of certain provisions through reservations and declarations indicating how they will interpret and apply certain provisions. National laws not based on principles of international law are not a valid ground for a Limited Public Interest objection.

Under these principles, everyone has the right to freedom of expression, but the exercise of this right carries with it special duties and responsibilities. Accordingly, certain limited restrictions may apply.

The grounds upon which an applied-for gTLD string may be considered contrary to generally accepted legal norms relating to morality and public order that are recognized under principles of international law are:

• Incitement to or promotion of violent lawless action;
• Incitement to or promotion of discrimination based upon race, color, gender, ethnicity, religion or national origin, or other similar types of
discrimination that violate generally accepted legal norms recognized under principles of international law;

- Incitement to or promotion of child pornography or other sexual abuse of children; or

- A determination that an applied-for gTLD string would be contrary to specific principles of international law as reflected in relevant international instruments of law.

The panel will conduct its analysis on the basis of the applied-for gTLD string itself. The panel may, if needed, use as additional context the intended purpose of the TLD as stated in the application.

### 3.5.4 Community Objection

The four tests described here will enable a DRSP panel to determine whether there is substantial opposition from a significant portion of the community to which the string may be targeted. For an objection to be successful, the objector must prove that:

- The community invoked by the objector is a clearly delineated community; and

- Community opposition to the application is substantial; and

- There is a strong association between the community invoked and the applied-for gTLD string; and

- The application creates a likelihood of material detriment to the rights or legitimate interests of a significant portion of the community to which the string may be explicitly or implicitly targeted. Each of these tests is described in further detail below.

**Community** – The objector must prove that the community expressing opposition can be regarded as a clearly delineated community. A panel could balance a number of factors to determine this, including but not limited to:

- The level of public recognition of the group as a community at a local and/or global level;

- The level of formal boundaries around the community and what persons or entities are considered to form the community;
• The length of time the community has been in existence;
• The global distribution of the community (this may not apply if the community is territorial); and
• The number of people or entities that make up the community.

If opposition by a number of people/entities is found, but the group represented by the objector is not determined to be a clearly delineated community, the objection will fail.

**Substantial Opposition** - The objector must prove substantial opposition within the community it has identified itself as representing. A panel could balance a number of factors to determine whether there is substantial opposition, including but not limited to:

• Number of expressions of opposition relative to the composition of the community;
• The representative nature of entities expressing opposition;
• Level of recognized stature or weight among sources of opposition;
• Distribution or diversity among sources of expressions of opposition, including:
  - Regional
  - Subsectors of community
  - Leadership of community
  - Membership of community
• Historical defense of the community in other contexts; and
• Costs incurred by objector in expressing opposition, including other channels the objector may have used to convey opposition.

If some opposition within the community is determined, but it does not meet the standard of substantial opposition, the objection will fail.

**Targeting** - The objector must prove a strong association between the applied-for gTLD string and the community represented by the objector. Factors that could be
balanced by a panel to determine this include but are not limited to:

- Statements contained in application;
- Other public statements by the applicant;
- Associations by the public.

If opposition by a community is determined, but there is no strong association between the community and the applied-for gTLD string, the objection will fail.

**Detriment** – The objector must prove that the application creates a likelihood of material detriment to the rights or legitimate interests of a significant portion of the community to which the string may be explicitly or implicitly targeted. An allegation of detriment that consists only of the applicant being delegated the string instead of the objector will not be sufficient for a finding of material detriment.

Factors that could be used by a panel in making this determination include but are not limited to:

- Nature and extent of damage to the reputation of the community represented by the objector that would result from the applicant’s operation of the applied-for gTLD string;
- Evidence that the applicant is not acting or does not intend to act in accordance with the interests of the community or of users more widely, including evidence that the applicant has not proposed or does not intend to institute effective security protection for user interests;
- Interference with the core activities of the community that would result from the applicant’s operation of the applied-for gTLD string;
- Dependence of the community represented by the objector on the DNS for its core activities;
- Nature and extent of concrete or economic damage to the community represented by the objector that would result from the applicant’s operation of the applied-for gTLD string; and
- Level of certainty that alleged detrimental outcomes would occur.
If opposition by a community is determined, but there is no likelihood of material detriment to the targeted community resulting from the applicant’s operation of the applied-for gTLD, the objection will fail.

The objector must meet all four tests in the standard for the objection to prevail.
Party with standing files objection directly with Dispute Resolution Service Provider (DRSP) for these grounds:
- String Confusion
- Legal Rights
- Limited Public Interest; and/or
- Community

Objection filing period opens

Objection filed with correct DRSP?

Objection meets procedural rules?

Objection dismissed

30 Days

DRSPs notify applicants of relevant objections

ICANN posts notice of all objections filed

Objection filing period closes

DRSP posts objection details on its website

Applicant files response and pays filing fee

Consolidation of objections, if applicable

DRSP appoints panel

DRSP sends estimation of costs to parties

Advance payment of costs due

Expert Determination

DRSP and ICANN update respective websites to reflect determination

Applicant proceeds to subsequent stage

Does applicant clear all objections?

Yes

No

Applicant withdraws

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These Procedures were designed with an eye toward timely and efficient dispute resolution. As part of the New gTLD Program, these Procedures apply to all proceedings administered by each of the dispute resolution service providers (DRSP). Each of the DRSPs has a specific set of rules that will also apply to such proceedings.
NEW gTLD DISPUTE RESOLUTION Procedure

Article 1. ICANN’s New gTLD Program

(a) The Internet Corporation for Assigned Names and Numbers (“ICANN”) has implemented a program for the introduction of new generic Top-Level Domain Names (“gTLDs”) in the internet. There will be a succession of rounds, during which applicants may apply for new gTLDs, in accordance with terms and conditions set by ICANN.

(b) The new gTLD program includes a dispute resolution procedure, pursuant to which disputes between a person or entity who applies for a new gTLD and a person or entity who objects to that gTLD are resolved in accordance with this New gTLD Dispute Resolution Procedure (the “Procedure”).

(c) Dispute resolution proceedings shall be administered by a Dispute Resolution Service Provider (“DRSP”) in accordance with this Procedure and the applicable DRSP Rules that are identified in Article 4(b).

(d) By applying for a new gTLD, an applicant accepts the applicability of this Procedure and the applicable DRSP’s Rules that are identified in Article 4(b); by filing an objection to a new gTLD, an objector accepts the applicability of this Procedure and the applicable DRSP’s Rules that are identified in Article 4(b). The parties cannot derogate from this Procedure without the express approval of ICANN and from the applicable DRSP Rules without the express approval of the relevant DRSP.

Article 2. Definitions

(a) The “Applicant” or “Respondent” is an entity that has applied to ICANN for a new gTLD and that will be the party responding to the Objection.

(b) The “Objector” is one or more persons or entities who have filed an objection against a new gTLD for which an application has been submitted.

(c) The “Panel” is the panel of Experts, comprising one or three “Experts” that has been constituted by a DRSP in accordance with this Procedure and the applicable DRSP Rules that are identified in Article 4(b).

(d) The “Expert Determination” is the decision upon the merits of the Objection that is rendered by a Panel in a proceeding conducted under this Procedure and the applicable DRSP Rules that are identified in Article 4(b).

(e) The grounds upon which an objection to a new gTLD may be filed are set out in full in Module 3 of the Applicant Guidebook. Such grounds are identified in this Procedure, and are based upon the Final Report on the Introduction of New Generic Top-Level Domains, dated 7 August 2007, issued by the ICANN Generic Names Supporting Organization (GNSO), as follows:

(i) “String Confusion Objection” refers to the objection that the string comprising the potential gTLD is confusingly similar to an existing top-level domain or another string applied for in the same round of applications.

(ii) “Existing Legal Rights Objection” refers to the objection that the string comprising the potential new gTLD infringes the existing legal rights of others.
that are recognized or enforceable under generally accepted and internationally recognized principles of law.

(iii) “Limited Public Interest Objection” refers to the objection that the string comprising the potential new gTLD is contrary to generally accepted legal norms relating to morality and public order that are recognized under principles of international law.

(iv) “Community Objection” refers to the objection that there is substantial opposition to the application from a significant portion of the community to which the string may be explicitly or implicitly targeted.

(f) “DRSP Rules” are the rules of procedure of a particular DRSP that have been identified as being applicable to objection proceedings under this Procedure.

Article 3. Dispute Resolution Service Providers

The various categories of disputes shall be administered by the following DRSPs:

(a) String Confusion Objections shall be administered by the International Centre for Dispute Resolution.

(b) Existing Legal Rights Objections shall be administered by the Arbitration and Mediation Center of the World Intellectual Property Organization.

(c) Limited Public Interest Objections shall be administered by the International Centre for Expertise of the International Chamber of Commerce.

(d) Community Objections shall be administered by the International Centre for Expertise of the International Chamber of Commerce.

Article 4. Applicable Rules

(a) All proceedings before the Panel shall be governed by this Procedure and by the DRSP Rules that apply to a particular category of objection. The outcome of the proceedings shall be deemed an Expert Determination, and the members of the Panel shall act as experts.

(b) The applicable DRSP Rules are the following:

(i) For a String Confusion Objection, the applicable DRSP Rules are the ICDR Supplementary Procedures for ICANN’s New gTLD Program.

(ii) For an Existing Legal Rights Objection, the applicable DRSP Rules are the WIPO Rules for New gTLD Dispute Resolution.

(iii) For a Limited Public Interest Objection, the applicable DRSP Rules are the Rules for Expertise of the International Chamber of Commerce (ICC), as supplemented by the ICC as needed.

(iv) For a Community Objection, the applicable DRSP Rules are the Rules for Expertise of the International Chamber of Commerce (ICC), as supplemented by the ICC as needed.

(c) In the event of any discrepancy between this Procedure and the applicable DRSP Rules, this Procedure shall prevail.
(d) The place of the proceedings, if relevant, shall be the location of the DRSP that is administering the proceedings.

(e) In all cases, the Panel shall ensure that the parties are treated with equality, and that each party is given a reasonable opportunity to present its position.

Article 5. Language

(a) The language of all submissions and proceedings under this Procedure shall be English.

(b) Parties may submit supporting evidence in its original language, provided and subject to the authority of the Panel to determine otherwise, that such evidence is accompanied by a certified or otherwise official English translation of all relevant text.

Article 6. Communications and Time Limits

(a) All communications by the Parties with the DRSPs and Panels must be submitted electronically. A Party that wishes to make a submission that is not available in electronic form (e.g., evidentiary models) shall request leave from the Panel to do so, and the Panel, in its sole discretion, shall determine whether to accept the non-electronic submission.

(b) The DRSP, Panel, Applicant, and Objector shall provide copies to one another of all correspondence (apart from confidential correspondence between the Panel and the DRSP and among the Panel) regarding the proceedings.

(c) For the purpose of determining the date of commencement of a time limit, a notice or other communication shall be deemed to have been received on the day that it is transmitted in accordance with paragraphs (a) and (b) of this Article.

(d) For the purpose of determining compliance with a time limit, a notice or other communication shall be deemed to have been sent, made or transmitted if it is dispatched in accordance with paragraphs (a) and (b) of this Article prior to or on the day of the expiration of the time limit.

(e) For the purpose of calculating a period of time under this Procedure, such period shall begin to run on the day following the day when a notice or other communication is received.

(f) Unless otherwise stated, all time periods provided in the Procedure are calculated on the basis of calendar days.

Article 7. Filing of the Objection

(a) A person wishing to object to a new gTLD for which an application has been submitted may file an objection ("Objection"). Any Objection to a proposed new gTLD must be filed before the published closing date for the Objection Filing period.

(b) The Objection must be filed with the appropriate DRSP, using a model form made available by that DRSP, with copies to ICANN and the Applicant.

(c) The electronic addresses for filing Objections (the specific addresses shall be made available once they are created by providers):

(i) A String Confusion Objection must be filed at: [●].
(ii) An Existing Legal Rights Objection must be filed at: [●].

(iii) A Limited Public Interest Objection must be filed at: [●].

(iv) A Community Objection must be filed at: [●].

(d) All Objections must be filed separately:

(i) An Objector who wishes to object to an application on more than one ground must file separate objections with the appropriate DRSP(s).

(ii) An Objector who wishes to object to more than one gTLD must file separate objections to each gTLD with the appropriate DRSP(s).

(e) If an Objection is filed with the wrong DRSP, that DRSP shall promptly notify the Objector of the error and that DRSP shall not process the incorrectly filed Objection. The Objector may then cure the error by filing its Objection with the correct DRSP within seven (7) days of receipt of the error notice, failing which the Objection shall be disregarded. If the Objection is filed with the correct DRSP within seven (7) days of receipt of the error notice but after the lapse of the time for submitting an Objection stipulation by Article 7(a) of this Procedure, it shall be deemed to be within this time limit.

Article 8. Content of the Objection

(a) The Objection shall contain, inter alia, the following information:

(i) The names and contact information (address, telephone number, email address, etc.) of the Objector;

(ii) A statement of the Objector’s basis for standing; and

(iii) A description of the basis for the Objection, including:

(aa) A statement of the ground upon which the Objection is being filed, as stated in Article 2(e) of this Procedure;

(bb) An explanation of the validity of the Objection and why the objection should be upheld.

(b) The substantive portion of the Objection shall be limited to 5,000 words or 20 pages, whichever is less, excluding attachments. The Objector shall also describe and provide copies of any supporting or official documents upon which the Objection is based.

(c) At the same time as the Objection is filed, the Objector shall pay a filing fee in the amount set in accordance with the applicable DRSP Rules and include evidence of such payment in the Objection. In the event that the filing fee is not paid within ten (10) days of the receipt of the Objection by the DRSP, the Objection shall be dismissed without prejudice.

Article 9. Administrative Review of the Objection

(a) The DRSP shall conduct an administrative review of the Objection for the purpose of verifying compliance with Articles 5-8 of this Procedure and the applicable DRSP Rules, and inform the Objector, the Applicant and ICANN of the result of its review within
fourteen (14) days of its receipt of the Objection. The DRSP may extend this time limit for reasons explained in the notification of such extension.

(b) If the DRSP finds that the Objection complies with Articles 5-8 of this Procedure and the applicable DRSP Rules, the DRSP shall confirm that the Objection shall be registered for processing.

(c) If the DRSP finds that the Objection does not comply with Articles 5-8 of this Procedure and the applicable DRSP Rules, the DRSP shall have the discretion to request that any administrative deficiencies in the Objection be corrected within five (5) days. If the deficiencies in the Objection are cured within the specified period but after the lapse of the time limit for submitting an Objection stipulated by Article 7(a) of this Procedure, the Objection shall be deemed to be within this time limit.

(d) If the DRSP finds that the Objection does not comply with Articles 5-8 of this Procedure and the applicable DRSP Rules, and the deficiencies in the Objection are not corrected within the period specified in Article 9(c), the DRSP shall dismiss the Objection and close the proceedings, without prejudice to the Objector’s submission of a new Objection that complies with this Procedure, provided that the Objection is filed within the deadline for filing such Objections. The DRSP’s review of the Objection shall not interrupt the running of the time limit for submitting an Objection stipulated by Article 7(a) of this Procedure.

(e) Immediately upon registering an Objection for processing, pursuant to Article 9(b), the DRSP shall post the following information about the Objection on its website: (i) the proposed string to which the Objection is directed; (ii) the names of the Objector and the Applicant; (ii) the grounds for the Objection; and (iv) the dates of the DRSP’s receipt of the Objection.

Article 10. ICANN’s Dispute Announcement

(a) Within thirty (30) days of the deadline for filing Objections in relation to gTLD applications in a given round, ICANN shall publish a document on its website identifying all of the admissible Objections that have been filed (the “Dispute Announcement”). ICANN shall also directly inform each DRSP of the posting of the Dispute Announcement.

(b) ICANN shall monitor the progress of all proceedings under this Procedure and shall take steps, where appropriate, to coordinate with any DRSP in relation to individual applications for which objections are pending before more than one DRSP.

Article 11. Response to the Objection

(a) Upon receipt of the Dispute Announcement, each DRSP shall promptly send a notice to: (i) each Applicant for a new gTLD to which one or more admissible Objections have been filed with that DRSP; and (ii) the respective Objector(s).

(b) The Applicant shall file a response to each Objection (the “Response”). The Response shall be filed within thirty (30) days of the transmission of the notice by the DRSP pursuant to Article 11(a).

(c) The Response must be filed with the appropriate DRSP, using a model form made available by that DRSP, with copies to ICANN and the Objector.
(d) The Response shall contain, inter alia, the following information:

(i) The names and contact information (address, telephone number, email address, etc.) of the Applicant; and

(ii) A point-by-point response to the statements made in the Objection.

(e) The substantive portion of the Response shall be limited to 5,000 words or 20 pages, whichever is less, excluding attachments. The Applicant shall also describe and provide copies of any supporting or official documents upon which the Response is based.

(f) At the same time as the Response is filed, the Applicant shall pay a filing fee in the amount set and published by the relevant DRSP (which shall be the same as the filing fee paid by the Objector) and include evidence of such payment in the Response. In the event that the filing fee is not paid within ten (10) days of the receipt of the Response by the DRSP, the Applicant shall be deemed to be in default, any Response disregarded and the Objection shall be deemed successful.

(g) If the DRSP finds that the Response does not comply with Articles 11(c) and (d)(1) of this Procedure and the applicable DRSP Rules, the DRSP shall have the discretion to request that any administrative deficiencies in the Response be corrected within five (5) days. If the administrative deficiencies in the Response are cured within the specified period but after the lapse of the time limit for submitting a Response pursuant to this Procedure, the Response shall be deemed to be within this time limit.

(g) If the Applicant fails to file a Response to the Objection within the 30-day time limit, the Applicant shall be deemed to be in default and the Objection shall be deemed successful. No fees paid by the Applicant will be refunded in case of default.

Article 12. Consolidation of Objections

(a) The DRSP is encouraged, whenever possible and practicable, and as may be further stipulated in the applicable DRSP Rules, to consolidate Objections, for example, when more than one Objector has filed an Objection to the same gTLD on the same grounds. The DRSP shall endeavor to decide upon consolidation prior to issuing its notice pursuant to Article 11(a) and, where appropriate, shall inform the parties of the consolidation in that notice.

(b) If the DRSP itself has not decided to consolidate two or more Objections, any Applicant or Objector may propose the consolidation of Objections within seven (7) days of the notice given by the DRSP pursuant to Article 11(a). If, following such a proposal, the DRSP decides to consolidate certain Objections, which decision must be made within 14 days of the notice given by the DRSP pursuant to Article 11(a), the deadline for the Applicant's Response in the consolidated proceeding shall be thirty (30) days from the Applicant's receipt of the DRSP's notice of consolidation.

(c) In deciding whether to consolidate Objections, the DRSP shall weigh the benefits (in terms of time, cost, consistency of decisions, etc.) that may result from the consolidation against the possible prejudice or inconvenience that the consolidation may cause. The DRSP's determination on consolidation shall be final and not subject to appeal.

(d) Objections based upon different grounds, as summarized in Article 2(e), shall not be consolidated.
Article 13. The Panel

(a) The DRSP shall select and appoint the Panel of Expert(s) within thirty (30) days after receiving the Response.

(b) Number and specific qualifications of Expert(s):

(i) There shall be one Expert in proceedings involving a String Confusion Objection.

(ii) There shall be one Expert or, if all of the Parties so agree, three Experts with relevant experience in intellectual property rights disputes in proceedings involving an Existing Legal Rights Objection.

(iii) There shall be three Experts recognized as eminent jurists of international reputation, one of whom shall be designated as the Chair. The Chair shall be of a nationality different from the nationalities of the Applicant and of the Objector, in proceedings involving a Limited Public Interest Objection.

(iv) There shall be one Expert in proceedings involving a Community Objection.

(c) All Experts acting under this Procedure shall be impartial and independent of the parties. The applicable DRSP Rules stipulate the manner by which each Expert shall confirm and maintain their impartiality and independence.

(d) The applicable DRSP Rules stipulate the procedures for challenging an Expert and replacing an Expert.

(e) Unless required by a court of law or authorized in writing by the parties, an Expert shall not act in any capacity whatsoever, in any pending or future proceedings, whether judicial, arbitral or otherwise, relating to the matter referred to expert determination under this Procedure.

Article 14. Costs

(a) Each DRSP shall determine the costs for the proceedings that it administers under this Procedure in accordance with the applicable DRSP Rules. Such costs shall cover the fees and expenses of the members of the Panel, as well as the administrative fees of the DRSP (the “Costs”).

(b) Within ten (10) days of constituting the Panel, the DRSP shall estimate the total Costs and request the Objector and the Applicant/Respondent each to pay in advance the full amount of the Costs to the DRSP. Each party shall make its advance payment of Costs within ten (10) days of receiving the DRSP’s request for payment and submit to the DRSP evidence of such payment. The respective filing fees paid by the Parties shall be credited against the amounts due for this advance payment of Costs.

(c) The DRSP may revise its estimate of the total Costs and request additional advance payments from the parties during the proceedings.

(d) Failure to make an advance payment of Costs:

(i) If the Objector fails to make the advance payment of Costs, its Objection shall be dismissed and no fees that it has paid shall be refunded.
(ii) If the Applicant fails to make the advance payment of Costs, the Objection will be deemed to have been sustained and no fees that the Applicant has paid shall be refunded.

(e) Upon the termination of the proceedings, after the Panel has rendered its Expert Determination, the DRSP shall refund to the prevailing party, as determined by the Panel, its advance payment(s) of Costs.

Article 15. Representation and Assistance

(a) The parties may be represented or assisted by persons of their choice.

(b) Each party or party representative shall communicate the name, contact information and function of such persons to the DRSP and the other party (or parties in case of consolidation).

Article 16. Negotiation and Mediation

(a) The parties are encouraged, but not required, to participate in negotiations and/or mediation at any time throughout the dispute resolution process aimed at settling their dispute amicably.

(b) Each DRSP shall be able to propose, if requested by the parties, a person who could assist the parties as mediator.

(c) A person who acts as mediator for the parties shall not serve as an Expert in a dispute between the parties under this Procedure or any other proceeding under this Procedure involving the same gTLD.

(d) The conduct of negotiations or mediation shall not, ipso facto, be the basis for a suspension of the dispute resolution proceedings or the extension of any deadline under this Procedure. Upon the joint request of the parties, the DRSP or (after it has been constituted) the Panel may grant the extension of a deadline or the suspension of the proceedings. Absent exceptional circumstances, such extension or suspension shall not exceed thirty (30) days and shall not delay the administration of any other Objection.

(e) If, during negotiations and/or mediation, the parties agree on a settlement of the matter referred to the DRSP under this Procedure, the parties shall inform the DRSP, which shall terminate the proceedings, subject to the parties’ payment obligation under this Procedure having been satisfied, and inform ICANN and the parties accordingly.

Article 17. Additional Written Submissions

(a) The Panel may decide whether the parties shall submit any written statements in addition to the Objection and the Response, and it shall fix time limits for such submissions.

(b) The time limits fixed by the Panel for additional written submissions shall not exceed thirty (30) days, unless the Panel, having consulted the DRSP, determines that exceptional circumstances justify a longer time limit.
Article 18. Evidence

In order to achieve the goal of resolving disputes over new gTLDs rapidly and at reasonable cost, procedures for the production of documents shall be limited. In exceptional cases, the Panel may require a party to provide additional evidence.

Article 19. Hearings

(a) Disputes under this Procedure and the applicable DRSP Rules will usually be resolved without a hearing.

(b) The Panel may decide, on its own initiative or at the request of a party, to hold a hearing only in extraordinary circumstances.

(c) In the event that the Panel decides to hold a hearing:

   (i) The Panel shall decide how and where the hearing shall be conducted.

   (ii) In order to expedite the proceedings and minimize costs, the hearing shall be conducted by videoconference if possible.

   (iii) The hearing shall be limited to one day, unless the Panel decides, in exceptional circumstances, that more than one day is required for the hearing.

   (iv) The Panel shall decide whether the hearing will be open to the public or conducted in private.

Article 20. Standards

(a) For each category of Objection identified in Article 2(e), the Panel shall apply the standards that have been defined by ICANN.

(b) In addition, the Panel may refer to and base its findings upon the statements and documents submitted and any rules or principles that it determines to be applicable.

(c) The Objector bears the burden of proving that its Objection should be sustained in accordance with the applicable standards.

Article 21. The Expert Determination

(a) The DRSP and the Panel shall make reasonable efforts to ensure that the Expert Determination is rendered within forty-five (45) days of the constitution of the Panel. In specific circumstances such as consolidated cases and in consultation with the DRSP, if significant additional documentation is requested by the Panel, a brief extension may be allowed.

(b) The Panel shall submit its Expert Determination in draft form to the DRSP’s scrutiny as to form before it is signed, unless such scrutiny is specifically excluded by the applicable DRSP Rules. The modifications proposed by the DRSP to the Panel, if any, shall address only the form of the Expert Determination. The signed Expert Determination shall be communicated to the DRSP, which in turn will communicate that Expert Determination to the Parties and ICANN.

(c) When the Panel comprises three Experts, the Expert Determination shall be made by a majority of the Experts.
(d) The Expert Determination shall be in writing, shall identify the prevailing party and shall state the reasons upon which it is based. The remedies available to an Applicant or an Objector pursuant to any proceeding before a Panel shall be limited to the success or dismissal of an Objection and to the refund by the DRSP to the prevailing party, as determined by the Panel in its Expert Determination, of its advance payment(s) of Costs pursuant to Article 14(e) of this Procedure and any relevant provisions of the applicable DRSP Rules.

(e) The Expert Determination shall state the date when it is made, and it shall be signed by the Expert(s). If any Expert fails to sign the Expert Determination, it shall be accompanied by a statement of the reason for the absence of such signature.

(f) In addition to providing electronic copies of its Expert Determination, the Panel shall provide a signed hard copy of the Expert Determination to the DRSP, unless the DRSP Rules provide for otherwise.

(g) Unless the Panel decides otherwise, the Expert Determination shall be published in full on the DRSP’s website.

Article 22. Exclusion of Liability

In addition to any exclusion of liability stipulated by the applicable DRSP Rules, neither the Expert(s), nor the DRSP and its employees, nor ICANN and its Board members, employees and consultants shall be liable to any person for any act or omission in connection with any proceeding conducted under this Procedure.

Article 23. Modification of the Procedure

(a) ICANN may from time to time, in accordance with its Bylaws, modify this Procedure.

(b) The version of this Procedure that is applicable to a dispute resolution proceeding is the version that was in effect on the day when the relevant application for a new gTLD is submitted.
Module 4

String Contention Procedures

This module describes situations in which contention over applied-for gTLD strings occurs, and the methods available to applicants for resolving such contention cases.

4.1 String Contention

String contention occurs when either:

1. Two or more applicants for an identical gTLD string successfully complete all previous stages of the evaluation and dispute resolution processes; or

2. Two or more applicants for similar gTLD strings successfully complete all previous stages of the evaluation and dispute resolution processes, and the similarity of the strings is identified as creating a probability of user confusion if more than one of the strings is delegated.

ICANN will not approve applications for proposed gTLD strings that are identical or that would result in user confusion, called contending strings. If either situation above occurs, such applications will proceed to contention resolution through either community priority evaluation, in certain cases, or through an auction. Both processes are described in this module. A group of applications for contending strings is referred to as a contention set.

(In this Applicant Guidebook, “similar” means strings so similar that they create a probability of user confusion if more than one of the strings is delegated into the root zone.)

4.1.1 Identification of Contention Sets

Contention sets are groups of applications containing identical or similar applied-for gTLD strings. Contention sets are identified during Initial Evaluation, following review of all applied-for gTLD strings. ICANN will publish preliminary contention sets once the String Similarity review is completed, and will update the contention sets as necessary during the evaluation and dispute resolution stages.)
Applications for identical gTLD strings will be automatically assigned to a contention set. For example, if Applicant A and Applicant B both apply for .TLDSTRING, they will be identified as being in a contention set. Such testing for identical strings also takes into consideration the code point variants listed in any relevant IDN table. That is, two or more applicants whose applied-for strings or designated variants are variant strings according to an IDN table submitted to ICANN would be considered in direct contention with one another. For example, if one applicant applies for string A and another applies for string B, and strings A and B are variant TLD strings as defined in Module 1, then the two applications are in direct contention.

The String Similarity Panel will also review the entire pool of applied-for strings to determine whether the strings proposed in any two or more applications are so similar that they would create a probability of user confusion if allowed to coexist in the DNS. The panel will make such a determination for each pair of applied-for gTLD strings. The outcome of the String Similarity review described in Module 2 is the identification of contention sets among applications that have direct or indirect contention relationships with one another.

Two strings are in **direct contention** if they are identical or similar to one another. More than two applicants might be represented in a direct contention situation: if four different applicants applied for the same gTLD string, they would all be in direct contention with one another.

Two strings are in **indirect contention** if they are both in direct contention with a third string, but not with one another. The example that follows explains direct and indirect contention in greater detail.

In Figure 4-1, Strings A and B are an example of direct contention. Strings C and G are an example of indirect contention. C and G both contend with B, but not with one another. The figure as a whole is one contention set. A contention set consists of all applications that are linked by string contention to one another, directly or indirectly.
Figure 4-1 – This diagram represents one contention set, featuring both directly and indirectly contending strings.

While preliminary contention sets are determined during Initial Evaluation, the final configuration of the contention sets can only be established once the evaluation and dispute resolution process stages have concluded. This is because any application excluded through those processes might modify a contention set identified earlier.

A contention set may be augmented, split into two sets, or eliminated altogether as a result of an Extended Evaluation or dispute resolution proceeding. The composition of a contention set may also be modified as some applications may be voluntarily withdrawn throughout the process.

Refer to Figure 4-2: In contention set 1, applications D and G are eliminated. Application A is the only remaining application, so there is no contention left to resolve.

In contention set 2, all applications successfully complete Extended Evaluation and Dispute Resolution, so the original contention set remains to be resolved.

In contention set 3, application F is eliminated. Since application F was in direct contention with E and J, but E and J are not in contention with one other, the original contention set splits into two sets: one containing E and K in direct contention, and one containing I and J.
Figure 4-2 – Resolution of string contention cannot begin until all applicants within a contention set have completed all applicable previous stages.

The remaining contention cases must then be resolved through community priority evaluation or by other means, depending on the circumstances. In the string contention resolution stage, ICANN addresses each contention set to achieve an unambiguous resolution.

As described elsewhere in this guidebook, cases of contention might be resolved by community priority evaluation or an agreement among the parties. Absent that, the last-resort contention resolution mechanism will be an auction.

4.1.2 Impact of String Confusion Dispute Resolution Proceedings on Contention Sets

If an applicant files a string confusion objection against another application (refer to Module 3), and the panel finds that user confusion is probable (that is, finds in favor of the objector), the two applications will be placed in direct contention with each other. Thus, the outcome of a dispute resolution proceeding based on a string confusion objection would be a new contention set structure for the relevant applications, augmenting the original contention set.

If an applicant files a string confusion objection against another application, and the panel finds that string
confusion does not exist (that is, finds in favor of the responding applicant), the two applications will not be considered in direct contention with one another.

A dispute resolution outcome in the case of a string confusion objection filed by another applicant will not result in removal of an application from a previously established contention set.

4.1.3 Self-Resolution of String Contention

Applicants that are identified as being in contention are encouraged to reach a settlement or agreement among themselves that resolves the contention. This may occur at any stage of the process, once ICANN publicly posts the applications received and the preliminary contention sets on its website.

Applicants may resolve string contention in a manner whereby one or more applicants withdraw their applications. An applicant may not resolve string contention by selecting a new string or by replacing itself with a joint venture. It is understood that applicants may seek to establish joint ventures in their efforts to resolve string contention. However, material changes in applications (for example, combinations of applicants to resolve contention) will require re-evaluation. This might require additional fees or evaluation in a subsequent application round. Applicants are encouraged to resolve contention by combining in a way that does not materially affect the remaining application. Accordingly, new joint ventures must take place in a manner that does not materially change the application, to avoid being subject to re-evaluation.

4.1.4 Possible Contention Resolution Outcomes

An application that has successfully completed all previous stages and is no longer part of a contention set due to changes in the composition of the contention set (as described in subsection 4.1.1) or self-resolution by applicants in the contention set (as described in subsection 4.1.3) may proceed to the next stage.

An application that prevails in a contention resolution procedure, either community priority evaluation or auction, may proceed to the next stage.
In some cases, an applicant who is not the outright winner of a string contention resolution process can still proceed. This situation is explained in the following paragraphs.

If the strings within a given contention set are all identical, the applications are in direct contention with each other and there can only be one winner that proceeds to the next step.

However, where there are both direct and indirect contention situations within a set, more than one string may survive the resolution.

For example, consider a case where string A is in contention with B, and B is in contention with C, but C is not in contention with A. If A wins the contention resolution procedure, B is eliminated but C can proceed since C is not in direct contention with the winner and both strings can coexist in the DNS without risk for confusion.

### 4.2 Community Priority Evaluation

Community priority evaluation will only occur if a community-based applicant selects this option. Community priority evaluation can begin once all applications in the contention set have completed all previous stages of the process.

The community priority evaluation is an independent analysis. Scores received in the applicant reviews are not carried forward to the community priority evaluation. Each application participating in the community priority evaluation begins with a score of zero.

#### 4.2.1 Eligibility for Community Priority Evaluation

As described in subsection 1.2.3 of Module 1, all applicants are required to identify whether their application type is:

- Community-based; or
- Standard.

Applicants designating their applications as community-based are also asked to respond to a set of questions in the application form to provide relevant information if a community priority evaluation occurs.

Only community-based applicants are eligible to participate in a community priority evaluation.
At the start of the contention resolution stage, all community-based applicants within remaining contention sets will be notified of the opportunity to opt for a community priority evaluation via submission of a deposit by a specified date. Only those applications for which a deposit has been received by the deadline will be scored in the community priority evaluation. Following the evaluation, the deposit will be refunded to applicants that score 14 or higher.

Before the community priority evaluation begins, the applicants who have elected to participate may be asked to provide additional information relevant to the community priority evaluation.

4.2.2 Community Priority Evaluation Procedure

Community priority evaluations for each eligible contention set will be performed by a community priority panel appointed by ICANN to review these applications. The panel’s role is to determine whether any of the community-based applications fulfills the community priority criteria. Standard applicants within the contention set, if any, will not participate in the community priority evaluation.

If a single community-based application is found to meet the community priority criteria (see subsection 4.2.3 below), that applicant will be declared to prevail in the community priority evaluation and may proceed. If more than one community-based application is found to meet the criteria, the remaining contention between them will be resolved as follows:

- In the case where the applications are in indirect contention with one another (see subsection 4.1.1), they will both be allowed to proceed to the next stage. In this case, applications that are in direct contention with any of these community-based applications will be eliminated.

- In the case where the applications are in direct contention with one another, these applicants will proceed to an auction. If all parties agree and present a joint request, ICANN may postpone the auction for a three-month period while the parties attempt to reach a settlement before proceeding to auction. This is a one-time option; ICANN will grant no more than one such request for each set of contending applications.
If none of the community-based applications are found to meet the criteria, then all of the parties in the contention set (both standard and community-based applicants) will proceed to an auction.

Results of each community priority evaluation will be posted when completed.

Applicants who are eliminated as a result of a community priority evaluation are eligible for a partial refund of the gTLD evaluation fee (see Module 1).

4.2.3 Community Priority Evaluation Criteria

The Community Priority Panel will review and score the one or more community-based applications having elected the community priority evaluation against four criteria as listed below.

The scoring process is conceived to identify qualified community-based applications, while preventing both “false positives” (awarding undue priority to an application that refers to a “community” construed merely to get a sought-after generic word as a gTLD string) and “false negatives” (not awarding priority to a qualified community application). This calls for a holistic approach, taking multiple criteria into account, as reflected in the process. The scoring will be performed by a panel and be based on information provided in the application plus other relevant information available (such as public information regarding the community represented). The panel may also perform independent research, if deemed necessary to reach informed scoring decisions.

It should be noted that a qualified community application eliminates all directly contending standard applications, regardless of how well qualified the latter may be. This is a fundamental reason for very stringent requirements for qualification of a community-based application, as embodied in the criteria below. Accordingly, a finding by the panel that an application does not meet the scoring threshold to prevail in a community priority evaluation is not necessarily an indication the community itself is in some way inadequate or invalid.

The sequence of the criteria reflects the order in which they will be assessed by the panel. The utmost care has been taken to avoid any “double-counting” - any negative aspect found in assessing an application for one criterion
should only be counted there and should not affect the assessment for other criteria.

An application must score at least 14 points to prevail in a community priority evaluation. The outcome will be determined according to the procedure described in subsection 4.2.2.

**Criterion #1: Community Establishment (0-4 points)**

A maximum of 4 points is possible on the Community Establishment criterion:

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<tr>
<td></td>
<td>Community Establishment</td>
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<tr>
<td>High</td>
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<td>Low</td>
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As measured by:

A. **Delineation (2)**

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<tr>
<td></td>
<td>Clearly delineated, organized, and pre-existing community.</td>
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<tr>
<td></td>
<td>Clearly delineated and pre-existing community, but not fulfilling the requirements for a score of 2.</td>
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<td></td>
<td>Insufficient delineation and pre-existence for a score of 1.</td>
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B. **Extension (2)**

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<td>Community of considerable size and longevity.</td>
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<td></td>
<td>Community of either considerable size or longevity, but not fulfilling the requirements for a score of 2.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Community of neither considerable size nor longevity.</td>
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This section relates to the community as explicitly identified and defined according to statements in the application. (The implicit reach of the applied-for string is not
considered here, but taken into account when scoring Criterion #2, "Nexus between Proposed String and Community."

**Criterion 1 Definitions**

- **“Community”** - Usage of the expression “community” has evolved considerably from its Latin origin - “communitas” meaning “fellowship” - while still implying more of cohesion than a mere commonality of interest. Notably, as “community” is used throughout the application, there should be: (a) an awareness and recognition of a community among its members; (b) some understanding of the community’s existence prior to September 2007 (when the new gTLD policy recommendations were completed); and (c) extended tenure or longevity—non-transience—into the future.

- **“Delineation”** relates to the membership of a community, where a clear and straightforward membership definition scores high, while an unclear, dispersed or unbound definition scores low.

- **“Pre-existing”** means that a community has been active as such since before the new gTLD policy recommendations were completed in September 2007.

- **“Organized”** implies that there is at least one entity mainly dedicated to the community, with documented evidence of community activities.

- **“Extension”** relates to the dimensions of the community, regarding its number of members, geographical reach, and foreseeable activity lifetime, as further explained in the following.

- **“Size”** relates both to the number of members and the geographical reach of the community, and will be scored depending on the context rather than on absolute numbers - a geographic location community may count millions of members in a limited location, a language community may have a million members with some spread over the globe, a community of service providers may have “only” some hundred members although well spread over the globe, just to mention some examples - all these can be regarded as of “considerable size.”
- "Longevity" means that the pursuits of a community are of a lasting, non-transient nature.

**Criterion 1 Guidelines**

With respect to “Delineation” and “Extension,” it should be noted that a community can consist of legal entities (for example, an association of suppliers of a particular service), of individuals (for example, a language community) or of a logical alliance of communities (for example, an international federation of national communities of a similar nature). All are viable as such, provided the requisite awareness and recognition of the community is at hand among the members. Otherwise the application would be seen as not relating to a real community and score 0 on both “Delineation” and “Extension.”

With respect to “Delineation,” if an application satisfactorily demonstrates all three relevant parameters (delineation, pre-existing and organized), then it scores a 2.

With respect to “Extension,” if an application satisfactorily demonstrates both community size and longevity, it scores a 2.

**Criterion #2: Nexus between Proposed String and Community (0-4 points)**

A maximum of 4 points is possible on the Nexus criterion:

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<tr>
<td><strong>Nexus between String &amp; Community</strong></td>
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<tr>
<td>High</td>
<td>Low</td>
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As measured by:

A. **Nexus (3)**

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<tbody>
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<td>The string matches the name of the community or is a well-known short-form or abbreviation of the community</td>
<td>String identifies the community, but does not qualify for a score of 3.</td>
<td>String nexus does not fulfill the requirements for a score of 2.</td>
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</table>
B. **Uniqueness (1)**

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<td>2</td>
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String has no other significant meaning beyond identifying the community described in the application.

String does not fulfill the requirement for a score of 1.

This section evaluates the relevance of the string to the specific community that it claims to represent.

**Criterion 2 Definitions**

- "Name" of the community means the established name by which the community is commonly known by others. It may be, but does not need to be, the name of an organization dedicated to the community.

- "Identify" means that the applied for string closely describes the community or the community members, without over-reaching substantially beyond the community.

**Criterion 2 Guidelines**

With respect to "Nexus," for a score of 3, the essential aspect is that the applied-for string is commonly known by others as the identification / name of the community.

With respect to "Nexus," for a score of 2, the applied-for string should closely describe the community or the community members, without over-reaching substantially beyond the community. As an example, a string could qualify for a score of 2 if it is a noun that the typical community member would naturally be called in the context. If the string appears excessively broad (such as, for example, a globally well-known but local tennis club applying for "TENNIS") then it would not qualify for a 2.
With respect to “Uniqueness,” “significant meaning” relates to the public in general, with consideration of the community language context added.

"Uniqueness" will be scored both with regard to the community context and from a general point of view. For example, a string for a particular geographic location community may seem unique from a general perspective, but would not score a 1 for uniqueness if it carries another significant meaning in the common language used in the relevant community location. The phrasing "...beyond identifying the community" in the score of 1 for "uniqueness" implies a requirement that the string does identify the community, i.e. scores 2 or 3 for "Nexus," in order to be eligible for a score of 1 for "Uniqueness."

It should be noted that "Uniqueness" is only about the meaning of the string - since the evaluation takes place to resolve contention there will obviously be other applications, community-based and/or standard, with identical or confusingly similar strings in the contention set to resolve, so the string will clearly not be "unique" in the sense of "alone."

**Criterion #3: Registration Policies (0-4 points)**

A maximum of 4 points is possible on the Registration Policies criterion:

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<tr>
<td>Registration Policies</td>
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High                                                       Low

As measured by:

A. **Eligibility (1)**

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- Eligibility restricted to community members.
- Largely unrestricted approach to eligibility.
This section evaluates the applicant’s registration policies as indicated in the application. Registration policies are the conditions that the future registry will set for prospective registrants, i.e. those desiring to register second-level domain names under the registry.
Criterion 3 Definitions

- "Eligibility" means the qualifications that entities or individuals must have in order to be allowed as registrants by the registry.

- "Name selection" means the conditions that must be fulfilled for any second-level domain name to be deemed acceptable by the registry.

- "Content and use" means the restrictions stipulated by the registry as to the content provided in and the use of any second-level domain name in the registry.

- "Enforcement" means the tools and provisions set out by the registry to prevent and remedy any breaches of the conditions by registrants.

Criterion 3 Guidelines

With respect to "Eligibility," the limitation to community "members" can invoke a formal membership but can also be satisfied in other ways, depending on the structure and orientation of the community at hand. For example, for a geographic location community TLD, a limitation to members of the community can be achieved by requiring that the registrant's physical address is within the boundaries of the location.

With respect to "Name selection," "Content and use," and "Enforcement," scoring of applications against these sub-criteria will be done from a holistic perspective, with due regard for the particularities of the community explicitly addressed. For example, an application proposing a TLD for a language community may feature strict rules imposing this language for name selection as well as for content and use, scoring 1 on both B and C above. It could nevertheless include forbearance in the enforcement measures for tutorial sites assisting those wishing to learn the language and still score 1 on D. More restrictions do not automatically result in a higher score. The restrictions and corresponding enforcement mechanisms proposed by the applicant should show an alignment with the community-based purpose of the TLD and demonstrate continuing accountability to the community named in the application.
Criterion #4: Community Endorsement (0-4 points)

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<tr>
<td>Community Endorsement</td>
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As measured by:

A. Support (2)

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<tbody>
<tr>
<td>Applicant is, or has documented support from, the recognized community institution(s)/member organization(s) or has otherwise documented authority to represent the community.</td>
<td>Documented support from at least one group with relevance, but insufficient support for a score of 2.</td>
<td>Insufficient proof of support for a score of 1.</td>
</tr>
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</table>

B. Opposition (2)

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<tbody>
<tr>
<td>No opposition of relevance.</td>
<td>Relevant opposition from one group of non-negligible size.</td>
<td>Relevant opposition from two or more groups of non-negligible size.</td>
</tr>
</tbody>
</table>

This section evaluates community support and/or opposition to the application. Support and opposition will be scored in relation to the communities explicitly addressed as stated in the application, with due regard for the communities implicitly addressed by the string.

Criterion 4 Definitions

- "Recognized" means the institution(s)/organization(s) that, through membership or otherwise, are clearly recognized by
the community members as representative of the community.

- "Relevance" and "relevant" refer to the communities explicitly and implicitly addressed. This means that opposition from communities not identified in the application but with an association to the applied-for string would be considered relevant.

**Criterion 4 Guidelines**

With respect to "Support," it follows that documented support from, for example, the only national association relevant to a particular community on a national level would score a 2 if the string is clearly oriented to that national level, but only a 1 if the string implicitly addresses similar communities in other nations.

Also with respect to "Support," the plurals in brackets for a score of 2, relate to cases of multiple institutions/organizations. In such cases there must be documented support from institutions/organizations representing a majority of the overall community addressed in order to score 2.

The applicant will score a 1 for "Support" if it does not have support from the majority of the recognized community institutions/member organizations, or does not provide full documentation that it has authority to represent the community with its application. A 0 will be scored on "Support" if the applicant fails to provide documentation showing support from recognized community institutions/community member organizations, or does not provide documentation showing that it has the authority to represent the community. It should be noted, however, that documented support from groups or communities that may be seen as implicitly addressed but have completely different orientations compared to the applicant community will not be required for a score of 2 regarding support.

To be taken into account as relevant support, such documentation must contain a description of the process and rationale used in arriving at the expression of support. Consideration of support is not based merely on the number of comments or expressions of support received.

When scoring "Opposition," previous objections to the application as well as public comments during the same application round will be taken into account and assessed.
in this context. There will be no presumption that such objections or comments would prevent a score of 2 or lead to any particular score for “Opposition.” To be taken into account as relevant opposition, such objections or comments must be of a reasoned nature. Sources of opposition that are clearly spurious, unsubstantiated, made for a purpose incompatible with competition objectives, or filed for the purpose of obstruction will not be considered relevant.

4.3 **Auction: Mechanism of Last Resort**

It is expected that most cases of contention will be resolved by the community priority evaluation, or through voluntary agreement among the involved applicants. Auction is a tie-breaker method for resolving string contention among the applications within a contention set, if the contention has not been resolved by other means.

An auction will not take place to resolve contention in the case where the contending applications are for geographic names (as defined in Module 2). In this case, the applications will be suspended pending resolution by the applicants.

An auction will take place, where contention has not already been resolved, in the case where an application for a geographic name is in a contention set with applications for similar strings that have not been identified as geographic names.

In practice, ICANN expects that most contention cases will be resolved through other means before reaching the auction stage. However, there is a possibility that significant funding will accrue to ICANN as a result of one or more auctions.¹

¹ The purpose of an auction is to resolve contention in a clear, objective manner. It is planned that costs of the new gTLD program will offset by fees, so any funds coming from a last resort contention resolution mechanism such as auctions would result (after paying for the auction process) in additional funding. Any proceeds from auctions will be reserved and earmarked until the uses of funds are determined. Funds must be used in a manner that supports directly ICANN’s Mission and Core Values and also allows ICANN to maintain its not for profit status.

Possible uses of auction funds include formation of a foundation with a clear mission and a transparent way to allocate funds to projects that are of interest to the greater Internet community, such as grants to support new gTLD applications or registry operators from communities in subsequent gTLD rounds, the creation of an ICANN-administered/community-based fund for specific projects for the benefit of the Internet community, the creation of a registry continuity fund for the protection of registrants (ensuring that funds would be in place to support the operation of a gTLD registry until a successor could be found), or establishment of a security fund to expand use of secure protocols, conduct research, and support standards development organizations in accordance with ICANN’s security and stability mission.
4.3.1 Auction Procedures

An auction of two or more applications within a contention set is conducted as follows. The auctioneer successively increases the prices associated with applications within the contention set, and the respective applicants indicate their willingness to pay these prices. As the prices rise, applicants will successively choose to exit from the auction. When a sufficient number of applications have been eliminated so that no direct contentions remain (i.e., the remaining applications are no longer in contention with one another and all the relevant strings can be delegated as TLDs), the auction will be deemed to conclude. At the auction’s conclusion, the applicants with remaining applications will pay the resulting prices and proceed toward delegation. This procedure is referred to as an “ascending-clock auction.”

This section provides applicants an informal introduction to the practicalities of participation in an ascending-clock auction. It is intended only as a general introduction and is only preliminary. The detailed set of Auction Rules will be available prior to the commencement of any auction proceedings. If any conflict arises between this module and the auction rules, the auction rules will prevail.

For simplicity, this section will describe the situation where a contention set consists of two or more applications for identical strings.

All auctions will be conducted over the Internet, with participants placing their bids remotely using a web-based software system designed especially for auction. The auction software system will be compatible with current versions of most prevalent browsers, and will not require the local installation of any additional software.

Auction participants (“bidders”) will receive instructions for access to the online auction site. Access to the site will be password-protected and bids will be encrypted through SSL. If a bidder temporarily loses connection to the Internet, that bidder may be permitted to submit its bids in a given auction round by fax, according to procedures described.
in the auction rules. The auctions will generally be conducted to conclude quickly, ideally in a single day.

The auction will be carried out in a series of auction rounds, as illustrated in Figure 4-3. The sequence of events is as follows:

1. For each auction round, the auctioneer will announce in advance: (1) the start-of-round price, (2) the end-of-round price, and (3) the starting and ending times of the auction round. In the first auction round, the start-of-round price for all bidders in the auction will be USD 0. In later auction rounds, the start-of-round price will be its end-of-round price from the previous auction round.

   ![Figure 4-3 – Sequence of events during an ascending-clock auction.](image)

2. During each auction round, bidders will be required to submit a bid or bids representing their willingness to pay within the range of intermediate prices between the start-of-round and end-of-round prices. In this way a bidder indicates its willingness to stay in the auction at all prices through and including the end-of-auction round price, or its wish to exit the auction at a price less than the end-of-auction round price, called the exit bid.

3. Exit is irrevocable. If a bidder exited the auction in a previous auction round, the bidder is not permitted to re-enter in the current auction round.
4. Bidders may submit their bid or bids at any time during the auction round.

5. Only bids that comply with all aspects of the auction rules will be considered valid. If more than one valid bid is submitted by a given bidder within the time limit of the auction round, the auctioneer will treat the last valid submitted bid as the actual bid.

6. At the end of each auction round, bids become the bidders’ legally-binding offers to secure the relevant gTLD strings at prices up to the respective bid amounts, subject to closure of the auction in accordance with the auction rules. In later auction rounds, bids may be used to exit from the auction at subsequent higher prices.

7. After each auction round, the auctioneer will disclose the aggregate number of bidders remaining in the auction at the end-of-round prices for the auction round, and will announce the prices and times for the next auction round.

- Each bid should consist of a single price associated with the application, and such price must be greater than or equal to the start-of-round price.

- If the bid amount is strictly less than the end-of-round price, then the bid is treated as an exit bid at the specified amount, and it signifies the bidder’s binding commitment to pay up to the bid amount if its application is approved.

- If the bid amount is greater than or equal to the end-of-round price, then the bid signifies that the bidder wishes to remain in the auction at all prices in the current auction round, and it signifies the bidder’s binding commitment to pay up to the end-of-round price if its application is approved. Following such bid, the application cannot be eliminated within the current auction round.

- To the extent that the bid amount exceeds the end-of-round price, then the bid is also treated as a proxy bid to be carried forward to the next auction round. The bidder will be permitted to change the proxy bid amount in the next auction round, and the amount of the proxy bid will not constrain the bidder’s ability to submit any valid bid amount in the next auction round.
• No bidder is permitted to submit a bid for any application for which an exit bid was received in a prior auction round. That is, once an application has exited the auction, it may not return.

• If no valid bid is submitted within a given auction round for an application that remains in the auction, then the bid amount is taken to be the amount of the proxy bid, if any, carried forward from the previous auction round or, if none, the bid is taken to be an exit bid at the start-of-round price for the current auction round.

8. This process continues, with the auctioneer increasing the price range for each given TLD string in each auction round, until there is one remaining bidder at the end-of-round price. After an auction round in which this condition is satisfied, the auction concludes and the auctioneer determines the clearing price. The last remaining application is deemed the successful application, and the associated bidder is obligated to pay the clearing price.

Figure 4-4 illustrates how an auction for five contending applications might progress.

Figure 4-4 – Example of an auction for five mutually-contending applications.
Before the first auction round, the auctioneer announces the end-of-round price $P_1$.

During Auction round 1, a bid is submitted for each application. In Figure 4-4, all five bidders submit bids of at least $P_1$. Since the aggregate demand exceeds one, the auction proceeds to Auction round 2. The auctioneer discloses that five contending applications remained at $P_1$ and announces the end-of-round price $P_2$.

During Auction round 2, a bid is submitted for each application. In Figure 4-4, all five bidders submit bids of at least $P_2$. The auctioneer discloses that five contending applications remained at $P_2$ and announces the end-of-round price $P_3$.

During Auction round 3, one of the bidders submits an exit bid at slightly below $P_3$, while the other four bidders submit bids of at least $P_3$. The auctioneer discloses that four contending applications remained at $P_3$ and announces the end-of-round price $P_4$.

During Auction round 4, one of the bidders submits an exit bid midway between $P_3$ and $P_4$, while the other three remaining bidders submit bids of at least $P_4$. The auctioneer discloses that three contending applications remained at $P_4$ and announces the end-of-auction round price $P_5$.

During Auction round 5, one of the bidders submits an exit bid at slightly above $P_5$, and one of the bidders submits an exit bid at $P_5$ midway between $P_4$ and $P_5$. The final bidder submits a bid greater than $P_5$. Since the aggregate demand at $P_5$ does not exceed one, the auction concludes in Auction round 5. The application associated with the highest bid in Auction round 5 is deemed the successful application. The clearing price is $P_5$, as this is the lowest price at which aggregate demand can be met.

To the extent possible, auctions to resolve multiple string contention situations will be conducted simultaneously.

### Currency

For bids to be comparable, all bids in the auction will be submitted in any integer (whole) number of US dollars.
4.3.1.2 Fees

A bidding deposit will be required of applicants participating in the auction, in an amount to be determined. The bidding deposit must be transmitted by wire transfer to a specified bank account specified by ICANN or its auction provider at a major international bank, to be received in advance of the auction date. The amount of the deposit will determine a bidding limit for each bidder: the bidding deposit will equal 10% of the bidding limit; and the bidder will not be permitted to submit any bid in excess of its bidding limit.

In order to avoid the need for bidders to pre-commit to a particular bidding limit, bidders may be given the option of making a specified deposit that will provide them with unlimited bidding authority for a given application. The amount of the deposit required for unlimited bidding authority will depend on the particular contention set and will be based on an assessment of the possible final prices within the auction.

All deposits from non-defaulting losing bidders will be returned following the close of the auction.

4.3.2 Winning Bid Payments

Any applicant that participates in an auction will be required to sign a bidder agreement that acknowledges its rights and responsibilities in the auction, including that its bids are legally binding commitments to pay the amount bid if it wins (i.e., if its application is approved), and to enter into the prescribed registry agreement with ICANN—together with a specified penalty for defaulting on payment of its winning bid or failing to enter into the required registry agreement.

The winning bidder in any auction will be required to pay the full amount of the final price within 20 business days of the end of the auction. Payment is to be made by wire transfer to the same international bank account as the bidding deposit, and the applicant’s bidding deposit will be credited toward the final price.

In the event that a bidder anticipates that it would require a longer payment period than 20 business days due to verifiable government-imposed currency restrictions, the bidder may advise ICANN well in advance of the auction and ICANN will consider applying a longer payment period to all bidders within the same contention set.
Any winning bidder for whom the full amount of the final price is not received within 20 business days of the end of an auction is subject to being declared in default. At their sole discretion, ICANN and its auction provider may delay the declaration of default for a brief period, but only if they are convinced that receipt of full payment is imminent.

Any winning bidder for whom the full amount of the final price is received within 20 business days of the end of an auction retains the obligation to execute the required registry agreement within 90 days of the end of auction. Such winning bidder who does not execute the agreement within 90 days of the end of the auction is subject to being declared in default. At their sole discretion, ICANN and its auction provider may delay the declaration of default for a brief period, but only if they are convinced that execution of the registry agreement is imminent.

4.3.3 Post-Default Procedures

Once declared in default, any winning bidder is subject to immediate forfeiture of its position in the auction and assessment of default penalties. After a winning bidder is declared in default, the remaining bidders will receive an offer to have their applications accepted, one at a time, in descending order of their exit bids. In this way, the next bidder would be declared the winner subject to payment of its last bid price. The same default procedures and penalties are in place for any runner-up bidder receiving such an offer.

Each bidder that is offered the relevant gTLD will be given a specified period—typically, four business days—to respond as to whether it wants the gTLD. A bidder who responds in the affirmative will have 20 business days to submit its full payment. A bidder who declines such an offer cannot revert on that statement, has no further obligations in this context and will not be considered in default.

The penalty for defaulting on a winning bid will equal 10% of the defaulting bid. Default penalties will be charged against any defaulting applicant’s bidding deposit before the associated bidding deposit is returned.

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2 If bidders were given the option of making a specified deposit that provided them with unlimited bidding authority for a given application and if the winning bidder utilized this option, then the penalty for defaulting on a winning bid will be the lesser of the following: (1) 10% of the defaulting bid, or (2) the specified deposit amount that provided the bidder with unlimited bidding authority.
4.4 Contention Resolution and Contract Execution

An applicant that has been declared the winner of a contention resolution process will proceed by entering into the contract execution step. (Refer to section 5.1 of Module 5.)

If a winner of the contention resolution procedure has not executed a contract within 90 calendar days of the decision, ICANN has the right to deny that application and extend an offer to the runner-up applicant, if any, to proceed with its application. For example, in an auction, another applicant who would be considered the runner-up applicant might proceed toward delegation. This offer is at ICANN’s option only. The runner-up applicant in a contention resolution process has no automatic right to an applied-for gTLD string if the first place winner does not execute a contract within a specified time. If the winning applicant can demonstrate that it is working diligently and in good faith toward successful completion of the steps necessary for entry into the registry agreement, ICANN may extend the 90-day period at its discretion. Runner-up applicants have no claim of priority over the winning application, even after what might be an extended period of negotiation.
Applicant begins application process.

Applicant submits application in TLD Application System (TAS).

ICANN publishes list of all complete applications.

ICANN runs algorithm for all applied-for gTLDs against all other applied-for gTLDs.

String Similarity Panel performs analysis, using algorithm results, to group similar and identical strings into contention sets.

Applicant elects whether to designate application as community-based.

IE, Extended Evaluation (EE), and Dispute Resolution continue. Some applications may not pass certain elements of the review process, which may alter the contention sets.

Have one or more community-based applicant(s) elected community priority?

Yes

Community priority evaluation

Does one clear winner emerge?

Yes

Applicants with contending strings participate in auction: One or more parties proceed to subsequent stage

No

Applicants are encouraged to self-resolve string contention anytime prior to the contention resolution process.

No

Applicant enters Transition to Delegation phase

Yes

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Module 5
Transition to Delegation

This module describes the final steps required of an applicant for completion of the process, including execution of a registry agreement with ICANN and preparing for delegation of the new gTLD into the root zone.

5.1 Registry Agreement

All applicants that have successfully completed the evaluation process—including, if necessary, the dispute resolution and string contention processes—are required to enter into a registry agreement with ICANN before proceeding to delegation.

After the close of each stage in the process, ICANN will send a notification to those successful applicants that are eligible for execution of a registry agreement at that time.

To proceed, applicants will be asked to provide specified information for purposes of executing the registry agreement:

1. Documentation of the applicant’s continued operations instrument (see Specification 8 to the agreement).
2. Confirmation of contact information and signatory to the agreement.
3. Notice of any material changes requested to the terms of the agreement.
4. The applicant must report: (i) any ownership interest it holds in any registrar or reseller of registered names, (ii) if known, any ownership interest that a registrar or reseller of registered names holds in the applicant, and (iii) if the applicant controls, is controlled by, or is under common control with any registrar or reseller of registered names. ICANN retains the right to refer an application to a competition authority prior to entry into the registry agreement if it is determined that the registry-registrar cross-ownership
arrangements might raise competition issues. For this purpose “control” (including the terms “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a person or entity, whether through the ownership of securities, as trustee or executor, by serving as a member of a board of directors or equivalent governing body, by contract, by credit arrangement or otherwise.

To ensure that an applicant continues to be a going concern in good legal standing, ICANN reserves the right to ask the applicant to submit additional updated documentation and information before entering into the registry agreement.

ICANN will begin processing registry agreements one month after the date of the notification to successful applicants. Requests will be handled in the order the complete information is received.

Generally, the process will include formal approval of the agreement without requiring additional Board review, so long as: the application passed all evaluation criteria; there are no material changes in circumstances; and there are no material changes to the base agreement. There may be other cases where the Board requests review of an application.

Eligible applicants are expected to have executed the registry agreement within nine (9) months of the notification date. Failure to do so may result in loss of eligibility, at ICANN’s discretion. An applicant may request an extension of this time period for up to an additional nine (9) months if it can demonstrate, to ICANN’s reasonable satisfaction, that it is working diligently and in good faith toward successfully completing the steps necessary for entry into the registry agreement.

The registry agreement can be reviewed in the attachment to this module. Certain provisions in the agreement are labeled as applicable to governmental and intergovernmental entities only. Private entities, even if supported by a government or IGO, would not ordinarily be eligible for these special provisions.

All successful applicants are expected to enter into the agreement substantially as written. Applicants may request and negotiate terms by exception; however, this extends
the time involved in executing the agreement. In the event that material changes to the agreement are requested, these must first be approved by the ICANN Board of Directors before execution of the agreement.

ICANN’s Board of Directors has ultimate responsibility for the New gTLD Program. The Board reserves the right to individually consider an application for a new gTLD to determine whether approval would be in the best interest of the Internet community. Under exceptional circumstances, the Board may individually consider a gTLD application. For example, the Board might individually consider an application as a result of GAC Advice on New gTLDs or of the use of an ICANN accountability mechanism.

5.2 Pre-Delegation Testing

Each applicant will be required to complete pre-delegation technical testing as a prerequisite to delegation into the root zone. This pre-delegation test must be completed within the time period specified in the registry agreement.

The purpose of the pre-delegation technical test is to verify that the applicant has met its commitment to establish registry operations in accordance with the technical and operational criteria described in Module 2.

The test is also intended to indicate that the applicant can operate the gTLD in a stable and secure manner. All applicants will be tested on a pass/fail basis according to the requirements that follow.

The test elements cover both the DNS server operational infrastructure and registry system operations. In many cases the applicant will perform the test elements as instructed and provide documentation of the results to ICANN to demonstrate satisfactory performance. At ICANN’s discretion, aspects of the applicant’s self-certification documentation can be audited either on-site at the services delivery point of the registry or elsewhere as determined by ICANN.

5.2.1 Testing Procedures

The applicant may initiate the pre-delegation test by submitting to ICANN the Pre-Delegation form and accompanying documents containing all of the following information:
• All name server names and IPv4/IPv6 addresses to be used in serving the new TLD data;

• If using anycast, the list of names and IPv4/IPv6 unicast addresses allowing the identification of each individual server in the anycast sets;

• If IDN is supported, the complete IDN tables used in the registry system;

• A test zone for the new TLD must be signed at test time and the valid key-set to be used at the time of testing must be provided to ICANN in the documentation, as well as the TLD DNSSEC Policy Statement (DPS);

• The executed agreement between the selected escrow agent and the applicant; and

• Self-certification documentation as described below for each test item.

ICANN will review the material submitted and in some cases perform tests in addition to those conducted by the applicant. After testing, ICANN will assemble a report with the outcome of the tests and provide that report to the applicant.

Any clarification request, additional information request, or other request generated in the process will be highlighted and listed in the report sent to the applicant.

ICANN may request the applicant to complete load tests considering an aggregated load where a single entity is performing registry services for multiple TLDs.

Once an applicant has met all of the pre-delegation testing requirements, it is eligible to request delegation of its applied-for gTLD.

If an applicant does not complete the pre-delegation steps within the time period specified in the registry agreement, ICANN reserves the right to terminate the registry agreement.
5.2.2 Test Elements: DNS Infrastructure

The first set of test elements concerns the DNS infrastructure of the new gTLD. In all tests of the DNS infrastructure, all requirements are independent of whether IPv4 or IPv6 is used. All tests shall be done both over IPv4 and IPv6, with reports providing results according to both protocols.

UDP Support -- The DNS infrastructure to which these tests apply comprises the complete set of servers and network infrastructure to be used by the chosen providers to deliver DNS service for the new gTLD to the Internet. The documentation provided by the applicant must include the results from a system performance test indicating available network and server capacity and an estimate of expected capacity during normal operation to ensure stable service as well as to adequately address Distributed Denial of Service (DDoS) attacks.

Self-certification documentation shall include data on load capacity, latency and network reachability.

Load capacity shall be reported using a table, and a corresponding graph, showing percentage of queries responded against an increasing number of queries per second generated from local (to the servers) traffic generators. The table shall include at least 20 data points and loads of UDP-based queries that will cause up to 10% query loss against a randomly selected subset of servers within the applicant’s DNS infrastructure. Responses must either contain zone data or be NXDOMAIN or NODATA responses to be considered valid.

Query latency shall be reported in milliseconds as measured by DNS probes located just outside the border routers of the physical network hosting the name servers, from a network topology point of view.

Reachability will be documented by providing information on the transit and peering arrangements for the DNS server locations, listing the AS numbers of the transit providers or peers at each point of presence and available bandwidth at those points of presence.

TCP support -- TCP transport service for DNS queries and responses must be enabled and provisioned for expected load. ICANN will review the capacity self-certification documentation provided by the applicant and will perform TCP reachability and transaction capability tests across a
randomly selected subset of the name servers within the applicant’s DNS infrastructure. In case of use of anycast, each individual server in each anycast set will be tested.

Self-certification documentation shall include data on load capacity, latency and external network reachability.

Load capacity shall be reported using a table, and a corresponding graph, showing percentage of queries that generated a valid (zone data, NODATA, or NXDOMAIN) response against an increasing number of queries per second generated from local (to the name servers) traffic generators. The table shall include at least 20 data points and loads that will cause up to 10% query loss (either due to connection timeout or connection reset) against a randomly selected subset of servers within the applicant’s DNS infrastructure.

Query latency will be reported in milliseconds as measured by DNS probes located just outside the border routers of the physical network hosting the name servers, from a network topology point of view.

Reachability will be documented by providing records of TCP-based DNS queries from nodes external to the network hosting the servers. These locations may be the same as those used for measuring latency above.

**DNSSEC support** -- Applicant must demonstrate support for EDNS(0) in its server infrastructure, the ability to return correct DNSSEC-related resource records such as DNSKEY, RRSIG, and NSEC/NSEC3 for the signed zone, and the ability to accept and publish DS resource records from second-level domain administrators. In particular, the applicant must demonstrate its ability to support the full life cycle of KSK and ZSK keys. ICANN will review the self-certification materials as well as test the reachability, response sizes, and DNS transaction capacity for DNS queries using the EDNS(0) protocol extension with the “DNSSEC OK” bit set for a randomly selected subset of all name servers within the applicant’s DNS infrastructure. In case of use of anycast, each individual server in each anycast set will be tested.

Load capacity, query latency, and reachability shall be documented as for UDP and TCP above.
5.2.3 Test Elements: Registry Systems

As documented in the registry agreement, registries must provide support for EPP within their Shared Registration System, and provide Whois service both via port 43 and a web interface, in addition to support for the DNS. This section details the requirements for testing these registry systems.

**System performance** -- The registry system must scale to meet the performance requirements described in Specification 10 of the registry agreement and ICANN will require self-certification of compliance. ICANN will review the self-certification documentation provided by the applicant to verify adherence to these minimum requirements.

**Whois support** -- Applicant must provision Whois services for the anticipated load. ICANN will verify that Whois data is accessible over IPv4 and IPv6 via both TCP port 43 and via a web interface and review self-certification documentation regarding Whois transaction capacity. Response format according to Specification 4 of the registry agreement and access to Whois (both port 43 and via web) will be tested by ICANN remotely from various points on the Internet over both IPv4 and IPv6.

Self-certification documents shall describe the maximum number of queries per second successfully handled by both the port 43 servers as well as the web interface, together with an applicant-provided load expectation.

Additionally, a description of deployed control functions to detect and mitigate data mining of the Whois database shall be documented.

**EPP Support** -- As part of a shared registration service, applicant must provision EPP services for the anticipated load. ICANN will verify conformance to appropriate RFCs (including EPP extensions for DNSSEC). ICANN will also review self-certification documentation regarding EPP transaction capacity.

Documentation shall provide a maximum Transaction per Second rate for the EPP interface with 10 data points corresponding to registry database sizes from 0 (empty) to the expected size after one year of operation, as determined by applicant.
Documentation shall also describe measures taken to handle load during initial registry operations, such as a land-rush period.

**IPv6 support** -- The ability of the registry to support registrars adding, changing, and removing IPv6 DNS records supplied by registrants will be tested by ICANN. If the registry supports EPP access via IPv6, this will be tested by ICANN remotely from various points on the Internet.

**DNSSEC support** -- ICANN will review the ability of the registry to support registrars adding, changing, and removing DNSSEC-related resource records as well as the registry's overall key management procedures. In particular, the applicant must demonstrate its ability to support the full life cycle of key changes for child domains. Inter-operation of the applicant's secure communication channels with the IANA for trust anchor material exchange will be verified.

The practice and policy document (also known as the DNSSEC Policy Statement or DPS), describing key material storage, access and usage for its own keys is also reviewed as part of this step.

**IDN support** -- ICANN will verify the complete IDN table(s) used in the registry system. The table(s) must comply with the guidelines in [http://iana.org/procedures/idn-repository.html](http://iana.org/procedures/idn-repository.html).

Requirements related to IDN for Whois are being developed. After these requirements are developed, prospective registries will be expected to comply with published IDN-related Whois requirements as part of pre-delegation testing.

**Escrow deposit** -- The applicant-provided samples of data deposit that include both a full and an incremental deposit showing correct type and formatting of content will be reviewed. Special attention will be given to the agreement with the escrow provider to ensure that escrowed data can be released within 24 hours should it be necessary. ICANN may, at its option, ask an independent third party to demonstrate the reconstitutability of the registry from escrowed data. ICANN may elect to test the data release process with the escrow agent.
5.3 Delegation Process

Upon notice of successful completion of the ICANN pre-delegation testing, applicants may initiate the process for delegation of the new gTLD into the root zone database.

This will include provision of additional information and completion of additional technical steps required for delegation. Information about the delegation process is available at http://iana.org/domains/root/.

5.4 Ongoing Operations

An applicant that is successfully delegated a gTLD will become a “Registry Operator.” In being delegated the role of operating part of the Internet’s domain name system, the applicant will be assuming a number of significant responsibilities. ICANN will hold all new gTLD operators accountable for the performance of their obligations under the registry agreement, and it is important that all applicants understand these responsibilities.

5.4.1 What is Expected of a Registry Operator

The registry agreement defines the obligations of gTLD registry operators. A breach of the registry operator’s obligations may result in ICANN compliance actions up to and including termination of the registry agreement. Prospective applicants are encouraged to review the following brief description of some of these responsibilities.

Note that this is a non-exhaustive list provided to potential applicants as an introduction to the responsibilities of a registry operator. For the complete and authoritative text, please refer to the registry agreement.

A registry operator is obligated to:

**Operate the TLD in a stable and secure manner.** The registry operator is responsible for the entire technical operation of the TLD. As noted in RFC 1591:

“The designated manager must do a satisfactory job of operating the DNS service for the domain. That is, the actual management of the assigning of domain names, delegating subdomains and operating nameservers must be done with technical competence. This includes keeping

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the central IR\(^2\) (in the case of top-level domains) or other higher-level domain manager advised of the status of the domain, responding to requests in a timely manner, and operating the database with accuracy, robustness, and resilience."

The registry operator is required to comply with relevant technical standards in the form of RFCs and other guidelines. Additionally, the registry operator must meet performance specifications in areas such as system downtime and system response times (see Specifications 6 and 10 of the registry agreement).

**Comply with consensus policies and temporary policies.**

gTLD registry operators are required to comply with consensus policies. Consensus policies may relate to a range of topics such as issues affecting interoperability of the DNS, registry functional and performance specifications, database security and stability, or resolution of disputes over registration of domain names.

To be adopted as a consensus policy, a policy must be developed by the Generic Names Supporting Organization (GNSO)\(^3\) following the process in Annex A of the ICANN Bylaws.\(^4\) The policy development process involves deliberation and collaboration by the various stakeholder groups participating in the process, with multiple opportunities for input and comment by the public, and can take significant time.

Examples of existing consensus policies are the Inter-Registrar Transfer Policy (governing transfers of domain names between registrars), and the Registry Services Evaluation Policy (establishing a review of proposed new registry services for security and stability or competition concerns), although there are several more, as found at [http://www.icann.org/en/general/consensus-policies.htm](http://www.icann.org/en/general/consensus-policies.htm).

gTLD registry operators are obligated to comply with both existing consensus policies and those that are developed in the future. Once a consensus policy has been formally adopted, ICANN will provide gTLD registry operators with notice of the requirement to implement the new policy and the effective date.

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\(^2\) IR is a historical reference to “Internet Registry,” a function now performed by ICANN.

\(^3\) [http://gnso.icann.org](http://gnso.icann.org)

In addition, the ICANN Board may, when required by circumstances, establish a temporary policy necessary to maintain the stability or security of registry services or the DNS. In such a case, all gTLD registry operators will be required to comply with the temporary policy for the designated period of time.

For more information, see Specification 1 of the registry agreement.

**Implement start-up rights protection measures.** The registry operator must implement, at a minimum, a Sunrise period and a Trademark Claims service during the start-up phases for registration in the TLD, as provided in the registry agreement. These mechanisms will be supported by the established Trademark Clearinghouse as indicated by ICANN.

The Sunrise period allows eligible rightsholders an early opportunity to register names in the TLD.

The Trademark Claims service provides notice to potential registrants of existing trademark rights, as well as notice to rightsholders of relevant names registered. Registry operators may continue offering the Trademark Claims service after the relevant start-up phases have concluded.

For more information, see Specification 7 of the registry agreement and the Trademark Clearinghouse model accompanying this module.

**Implement post-launch rights protection measures.** The registry operator is required to implement decisions made under the Uniform Rapid Suspension (URS) procedure, including suspension of specific domain names within the registry. The registry operator is also required to comply with and implement decisions made according to the Trademark Post-Delegation Dispute Resolution Policy (PDDRP).

The required measures are described fully in the URS and PDDRP procedures accompanying this module. Registry operators may introduce additional rights protection measures relevant to the particular gTLD.

**Implement measures for protection of country and territory names in the new gTLD.** All new gTLD registry operators are required to provide certain minimum protections for country and territory names, including an initial reservation requirement and establishment of applicable rules and
procedures for release of these names. The rules for release can be developed or agreed to by governments, the GAC, and/or approved by ICANN after a community discussion. Registry operators are encouraged to implement measures for protection of geographical names in addition to those required by the agreement, according to the needs and interests of each gTLD’s particular circumstances. (See Specification 5 of the registry agreement).

**Pay recurring fees to ICANN.** In addition to supporting expenditures made to accomplish the objectives set out in ICANN’s mission statement, these funds enable the support required for new gTLDs, including: contractual compliance, registry liaison, increased registrar accreditations, and other registry support activities. The fees include both a fixed component (USD 25,000 annually) and, where the TLD exceeds a transaction volume, a variable fee based on transaction volume. See Article 6 of the registry agreement.

**Regularly deposit data into escrow.** This serves an important role in registrant protection and continuity for certain instances where the registry or one aspect of the registry operations experiences a system failure or loss of data. (See Specification 2 of the registry agreement.)

**Deliver monthly reports in a timely manner.** A registry operator must submit a report to ICANN on a monthly basis. The report includes registrar transactions for the month and is used by ICANN for calculation of registrar fees. (See Specification 3 of the registry agreement.)

**Provide Whois service.** A registry operator must provide a publicly available Whois service for registered domain names in the TLD. (See Specification 4 of the registry agreement.)

**Maintain partnerships with ICANN-accredited registrars.** A registry operator creates a Registry-Registrar Agreement (RRA) to define requirements for its registrars. This must include certain terms that are specified in the Registry Agreement, and may include additional terms specific to the TLD. A registry operator must provide non-discriminatory access to its registry services to all ICANN-accredited registrars with whom it has entered into an RRA, and who are in compliance with the requirements. This includes providing advance notice of pricing changes to all
registrars, in compliance with the time frames specified in the agreement. (See Article 2 of the registry agreement.)

**Maintain an abuse point of contact.** A registry operator must maintain and publish on its website a single point of contact responsible for addressing matters requiring expedited attention and providing a timely response to abuse complaints concerning all names registered in the TLD through all registrars of record, including those involving a reseller. A registry operator must also take reasonable steps to investigate and respond to any reports from law enforcement, governmental and quasi-governmental agencies of illegal conduct in connection with the use of the TLD. (See Article 2 and Specification 6 of the registry agreement.)

**Cooperate with contractual compliance audits.** To maintain a level playing field and a consistent operating environment, ICANN staff performs periodic audits to assess contractual compliance and address any resulting problems. A registry operator must provide documents and information requested by ICANN that are necessary to perform such audits. (See Article 2 of the registry agreement.)

**Maintain a Continued Operations Instrument.** A registry operator must, at the time of the agreement, have in place a continued operations instrument sufficient to fund basic registry operations for a period of three (3) years. This requirement remains in place for five (5) years after delegation of the TLD, after which time the registry operator is no longer required to maintain the continued operations instrument. (See Specification 8 to the registry agreement.)

**Maintain community-based policies and procedures.** If the registry operator designated its application as community-based at the time of the application, the registry operator has requirements in its registry agreement to maintain the community-based policies and procedures it specified in its application. The registry operator is bound by the Registry Restrictions Dispute Resolution Procedure with respect to disputes regarding execution of its community-based policies and procedures. (See Article 2 to the registry agreement.)

**Have continuity and transition plans in place.** This includes performing failover testing on a regular basis. In the event that a transition to a new registry operator becomes necessary, the registry operator is expected to cooperate
by consulting with ICANN on the appropriate successor, providing the data required to enable a smooth transition, and complying with the applicable registry transition procedures. (See Articles 2 and 4 of the registry agreement.)

**Make TLD zone files available via a standardized process.** This includes provision of access to the registry’s zone file to credentialed users, according to established access, file, and format standards. The registry operator will enter into a standardized form of agreement with zone file users and will accept credential information for users via a clearinghouse. (See Specification 4 of the registry agreement.)

**Implement DNSSEC.** The registry operator is required to sign the TLD zone files implementing Domain Name System Security Extensions (DNSSEC) in accordance with the relevant technical standards. The registry must accept public key material from registrars for domain names registered in the TLD, and publish a DNSSEC Policy Statement describing key material storage, access, and usage for the registry’s keys. (See Specification 6 of the registry agreement.)

### 5.4.2 What is Expected of ICANN

ICANN will continue to provide support for gTLD registry operators as they launch and maintain registry operations. ICANN’s gTLD registry liaison function provides a point of contact for gTLD registry operators for assistance on a continuing basis.

ICANN’s contractual compliance function will perform audits on a regular basis to ensure that gTLD registry operators remain in compliance with agreement obligations, as well as investigate any complaints from the community regarding the registry operator’s adherence to its contractual obligations. See [http://www.icann.org/en/compliance/](http://www.icann.org/en/compliance/) for more information on current contractual compliance activities.

ICANN’s Bylaws require ICANN to act in an open and transparent manner, and to provide equitable treatment among registry operators. ICANN is responsible for maintaining the security and stability of the global Internet, and looks forward to a constructive and cooperative relationship with future gTLD registry operators in furtherance of this goal.
Draft – New gTLD Program - Transition to Delegation
(Timeframes are estimates only)

**Applicant Doc Prep 1 Month**
- ICANN provides notice of eligibility to applicant
- Applicant prepares documentation for contracting

**Contraction – 1 day to 9 months**
- Applicant and ICANN negotiate and agree on contract
- Board reviews changes to base agreement
- Board reviews application
- Other, trigger for Board review

**Pre-Delegation Testing – 1 to 12 months**
- ICANN and applicant execute registry agreement
- Applicant requests initiation of pre-delegation process through TAS
- ICANN perform pre-delegation process
- Applicant requests initiation of the IANA delegation process through TAS

**Flowchart Notes**
- Applicant remedies issues
- ICANN provides notice of eligibility to applicant includes:
  - Material changes in circumstances
  - Continued Operations instrument
  - Designated contracting parties

**Timeframes**
- Applicant Doc Prep 1 Month
- Contracting – 1 day to 9 months
- Pre-Delegation Testing – 1 to 12 months
This document contains the registry agreement associated with the Applicant Guidebook for New gTLDs.

Successful gTLD applicants would enter into this form of registry agreement with ICANN prior to delegation of the new gTLD. (Note: ICANN reserves the right to make reasonable updates and changes to this proposed agreement during the course of the application process, including as the possible result of new policies that might be adopted during the course of the application process).
This REGISTRY AGREEMENT (this “Agreement”) is entered into as of ___________ (the “Effective Date”) between Internet Corporation for Assigned Names and Numbers, a California nonprofit public benefit corporation (“ICANN”), and __________, a ______________ (“Registry Operator”).

ARTICLE 1.

DELEGATION AND OPERATION
OF TOP–LEVEL DOMAIN; REPRESENTATIONS AND WARRANTIES

1.1 Domain and Designation. The Top-Level Domain to which this Agreement applies is _____ (the “TLD”). Upon the Effective Date and until the end of the Term (as defined in Section 4.1), ICANN designates Registry Operator as the registry operator for the TLD, subject to the requirements and necessary approvals for delegation of the TLD and entry into the root-zone.

1.2 Technical Feasibility of String. While ICANN has encouraged and will continue to encourage universal acceptance of all top-level domain strings across the Internet, certain top-level domain strings may encounter difficulty in acceptance by ISPs and webhosters and/or validation by web applications. Registry Operator shall be responsible for ensuring to its satisfaction the technical feasibility of the TLD string prior to entering into this Agreement.

1.3 Representations and Warranties.

(a) Registry Operator represents and warrants to ICANN as follows:

(i) all material information provided and statements made in the registry TLD application, and statements made in writing during the negotiation of this Agreement, were true and correct in all material respects at the time made, and such information or statements continue to be true and correct in all material respects as of the Effective Date except as otherwise previously disclosed in writing by Registry Operator to ICANN;

(ii) Registry Operator is duly organized, validly existing and in good standing under the laws of the jurisdiction set forth in the preamble hereto, and Registry Operator has all requisite power and authority and obtained all necessary approvals to enter into and duly execute and deliver this Agreement; and

(iii) Registry Operator has delivered to ICANN a duly executed instrument that secures the funds required to perform registry functions for the TLD in the event of the termination or expiration of this Agreement (the “Continued Operations Instrument”), and such instrument is a binding obligation of the parties thereto, enforceable against the parties thereto in accordance with its terms.

(b) ICANN represents and warrants to Registry Operator that ICANN is a nonprofit public benefit corporation duly organized, validly existing and in good standing under the laws of the State of California, United States of America. ICANN has all requisite power and authority and obtained all necessary corporate approvals to enter into and duly execute and deliver this Agreement.
ARTICLE 2.

COVENANTS OF REGISTRY OPERATOR

Registry Operator covenants and agrees with ICANN as follows:

2.1 Approved Services; Additional Services. Registry Operator shall be entitled to provide the Registry Services described in clauses (a) and (b) of the first paragraph of Section 2.1 in the specification at [see specification 6] (“Specification 6”) and such other Registry Services set forth on Exhibit A (collectively, the “Approved Services”). If Registry Operator desires to provide any Registry Service that is not an Approved Service or is a modification to an Approved Service (each, an “Additional Service”), Registry Operator shall submit a request for approval of such Additional Service pursuant to the Registry Services Evaluation Policy at http://www.icann.org/en/registries/rsep/rsep.html, as such policy may be amended from time to time in accordance with the bylaws of ICANN (as amended from time to time, the “ICANN Bylaws”) applicable to Consensus Policies (the “RSEP”). Registry Operator may offer Additional Services only with the written approval of ICANN, and, upon any such approval, such Additional Services shall be deemed Registry Services under this Agreement. In its reasonable discretion, ICANN may require an amendment to this Agreement reflecting the provision of any Additional Service which is approved pursuant to the RSEP, which amendment shall be in a form reasonably acceptable to the parties.

2.2 Compliance with Consensus Policies and Temporary Policies. Registry Operator shall comply with and implement all Consensus Policies and Temporary Policies found at <http://www.icann.org/general/consensus-policies.htm>, as of the Effective Date and as may in the future be developed and adopted in accordance with the ICANN Bylaws, provided such future Consensus Policies and Temporary Policies are adopted in accordance with the procedure and relate to those topics and subject to those limitations set forth at [see specification 1]* (“Specification 1”).

2.3 Data Escrow. Registry Operator shall comply with the registry data escrow procedures posted at [see specification 2]*.

2.4 Monthly Reporting. Within twenty (20) calendar days following the end of each calendar month, Registry Operator shall deliver to ICANN reports in the format posted in the specification at [see specification 3]*.

2.5 Publication of Registration Data. Registry Operator shall provide public access to registration data in accordance with the specification posted at [see specification 4]* (“Specification 4”).

2.6 Reserved Names. Except to the extent that ICANN otherwise expressly authorizes in writing, Registry Operator shall comply with the restrictions on registration of character strings set forth at [see specification 5]* (“Specification 5”). Registry Operator may establish policies concerning the reservation or blocking of additional character strings within the TLD at its discretion. If Registry Operator is the registrant for any domain names in the Registry TLD (other than the Second-Level Reservations for Registry Operations from Specification 5), such registrations must be through an ICANN accredited registrar. Any such registrations will be considered Transactions (as defined in Section 6.1) for purposes of calculating the Registry-Level Transaction Fee to be paid to ICANN by Registry Operator pursuant to Section 6.1.

2.7 Registry Interoperability and Continuity. Registry Operator shall comply with the Registry Interoperability and Continuity Specifications as set forth in Specification 6.

* Final text will be posted on ICANN website; agreement reference to be replaced by hyperlink.
2.8 Protection of Legal Rights of Third Parties. Registry Operator must specify, and comply with, a process and procedures for launch of the TLD and initial registration-related and ongoing protection of the legal rights of third parties as set forth in the specification at [see specification 7]* (“Specification 7”). Registry Operator may, at its election, implement additional protections of the legal rights of third parties. Any changes or modifications to the process and procedures required by Specification 7 following the Effective Date must be approved in advance by ICANN in writing. Registry Operator must comply with all remedies imposed by ICANN pursuant to Section 2 of Specification 7, subject to Registry Operator’s right to challenge such remedies as set forth in the applicable procedure described therein. Registry Operator shall take reasonable steps to investigate and respond to any reports from law enforcement and governmental and quasi-governmental agencies of illegal conduct in connection with the use of the TLD. In responding to such reports, Registry Operator will not be required to take any action in contravention of applicable law.

2.9 Registrars.

(a) Registry Operator must use only ICANN accredited registrars in registering domain names. Registry Operator must provide non-discriminatory access to Registry Services to all ICANN accredited registrars that enter into and are in compliance with the registry-registrar agreement for the TLD; provided, that Registry Operator may establish non-discriminatory criteria for qualification to register names in the TLD that are reasonably related to the proper functioning of the TLD. Registry Operator must use a uniform non-discriminatory agreement with all registrars authorized to register names in the TLD. Such agreement may be revised by Registry Operator from time to time; provided, however, that any such revisions must be approved in advance by ICANN.

(b) If Registry Operator (i) becomes an Affiliate or reseller of an ICANN accredited registrar, or (ii) subcontracts the provision of any Registry Services to an ICANN accredited registrar, registrar reseller or any of their respective Affiliates, then, in either such case of (i) or (ii) above, Registry Operator will give ICANN prompt notice of the contract, transaction or other arrangement that resulted in such affiliation, reseller relationship or subcontract, as applicable, including, if requested by ICANN, copies of any contract relating thereto; provided, that ICANN will not disclose such contracts to any third party other than relevant competition authorities. ICANN reserves the right, but not the obligation, to refer any such contract, transaction or other arrangement to relevant competition authorities in the event that ICANN determines that such contract, transaction or other arrangement might raise competition issues.

(c) For the purposes of this Agreement: (i) “Affiliate” means a person or entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, the person or entity specified, and (ii) “control” (including the terms “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a person or entity, whether through the ownership of securities, as trustee or executor, by serving as an employee or a member of a board of directors or equivalent governing body, by contract, by credit arrangement or otherwise.

2.10 Pricing for Registry Services.

(a) With respect to initial domain name registrations, Registry Operator shall provide ICANN and each ICANN accredited registrar that has executed the registry-registrar agreement for the TLD advance written notice of any price increase (including as a result of the elimination of any refunds, rebates, discounts, product tying or other programs which had the effect of reducing the price charged to registrars, unless such refunds, rebates, discounts, product tying or other programs are of a limited

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duration that is clearly and conspicuously disclosed to the registrar when offered) of no less than thirty (30) calendar days. Registry Operator shall offer registrars the option to obtain initial domain name registrations for periods of one to ten years at the discretion of the registrar, but no greater than ten years.

(b) With respect to renewal of domain name registrations, Registry Operator shall provide ICANN and each ICANN accredited registrar that has executed the registry-registrar agreement for the TLD advance written notice of any price increase (including as a result of the elimination of any refunds, rebates, discounts, product tying, Qualified Marketing Programs or other programs which had the effect of reducing the price charged to registrars) of no less than one hundred eighty (180) calendar days. Notwithstanding the foregoing sentence, with respect to renewal of domain name registrations: (i) Registry Operator need only provide thirty (30) calendar days notice of any price increase if the resulting price is less than or equal to (A) for the period beginning on the Effective Date and ending twelve (12) months following the Effective Date, the initial price charged for registrations in the TLD, or (B) for subsequent periods, a price for which Registry Operator provided a notice pursuant to the first sentence of this Section 2.10(b) within the twelve (12) month period preceding the effective date of the proposed price increase; and (ii) Registry Operator need not provide notice of any price increase for the imposition of the Variable Registry-Level Fee set forth in Section 6.3. Registry Operator shall offer registrars the option to obtain domain name registration renewals at the current price (i.e. the price in place prior to any noticed increase) for periods of one to ten years at the discretion of the registrar, but no greater than ten years.

(c) In addition, Registry Operator must have uniform pricing for renewals of domain name registrations (“Renewal Pricing”). For the purposes of determining Renewal Pricing, the price for each domain registration renewal must be identical to the price of all other domain name registration renewals in place at the time of such renewal, and such price must take into account universal application of any refunds, rebates, discounts, product tying or other programs in place at the time of renewal. The foregoing requirements of this Section 2.10(c) shall not apply for (i) purposes of determining Renewal Pricing if the registrar has provided Registry Operator with documentation that demonstrates that the applicable registrant expressly agreed in its registration agreement with registrar to higher Renewal Pricing at the time of the initial registration of the domain and this Section 2.10(c) will be interpreted broadly to prohibit such practices. For purposes of this Section 2.10(c), a “Qualified Marketing Program” is a marketing program pursuant to which Registry Operator offers discounted Renewal Pricing, provided that each of the following criteria is satisfied: (i) the program and related discounts are offered for a period of time not to exceed one hundred eighty (180) calendar days (with consecutive substantially similar programs aggregated for purposes of determining the number of calendar days of the program), (ii) all ICANN accredited registrars are provided the same opportunity to qualify for such discounted Renewal Pricing; and (iii) the intent or effect of the program is not to exclude any particular class(es) of registrations (e.g., registrations held by large corporations) or increase the renewal price of any particular class(es) of registrations. Nothing in this Section 2.10(c) shall limit Registry Operator’s obligations pursuant to Section 2.10(b).

(d) Registry Operator shall provide public query-based DNS lookup service for the TLD (that is, operate the Registry TLD zone servers) at its sole expense.

2.11 Contractual and Operational Compliance Audits.

* Final text will be posted on ICANN website; agreement reference to be replaced by hyperlink.
(a) ICANN may from time to time (not to exceed twice per calendar year) conduct, or engage a third party to conduct, contractual compliance audits to assess compliance by Registry Operator with its representations and warranties contained in Article 1 of this Agreement and its covenants contained in Article 2 of this Agreement. Such audits shall be tailored to achieve the purpose of assessing compliance, and ICANN will (a) give reasonable advance notice of any such audit, which notice shall specify in reasonable detail the categories of documents, data and other information requested by ICANN, and (b) use commercially reasonable efforts to conduct such audit in such a manner as to not unreasonably disrupt the operations of Registry Operator. As part of such audit and upon request by ICANN, Registry Operator shall timely provide all responsive documents, data and any other information necessary to demonstrate Registry Operator’s compliance with this Agreement. Upon no less than five (5) business days notice (unless otherwise agreed to by Registry Operator), ICANN may, as part of any contractual compliance audit, conduct site visits during regular business hours to assess compliance by Registry Operator with its representations and warranties contained in Article 1 of this Agreement and its covenants contained in Article 2 of this Agreement.

(b) Any audit conducted pursuant to Section 2.11(a) will be at ICANN’s expense, unless (i) Registry Operator (A) controls, is controlled by, is under common control or is otherwise Affiliated with, any ICANN accredited registrar or registrar reseller or any of their respective Affiliates, or (B) has subcontracted the provision of Registry Services to an ICANN accredited registrar or registrar reseller or any of their respective Affiliates, and, in either case of (A) or (B) above, the audit relates to Registry Operator’s compliance with Section 2.14, in which case Registry Operator shall reimburse ICANN for all reasonable costs and expenses associated with the portion of the audit related to Registry Operator’s compliance with Section 2.14, or (ii) the audit is related to a discrepancy in the fees paid by Registry Operator hereunder in excess of 5% to ICANN’s detriment, in which case Registry Operator shall reimburse ICANN for all reasonable costs and expenses associated with the entirety of such audit. In either such case of (i) or (ii) above, such reimbursement will be paid together with the next Registry-Level Fee payment due following the date of transmittal of the cost statement for such audit.

(c) Notwithstanding Section 2.11(a), if Registry Operator is found not to be in compliance with its representations and warranties contained in Article 1 of this Agreement or its covenants contained in Article 2 of this Agreement in two consecutive audits conducted pursuant to this Section 2.11, ICANN may increase the number of such audits to one per calendar quarter.

(d) Registry Operator will give ICANN immediate notice of the commencement of any of the proceedings referenced in Section 4.3(d) or the occurrence of any of the matters specified in Section 4.3(f).

2.12 Continued Operations Instrument. Registry Operator shall comply with the terms and conditions relating to the Continued Operations Instrument set forth in the specification at [see specification 8].

2.13 Emergency Transition. Registry Operator agrees that in the event that any of the registry functions set forth in Section 6 of Specification 10 fails for a period longer than the emergency threshold for such function set forth in Section 6 of Specification 10, ICANN may designate an emergency interim registry operator of the registry for the TLD (an “Emergency Operator”) in accordance with ICANN’s registry transition process (available at ____________) (as the same may be amended from time to time, the “Registry Transition Process”) until such time as Registry Operator has demonstrated to ICANN’s reasonable satisfaction that it can resume operation of the registry for the TLD without the reoccurrence of such failure. Following such demonstration, Registry Operator may transition back into operation of the registry for the TLD pursuant to the procedures set out in the Registry Transition Process,

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provided that Registry Operator pays all reasonable costs incurred (i) by ICANN as a result of the designation of the Emergency Operator and (ii) by the Emergency Operator in connection with the operation of the registry for the TLD, which costs shall be documented in reasonable detail in records that shall be made available to Registry Operator. In the event ICANN designates an Emergency Operator pursuant to this Section 2.13 and the Registry Transition Process, Registry Operator shall provide ICANN or any such Emergency Operator with all data (including the data escrowed in accordance with Section 2.3) regarding operations of the registry for the TLD necessary to maintain operations and registry functions that may be reasonably requested by ICANN or such Emergency Operator. Registry Operator agrees that ICANN may make any changes it deems necessary to the IANA database for DNS and WHOIS records with respect to the TLD in the event that an Emergency Operator is designated pursuant to this Section 2.13. In addition, in the event of such failure, ICANN shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable.

2.14 **Registry Code of Conduct.** In connection with the operation of the registry for the TLD, Registry Operator shall comply with the Registry Code of Conduct as set forth in the specification at [see specification 9].

2.15 **Cooperation with Economic Studies.** If ICANN initiates or commissions an economic study on the impact or functioning of new generic top-level domains on the Internet, the DNS or related matters, Registry Operator shall reasonably cooperate with such study, including by delivering to ICANN or its designee conducting such study all data reasonably necessary for the purposes of such study requested by ICANN or its designee, provided, that Registry Operator may withhold any internal analyses or evaluations prepared by Registry Operator with respect to such data. Any data delivered to ICANN or its designee pursuant to this Section 2.15 shall be fully aggregated and anonymized by ICANN or its designee prior to any disclosure of such data to any third party.

2.16 **Registry Performance Specifications.** Registry Performance Specifications for operation of the TLD will be as set forth in the specification at [see specification 10]*. Registry Operator shall comply with such Performance Specifications and, for a period of at least one year, shall keep technical and operational records sufficient to evidence compliance with such specifications for each calendar year during the Term.

2.17 **Personal Data.** Registry Operator shall (i) notify each ICANN-accredited registrar that is a party to the registry-registrar agreement for the TLD of the purposes for which data about any identified or identifiable natural person (“Personal Data”) submitted to Registry Operator by such registrar is collected and used under this Agreement or otherwise and the intended recipients (or categories of recipients) of such Personal Data, and (ii) require such registrar to obtain the consent of each registrant in the TLD for such collection and use of Personal Data. Registry Operator shall take reasonable steps to protect Personal Data collected from such registrar from loss, misuse, unauthorized disclosure, alteration or destruction. Registry Operator shall not use or authorize the use of Personal Data in a way that is incompatible with the notice provided to registrars.

2.18 **[Note: For Community-Based TLDs Only] Obligations of Registry Operator to TLD Community.** Registry Operator shall establish registration policies in conformity with the application submitted with respect to the TLD for: (i) naming conventions within the TLD, (ii) requirements for registration by members of the TLD community, and (iii) use of registered domain names in conformity with the stated purpose of the community-based TLD. Registry Operator shall operate the TLD in a manner that allows the TLD community to discuss and participate in the development and modification of policies and practices for the TLD. Registry Operator shall establish procedures for the enforcement of registration policies for the TLD, and resolution of disputes concerning compliance with TLD registration

* Final text will be posted on ICANN website; agreement reference to be replaced by hyperlink.
policies, and shall enforce such registration policies. Registry Operator agrees to implement and be bound by the Registry Restrictions Dispute Resolution Procedure as set forth at [insert applicable URL] with respect to disputes arising pursuant to this Section 2.18.]

ARTICLE 3.

COVENANTS OF ICANN

ICANN covenants and agrees with Registry Operator as follows:

3.1 Open and Transparent. Consistent with ICANN’s expressed mission and core values, ICANN shall operate in an open and transparent manner.

3.2 Equitable Treatment. ICANN shall not apply standards, policies, procedures or practices arbitrarily, unjustifiably, or inequitably and shall not single out Registry Operator for disparate treatment unless justified by substantial and reasonable cause.

3.3 TLD Nameservers. ICANN will use commercially reasonable efforts to ensure that any changes to the TLD nameserver designations submitted to ICANN by Registry Operator (in a format and with required technical elements specified by ICANN at http://www.iana.org/domains/root/ will be implemented by ICANN within seven (7) calendar days or as promptly as feasible following technical verifications.

3.4 Root-zone Information Publication. ICANN’s publication of root-zone contact information for the TLD will include Registry Operator and its administrative and technical contacts. Any request to modify the contact information for the Registry Operator must be made in the format specified from time to time by ICANN at http://www.iana.org/domains/root/.

3.5 Authoritative Root Database. To the extent that ICANN is authorized to set policy with regard to an authoritative root server system, ICANN shall use commercially reasonable efforts to (a) ensure that the authoritative root will point to the top-level domain nameservers designated by Registry Operator for the TLD, (b) maintain a stable, secure, and authoritative publicly available database of relevant information about the TLD, in accordance with ICANN publicly available policies and procedures, and (c) coordinate the Authoritative Root Server System so that it is operated and maintained in a stable and secure manner; provided, that ICANN shall not be in breach of this Agreement and ICANN shall have no liability in the event that any third party (including any governmental entity or internet service provider) blocks or restricts access to the TLD in any jurisdiction.

ARTICLE 4.

TERM AND TERMINATION

4.1 Term. The term of this Agreement will be ten years from the Effective Date (as such term may be extended pursuant to Section 4.2, the “Term”).

4.2 Renewal.

(a) This Agreement will be renewed for successive periods of ten years upon the expiration of the initial Term set forth in Section 4.1 and each successive Term, unless:

* Final text will be posted on ICANN website; agreement reference to be replaced by hyperlink.
(i) Following notice by ICANN to Registry Operator of a fundamental and material breach of Registry Operator’s covenants set forth in Article 2 or breach of its payment obligations under Article 6 of this Agreement, which notice shall include with specificity the details of the alleged breach, and such breach has not been cured within thirty (30) calendar days of such notice, (A) an arbitrator or court has finally determined that Registry Operator has been in fundamental and material breach of such covenant(s) or in breach of its payment obligations, and (B) Registry Operator has failed to comply with such determination and cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court; or

(ii) During the then current Term, Registry Operator shall have been found by an arbitrator (pursuant to Section 5.2 of this Agreement) on at least three (3) separate occasions to have been in fundamental and material breach (whether or not cured) of Registry Operator’s covenants set forth in Article 2 or breach of its payment obligations under Article 6 of this Agreement.

(b) Upon the occurrence of the events set forth in Section 4.2(a) (i) or (ii), the Agreement shall terminate at the expiration of the then current Term.

4.3 Termination by ICANN.

(a) ICANN may, upon notice to Registry Operator, terminate this Agreement if: (i) Registry Operator fails to cure (A) any fundamental and material breach of Registry Operator’s representations and warranties set forth in Article 1 or covenants set forth in Article 2, or (B) any breach of Registry Operator’s payment obligations set forth in Article 6 of this Agreement, each within thirty (30) calendar days after ICANN gives Registry Operator notice of such breach, which notice will include with specificity the details of the alleged breach, (ii) an arbitrator or court has finally determined that Registry Operator is in fundamental and material breach of such covenant(s) or in breach of its payment obligations, and (iii) Registry Operator fails to comply with such determination and cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court.

(b) ICANN may, upon notice to Registry Operator, terminate this Agreement if Registry Operator fails to complete all testing and procedures (identified by ICANN in writing to Registry Operator prior to the date hereof) for delegation of the TLD into the root zone within twelve (12) months of the Effective Date. Registry Operator may request an extension for up to additional twelve (12) months for delegation if it can demonstrate, to ICANN’s reasonable satisfaction, that Registry Operator is working diligently and in good faith toward successfully completing the steps necessary for delegation of the TLD. Any fees paid by Registry Operator to ICANN prior to such termination date shall be retained by ICANN in full.

(c) ICANN may, upon notice to Registry Operator, terminate this Agreement if (i) Registry Operator fails to cure a material breach of Registry Operator’s obligations set forth in Section 2.12 of this Agreement within thirty (30) calendar days of delivery of notice of such breach by ICANN, or if the Continued Operations Instrument is not in effect for greater than sixty (60) consecutive calendar days at any time following the Effective Date, (ii) an arbitrator or court has finally determined that Registry Operator is in material breach of such covenant, and (iii) Registry Operator fails to cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court.

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DRAFT NEW GTLD REGISTRY AGREEMENT

(d) ICANN may, upon notice to Registry Operator, terminate this Agreement if (i) Registry Operator makes an assignment for the benefit of creditors or similar act, (ii) attachment, garnishment or similar proceedings are commenced against Registry Operator, which proceedings are a material threat to Registry Operator’s ability to operate the registry for the TLD, and are not dismissed within sixty (60) days of their commencement, (iii) a trustee, receiver, liquidator or equivalent is appointed in place of Registry Operator or maintains control over any of Registry Operator’s property, (iv) execution is levied upon any property of Registry Operator, (v) proceedings are instituted by or against Registry Operator under any bankruptcy, insolvency, reorganization or other laws relating to the relief of debtors and such proceedings are not dismissed within thirty (30) days of their commencement, or (vi) Registry Operator files for protection under the United States Bankruptcy Code, 11 U.S.C. Section 101 et seq., or a foreign equivalent or liquidates, dissolves or otherwise discontinues its operations or the operation of the TLD.

(e) ICANN may, upon thirty (30) calendar days’ notice to Registry Operator, terminate this Agreement pursuant to Section 2 of Specification 7, subject to Registry Operator’s right to challenge such termination as set forth in the applicable procedure described therein.

(f) ICANN may, upon notice to Registry Operator, terminate this Agreement if (i) Registry Operator knowingly employs any officer that is convicted of a misdemeanor related to financial activities or of any felony, or is judged by a court of competent jurisdiction to have committed fraud or breach of fiduciary duty, or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing and such officer is not terminated within thirty (30) calendar days of Registry Operator’s knowledge of the foregoing, or (ii) any member of Registry Operator’s board of directors or similar governing body is convicted of a misdemeanor related to financial activities or of any felony, or is judged by a court of competent jurisdiction to have committed fraud or breach of fiduciary duty, or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing and such member is not removed from Registry Operator’s board of directors or similar governing body within thirty (30) calendar days of Registry Operator’s knowledge of the foregoing.

(g) [Applicable to intergovernmental organizations or governmental entities only.] ICANN may terminate this Agreement pursuant to Section 7.14.

4.4 Termination by Registry Operator.

(a) Registry Operator may terminate this Agreement upon notice to ICANN if, (i) ICANN fails to cure any fundamental and material breach of ICANN’s covenants set forth in Article 3, within thirty (30) calendar days after Registry Operator gives ICANN notice of such breach, which notice will include with specificity the details of the alleged breach, (ii) an arbitrator or court has finally determined that ICANN is in fundamental and material breach of such covenants, and (iii) ICANN fails to comply with such determination and cure such breach within ten (10) calendar days or such other time period as may be determined by the arbitrator or court.

(b) Registry Operator may terminate this Agreement for any reason upon one hundred eighty (180) calendar day advance notice to ICANN.

4.5 Transition of Registry upon Termination of Agreement. Upon expiration of the Term pursuant to Section 4.1 or Section 4.2 or any termination of this Agreement pursuant to Section 4.3 or Section 4.4, Registry Operator shall provide ICANN or any successor registry operator that may be designated by ICANN for the TLD in accordance with this Section 4.5 with all data (including the data

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escrowed in accordance with Section 2.3) regarding operations of the registry for the TLD necessary to maintain operations and registry functions that may be reasonably requested by ICANN or such successor registry operator. After consultation with Registry Operator, ICANN shall determine whether or not to transition operation of the TLD to a successor registry operator in its sole discretion and in conformance with the Registry Transition Process; provided, however, that if Registry Operator demonstrates to ICANN’s reasonable satisfaction that (i) all domain name registrations in the TLD are registered to, and maintained by, Registry Operator for its own exclusive use, (ii) Registry Operator does not sell, distribute or transfer control or use of any registrations in the TLD to any third party that is not an Affiliate of Registry Operator, and (iii) transitioning operation of the TLD is not necessary to protect the public interest, then ICANN may not transition operation of the TLD to a successor registry operator upon the expiration or termination of this Agreement without the consent of Registry Operator (which shall not be unreasonably withheld, conditioned or delayed). For the avoidance of doubt, the foregoing sentence shall not prohibit ICANN from delegating the TLD pursuant to a future application process for the delegation of top-level domains, subject to any processes and objection procedures instituted by ICANN in connection with such application process intended to protect the rights of third parties. Registry Operator agrees that ICANN may make any changes it deems necessary to the IANA database for DNS and WHOIS records with respect to the TLD in the event of a transition of the TLD pursuant to this Section 4.5. In addition, ICANN or its designee shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable, regardless of the reason for termination or expiration of this Agreement.

[Alternative Section 4.5 Transition of Registry upon Termination of Agreement text for intergovernmental organizations or governmental entities or other special circumstances:]

“Transition of Registry upon Termination of Agreement. Upon expiration of the Term pursuant to Section 4.1 or Section 4.2 or any termination of this Agreement pursuant to Section 4.3 or Section 4.4, in connection with ICANN’s designation of a successor registry operator for the TLD, Registry Operator and ICANN agree to consult each other and work cooperatively to facilitate and implement the transition of the TLD in accordance with this Section 4.5. After consultation with Registry Operator, ICANN shall determine whether or not to transition operation of the TLD to a successor registry operator in its sole discretion and in conformance with the Registry Transition Process. In the event ICANN determines to transition operation of the TLD to a successor registry operator, upon Registry Operator’s consent (which shall not be unreasonably withheld, conditioned or delayed), Registry Operator shall provide ICANN or such successor registry operator for the TLD with any data regarding operations of the TLD necessary to maintain operations and registry functions that may be reasonably requested by ICANN or such successor registry operator in addition to data escrowed in accordance with Section 2.3 hereof. In the event that Registry Operator does not consent to provide such data, any registry data related to the TLD shall be returned to Registry Operator, unless otherwise agreed upon by the parties. Registry Operator agrees that ICANN may make any changes it deems necessary to the IANA database for DNS and WHOIS records with respect to the TLD in the event of a transition of the TLD pursuant to this Section 4.5. In addition, ICANN or its designee shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable, regardless of the reason for termination or expiration of this Agreement.”]

4.6 Effect of Termination. Upon any expiration of the Term or termination of this Agreement, the obligations and rights of the parties hereto shall cease, provided that such expiration or termination of this Agreement shall not relieve the parties of any obligation or breach of this Agreement accruing prior to such expiration or termination, including, without limitation, all accrued payment obligations arising under Article 6. In addition, Article 5, Article 7, Section 2.12, Section 4.5, and this
Section 4.6 shall survive the expiration or termination of this Agreement. For the avoidance of doubt, the rights of Registry Operator to operate the registry for the TLD shall immediately cease upon any expiration of the Term or termination of this Agreement.

ARTICLE 5.

DISPUTE RESOLUTION

5.1 Cooperative Engagement. Before either party may initiate arbitration pursuant to Section 5.2 below, ICANN and Registry Operator, following initiation of communications by either party, must attempt to resolve the dispute by engaging in good faith discussion over a period of at least fifteen (15) calendar days.

5.2 Arbitration. Disputes arising under or in connection with this Agreement, including requests for specific performance, will be resolved through binding arbitration conducted pursuant to the rules of the International Court of Arbitration of the International Chamber of Commerce. The arbitration will be conducted in the English language and will occur in Los Angeles County, California. Any arbitration will be in front of a single arbitrator, unless (i) ICANN is seeking punitive or exemplary damages, or operational sanctions, or (ii) the parties agree in writing to a greater number of arbitrators. In either case of clauses (i) or (ii) in the preceding sentence, the arbitration will be in front of three arbitrators with each party selecting one arbitrator and the two selected arbitrators selecting the third arbitrator. In order to expedite the arbitration and limit its cost, the arbitrator(s) shall establish page limits for the parties’ filings in conjunction with the arbitration, and should the arbitrator(s) determine that a hearing is necessary, the hearing shall be limited to one (1) calendar day, provided that in any arbitration in which ICANN is seeking punitive or exemplary damages, or operational sanctions, the hearing may be extended for one (1) additional calendar day if agreed upon by the parties or ordered by the arbitrator(s) based on the arbitrator(s) independent determination or the reasonable request of one of the parties thereto. The prevailing party in the arbitration will have the right to recover its costs and reasonable attorneys’ fees, which the arbitrator(s) shall include in the awards. In the event the arbitrators determine that Registry Operator has been repeatedly and willfully in fundamental and material breach of its obligations set forth in Article 2, Article 6 or Section 5.4 of this Agreement, ICANN may request the arbitrators award punitive or exemplary damages, or operational sanctions (including without limitation an order temporarily restricting Registry Operator’s right to sell new registrations). In any litigation involving ICANN concerning this Agreement, jurisdiction and exclusive venue for such litigation will be in a court located in Los Angeles County, California; however, the parties will also have the right to enforce a judgment of such a court in any court of competent jurisdiction.

[Alternative Section 5.2 Arbitration text for intergovernmental organizations or governmental entities or other special circumstances:

“Arbitration. Disputes arising under or in connection with this Agreement, including requests for specific performance, will be resolved through binding arbitration conducted pursuant to the rules of the International Court of Arbitration of the International Chamber of Commerce. The arbitration will be conducted in the English language and will occur in Geneva, Switzerland, unless another location is mutually agreed upon by Registry Operator and ICANN. Any arbitration will be in front of a single arbitrator, unless (i) ICANN is seeking punitive or exemplary damages, or operational sanctions, or (ii) the parties agree in writing to a greater number of arbitrators. In either case of clauses (i) or (ii) in the preceding sentence, the arbitration will be in front of three arbitrators with each party selecting one arbitrator and the two selected arbitrators selecting the third arbitrator. In order to expedite the arbitration and limit its cost, the arbitrator(s) shall establish page limits for the parties’ filings in conjunction with the

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arbitration, and should the arbitrator(s) determine that a hearing is necessary, the hearing shall be limited to one (1) calendar day, provided that in any arbitration in which ICANN is seeking punitive or exemplary damages, or operational sanctions, the hearing may be extended for one (1) additional calendar day if agreed upon by the parties or ordered by the arbitrator(s) based on the arbitrator(s) independent determination or the reasonable request of one of the parties thereto. The prevailing party in the arbitration will have the right to recover its costs and reasonable attorneys’ fees, which the arbitrator(s) shall include in the awards. In the event the arbitrators determine that Registry Operator has been repeatedly and willfully in fundamental and material breach of its obligations set forth in Article 2, Article 6 or Section 5.4 of this Agreement, ICANN may request the arbitrators award punitive or exemplary damages, or operational sanctions (including without limitation an order temporarily restricting Registry Operator’s right to sell new registrations). In any litigation involving ICANN concerning this Agreement, jurisdiction and exclusive venue for such litigation will be in a court located in Geneva, Switzerland, unless another location is mutually agreed upon by Registry Operator and ICANN; however, the parties will also have the right to enforce a judgment of such a court in any court of competent jurisdiction.”]

5.3 Limitation of Liability. ICANN’s aggregate monetary liability for violations of this Agreement will not exceed an amount equal to the Registry-Level Fees paid by Registry Operator to ICANN within the preceding twelve-month period pursuant to this Agreement (excluding the Variable Registry-Level Fee set forth in Section 6.3, if any). Registry Operator’s aggregate monetary liability to ICANN for breaches of this Agreement will be limited to an amount equal to the fees paid to ICANN during the preceding twelve-month period (excluding the Variable Registry-Level Fee set forth in Section 6.3, if any), and punitive and exemplary damages, if any, awarded in accordance with Section 5.2. In no event shall either party be liable for special, punitive, exemplary or consequential damages arising out of or in connection with this Agreement or the performance or nonperformance of obligations undertaken in this Agreement, except as provided in Section 5.2. Except as otherwise provided in this Agreement, neither party makes any warranty, express or implied, with respect to the services rendered by itself, its servants or agents, or the results obtained from their work, including, without limitation, any implied warranty of merchantability, non-infringement or fitness for a particular purpose.

5.4 Specific Performance. Registry Operator and ICANN agree that irreparable damage could occur if any of the provisions of this Agreement was not performed in accordance with its specific terms. Accordingly, the parties agree that they each shall be entitled to seek from the arbitrator specific performance of the terms of this Agreement (in addition to any other remedy to which each party is entitled).

ARTICLE 6.

FEES

6.1 Registry-Level Fees. Registry Operator shall pay ICANN a Registry-Level Fee equal to (i) the Registry Fixed Fee of US$6,250 per calendar quarter and (ii) the Registry-Level Transaction Fee. The Registry-Level Transaction Fee will be equal to the number of annual increments of an initial or renewal domain name registration (at one or more levels, and including renewals associated with transfers from one ICANN-accredited registrar to another, each a “Transaction”), during the applicable calendar quarter multiplied by US$0.25; provided, however that the Registry-Level Transaction Fee shall not apply until and unless more than 50,000 Transactions have occurred in the TLD during any calendar quarter or any four calendar quarter period (the “Transaction Threshold”) and shall apply to each Transaction that occurred during each quarter in which the Transaction Threshold has been met, but shall not apply to each quarter in which the Transaction Threshold has not been met. Registry Operator shall pay the Registry-

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Level Fees on a quarterly basis by the 20th day following the end of each calendar quarter (i.e., on April 20, July 20, October 20 and January 20 for the calendar quarters ending March 31, June 30, September 30 and December 31) of the year to an account designated by ICANN.

6.2 Cost Recovery for RSTEP. Requests by Registry Operator for the approval of Additional Services pursuant to Section 2.1 may be referred by ICANN to the Registry Services Technical Evaluation Panel ("RSTEP") pursuant to that process at http://www.icann.org/en/registries/rsep/. In the event that such requests are referred to RSTEP, Registry Operator shall remit to ICANN the invoiced cost of the RSTEP review within ten (10) business days of receipt of a copy of the RSTEP invoice from ICANN, unless ICANN determines, in its sole and absolute discretion, to pay all or any portion of the invoiced cost of such RSTEP review.

6.3 Variable Registry-Level Fee.

(a) If the ICANN accredited registrars (as a group) do not approve pursuant to the terms of their registrar accreditation agreements with ICANN the variable accreditation fees established by the ICANN Board of Directors for any ICANN fiscal year, upon delivery of notice from ICANN, Registry Operator shall pay to ICANN a Variable Registry-Level Fee, which shall be paid on a fiscal quarter basis, and shall accrue as of the beginning of the first fiscal quarter of such ICANN fiscal year. The fee will be calculated and invoiced by ICANN on a quarterly basis, and shall be paid by Registry Operator within sixty (60) calendar days with respect to the first quarter of such ICANN fiscal year and within twenty (20) calendar days with respect to each remaining quarter of such ICANN fiscal year, of receipt of the invoiced amount by ICANN. The Registry Operator may invoice and collect the Variable Registry-Level Fees from the registrars who are party to a registry-registrar agreement with Registry Operator (which agreement may specifically provide for the reimbursement of Variable Registry-Level Fees paid by Registry Operator pursuant to this Section 6.3); provided, that the fees shall be invoiced to all ICANN accredited registrars if invoiced to any. The Variable Registry-Level Fee, if collectible by ICANN, shall be an obligation of Registry Operator and shall be due and payable as provided in this Section 6.3 irrespective of Registry Operator’s ability to seek and obtain reimbursement of such fee from registrars. In the event ICANN later collects variable accreditation fees for which Registry Operator has paid ICANN a Variable Registry-Level Fee, ICANN shall reimburse the Registry Operator an appropriate amount of the Variable Registry-Level Fee, as reasonably determined by ICANN. If the ICANN accredited registrars (as a group) do approve pursuant to the terms of their registrar accreditation agreements with ICANN the variable accreditation fees established by the ICANN Board of Directors for a fiscal year, ICANN shall not be entitled to a Variable-Level Fee hereunder for such fiscal year, irrespective of whether the ICANN accredited registrars comply with their payment obligations to ICANN during such fiscal year.

(b) The amount of the Variable Registry-Level Fee will be specified for each registrar, and may include both a per-registrar component and a transactional component. The per-registrar component of the Variable Registry-Level Fee shall be specified by ICANN in accordance with the budget adopted by the ICANN Board of Directors for each ICANN fiscal year. The transactional component of the Variable Registry-Level Fee shall be specified by ICANN in accordance with the budget adopted by the ICANN Board of Directors for each ICANN fiscal year but shall not exceed US$0.25 per domain name registration (including renewals associated with transfers from one ICANN-accredited registrar to another) per year.

6.4 Adjustments to Fees. Notwithstanding any of the fee limitations set forth in this Article 6, commencing upon the expiration of the first year of this Agreement, and upon the expiration of each year thereafter during the Term, the then current fees set forth in Section 6.1 and Section 6.3 may be

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adjusted, at ICANN’s discretion, by a percentage equal to the percentage change, if any, in (i) the Consumer Price Index for All Urban Consumers, U.S. City Average (1982-1984 = 100) published by the United States Department of Labor, Bureau of Labor Statistics, or any successor index (the “CPI”) for the month which is one (1) month prior to the commencement of the applicable year, over (ii) the CPI published for the month which is one (1) month prior to the commencement of the immediately prior year. In the event of any such increase, ICANN shall provide notice to Registry Operator specifying the amount of such adjustment. Any fee adjustment under this Section 6.4 shall be effective as of the first day of the year in which the above calculation is made.

6.5 Additional Fee on Late Payments. For any payments thirty (30) calendar days or more overdue under this Agreement, Registry Operator shall pay an additional fee on late payments at the rate of 1.5% per month or, if less, the maximum rate permitted by applicable law.

ARTICLE 7.

MISCELLANEOUS

7.1 Indemnification of ICANN.

(a) Registry Operator shall indemnify and defend ICANN and its directors, officers, employees, and agents (collectively, “Indemnitees”) from and against any and all third-party claims, damages, liabilities, costs, and expenses, including reasonable legal fees and expenses, arising out of or relating to intellectual property ownership rights with respect to the TLD, the delegation of the TLD to Registry Operator, Registry Operator’s operation of the registry for the TLD or Registry Operator’s provision of Registry Services, provided that Registry Operator shall not be obligated to indemnify or defend any Indemnitee to the extent the claim, damage, liability, cost or expense arose: (i) due to the actions or omissions of ICANN, its subcontractors, panelists or evaluators specifically related to and occurring during the registry TLD application process (other than actions or omissions requested by or for the benefit of Registry Operator), or (ii) due to a breach by ICANN of any obligation contained in this Agreement or any willful misconduct by ICANN. This Section shall not be deemed to require Registry Operator to reimburse or otherwise indemnify ICANN for costs associated with the negotiation or execution of this Agreement, or with monitoring or management of the parties’ respective obligations hereunder. Further, this Section shall not apply to any request for attorney’s fees in connection with any litigation or arbitration between or among the parties, which shall be governed by Article 5 or otherwise awarded by a court or arbitrator.

[Alternative Section 7.1(a) text for intergovernmental organizations or governmental entities:

“Registry Operator shall use its best efforts to cooperate with ICANN in order to ensure that ICANN does not incur any costs associated with claims, damages, liabilities, costs and expenses, including reasonable legal fees and expenses, arising out of or relating to intellectual property ownership rights with respect to the TLD, the delegation of the TLD to Registry Operator, Registry Operator’s operation of the registry for the TLD or Registry Operator’s provision of Registry Services, provided that Registry Operator shall not be obligated to provide such cooperation to the extent the claim, damage, liability, cost or expense arose due to a breach by ICANN of any of its obligations contained in this Agreement or any willful misconduct by ICANN. This Section shall not be deemed to require Registry Operator to reimburse or otherwise indemnify ICANN for costs associated with the negotiation or execution of this Agreement, or with monitoring or management of the parties’ respective obligations hereunder. Further, this Section shall not apply to any request for attorney’s fees in connection with any

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litigation or arbitration between or among the parties, which shall be governed by Article 5 or otherwise awarded by a court or arbitrator.”]

(b) For any claims by ICANN for indemnification whereby multiple registry operators (including Registry Operator) have engaged in the same actions or omissions that gave rise to the claim, Registry Operator’s aggregate liability to indemnify ICANN with respect to such claim shall be limited to a percentage of ICANN’s total claim, calculated by dividing the number of total domain names under registration with Registry Operator within the TLD (which names under registration shall be calculated consistently with Article 6 hereof for any applicable quarter) by the total number of domain names under registration within all top level domains for which the registry operators thereof are engaging in the same acts or omissions giving rise to such claim. For the purposes of reducing Registry Operator’s liability under Section 7.1(a) pursuant to this Section 7.1(b), Registry Operator shall have the burden of identifying the other registry operators that are engaged in the same actions or omissions that gave rise to the claim, and demonstrating, to ICANN’s reasonable satisfaction, such other registry operators’ culpability for such actions or omissions. For the avoidance of doubt, in the event that a registry operator is engaged in the same acts or omissions giving rise to the claims, but such registry operator(s) do not have the same or similar indemnification obligations to ICANN as set forth in Section 7.1(a) above, the number of domains under management by such registry operator(s) shall nonetheless be included in the calculation in the preceding sentence. [Note: This Section 7.1(b) is inapplicable to intergovernmental organizations or governmental entities.]

7.2 Indemnification Procedures. If any third-party claim is commenced that is indemnified under Section 7.1 above, ICANN shall provide notice thereof to Registry Operator as promptly as practicable. Registry Operator shall be entitled, if it so elects, in a notice promptly delivered to ICANN, to immediately take control of the defense and investigation of such claim and to employ and engage attorneys reasonably acceptable to ICANN to handle and defend the same, at Registry Operator’s sole cost and expense, provided that in all events ICANN will be entitled to control at its sole cost and expense the litigation of issues concerning the validity or interpretation of ICANN’s policies, Bylaws or conduct. ICANN shall cooperate, at Registry Operator’s cost and expense, in all reasonable respects with Registry Operator and its attorneys in the investigation, trial, and defense of such claim and any appeal arising therefrom, and may, at its own cost and expense, participate, through its attorneys or otherwise, in such investigation, trial and defense of such claim and any appeal arising therefrom. No settlement of a claim that involves a remedy affecting ICANN other than the payment of money in an amount that is fully indemnified by Registry Operator will be entered into without the consent of ICANN. If Registry Operator does not assume full control over the defense of a claim subject to such defense in accordance with this Section 7.2, ICANN will have the right to defend the claim in such manner as it may deem appropriate, at the cost and expense of Registry Operator and Registry Operator shall cooperate in such defense. [Note: This Section 7.2 is inapplicable to intergovernmental organizations or governmental entities.]

7.3 Defined Terms. For purposes of this Agreement, unless such definitions are amended pursuant to a Consensus Policy at a future date, in which case the following definitions shall be deemed amended and restated in their entirety as set forth in such Consensus Policy, Security and Stability shall be defined as follows:

(a) For the purposes of this Agreement, an effect on “Security” shall mean (1) the unauthorized disclosure, alteration, insertion or destruction of registry data, or (2) the unauthorized access to or disclosure of information or resources on the Internet by systems operating in accordance with all applicable standards.

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(b) For purposes of this Agreement, an effect on “Stability” shall refer to (1) lack of compliance with applicable relevant standards that are authoritative and published by a well-established and recognized Internet standards body, such as the relevant Standards-Track or Best Current Practice Requests for Comments (“RFCs”) sponsored by the Internet Engineering Task Force; or (2) the creation of a condition that adversely affects the throughput, response time, consistency or coherence of responses to Internet servers or end systems operating in accordance with applicable relevant standards that are authoritative and published by a well-established and recognized Internet standards body, such as the relevant Standards-Track or Best Current Practice RFCs, and relying on Registry Operator's delegated information or provisioning of services.

7.4 No Offset. All payments due under this Agreement will be made in a timely manner throughout the Term and notwithstanding the pendency of any dispute (monetary or otherwise) between Registry Operator and ICANN.

7.5 Change in Control; Assignment and Subcontracting. Neither party may assign this Agreement without the prior written approval of the other party, which approval will not be unreasonably withheld. Notwithstanding the foregoing, ICANN may assign this Agreement in conjunction with a reorganization or re-incorporation of ICANN to another nonprofit corporation or similar entity organized in the same legal jurisdiction in which ICANN is currently organized for the same or substantially the same purposes. For purposes of this Section 7.5, a direct or indirect change of control of Registry Operator or any material subcontracting arrangement with respect to the operation of the registry for the TLD shall be deemed an assignment. ICANN shall be deemed to have reasonably withheld its consent to any such a direct or indirect change of control or subcontracting arrangement in the event that ICANN reasonably determines that the person or entity acquiring control of Registry Operator or entering into such subcontracting arrangement (or the ultimate parent entity of such acquiring or subcontracting entity) does not meet the ICANN-adopted registry operator criteria or qualifications then in effect. In addition, without limiting the foregoing, Registry Operator must provide no less than thirty (30) calendar days advance notice to ICANN of any material subcontracting arrangements, and any agreement to subcontract portions of the operations of the TLD must mandate compliance with all covenants, obligations and agreements by Registry Operator hereunder, and Registry Operator shall continue to be bound by such covenants, obligations and agreements. Without limiting the foregoing, Registry Operator must also provide no less than thirty (30) calendar days advance notice to ICANN prior to the consummation of any transaction anticipated to result in a direct or indirect change of control of Registry Operator. Such change of control notification shall include a statement that affirms that the ultimate parent entity of the party acquiring such control meets the ICANN-adopted specification or policy on registry operator criteria then in effect, and affirms that Registry Operator is in compliance with its obligations under this Agreement. Within thirty (30) calendar days of such notification, ICANN may request additional information from Registry Operator establishing compliance with this Agreement, in which case Registry Operator must supply the requested information within fifteen (15) calendar days. If ICANN fails to expressly provide or withhold its consent to any direct or indirect change of control of Registry Operator or any material subcontracting arrangement within thirty (30) (or, if ICANN has requested additional information from Registry Operator as set forth above, sixty (60)) calendar days of the receipt of written notice of such transaction from Registry Operator, ICANN shall be deemed to have consented to such transaction. In connection with any such transaction, Registry Operator shall comply with the Registry Transition Process.

7.6 Amendments and Waivers.

(a) If ICANN determines that an amendment to this Agreement (including to the Specifications referred to herein) and all other registry agreements between ICANN and the Applicable
Registry Operators (the “Applicable Registry Agreements”) is desirable (each, a “Special Amendment”), ICANN may submit a Special Amendment for approval by the Applicable Registry Operators pursuant to the process set forth in this Section 7.6, provided that a Special Amendment is not a Restricted Amendment (as defined below). Prior to submitting a Special Amendment for such approval, ICANN shall first consult in good faith with the Working Group (as defined below) regarding the form and substance of a Special Amendment. The duration of such consultation shall be reasonably determined by ICANN based on the substance of the Special Amendment. Following such consultation, ICANN may propose the adoption of a Special Amendment by publicly posting such amendment on its website for no less than thirty (30) calendar days (the “Posting Period”) and providing notice of such amendment by ICANN to the Applicable Registry Operators in accordance with Section 7.8. ICANN will consider the public comments submitted on a Special Amendment during the Posting Period (including comments submitted by the Applicable Registry Operators).

(b) If, within two (2) calendar years of the expiration of the Posting Period (the “Approval Period”), (i) the ICANN Board of Directors approves a Special Amendment (which may be in a form different than submitted for public comment) and (ii) such Special Amendment receives Registry Operator Approval (as defined below), such Special Amendment shall be deemed approved (an “Approved Amendment”) by the Applicable Registry Operators (the last date on which such approvals are obtained is herein referred to as the “Amendment Approval Date”) and shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days notice from ICANN to Registry Operator (the “Amendment Effective Date”). In the event that a Special Amendment is not approved by the ICANN Board of Directors or does not receive Registry Operator Approval within the Approval Period, the Special Amendment will have no effect. The procedure used by ICANN to obtain Registry Operator Approval shall be designed to document the written approval of the Applicable Registry Operators, which may be in electronic form.

(c) During the thirty (30) calendar day period following the Amendment Approval Date, Registry Operator (so long as it did not vote in favor of the Approved Amendment) may apply in writing to ICANN for an exemption from the Approved Amendment (each such request submitted by Registry Operator hereunder, an “Exemption Request”). Each Exemption Request will set forth the basis for such request and provide detailed support for an exemption from the Approved Amendment. An Exemption Request may also include a detailed description and support for any alternatives to, or a variation of, the Approved Amendment proposed by such Registry Operator. An Exemption Request may only be granted upon a clear and convincing showing by Registry Operator that compliance with the Approved Amendment conflicts with applicable laws or would have a material adverse effect on the long-term financial condition or results of operations of Registry Operator. No Exemption Request will be granted if ICANN determines, in its reasonable discretion, that granting such Exemption Request would be materially harmful to registrants or result in the denial of a direct benefit to registrants. Within ninety (90) calendar days of ICANN’s receipt of an Exemption Request, ICANN shall either approve (which approval may be conditioned or consist of alternatives to or a variation of the Approved Amendment) or deny the Exemption Request in writing, during which time the Approved Amendment will not amend this Agreement; provided, that any such conditions, alternatives or variations shall be effective and, to the extent applicable, will amend this Agreement as of the Amendment Effective Date. If the Exemption Request is approved by ICANN, the Approved Amendment will not amend this Agreement. If such Exemption Request is denied by ICANN, the Approved Amendment will amend this Agreement as of the Amendment Effective Date (or, if such date has passed, such Approved Amendment shall be deemed effective immediately on the date of such denial), provided that Registry Operator may, within thirty (30) calendar days following receipt of ICANN’s determination, appeal ICANN’s decision to deny the Exemption Request pursuant to the dispute resolution procedures set forth in Article 5. The Approved

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Amendment will be deemed not to have amended this Agreement during the pendency of the dispute resolution process. For avoidance of doubt, only Exemption Requests submitted by Registry Operator that are approved by ICANN pursuant to this Section 7.6(c) or through an arbitration decision pursuant to Article 5 shall exempt Registry Operator from any Approved Amendment, and no exemption request granted to any other Applicable Registry Operator (whether by ICANN or through arbitration) shall have any effect under this Agreement or exempt Registry Operator from any Approved Amendment.

(d) Except as set forth in this Section 7.6, no amendment, supplement or modification of this Agreement or any provision hereof shall be binding unless executed in writing by both parties, and nothing in this Section 7.6 shall restrict ICANN and Registry Operator from entering into bilateral amendments and modifications to this Agreement negotiated solely between the two parties. No waiver of any provision of this Agreement shall be binding unless evidenced by a writing signed by the party waiving compliance with such provision. No waiver of any of the provisions of this Agreement or failure to enforce any of the provisions hereof shall be deemed or shall constitute a waiver of any other provision hereof, nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided. For the avoidance of doubt, nothing in this Section 7.6 shall be deemed to limit Registry Operator’s obligation to comply with Section 2.2.

(e) For purposes of this Section 7.6, the following terms shall have the following meanings:

(i) “Applicable Registry Operators” means, collectively, the registry operators of the top-level domains party to a registry agreement that contains a provision similar to this Section 7.6, including Registry Operator.

(ii) “Registry Operator Approval” means the receipt of each of the following: (A) the affirmative approval of the Applicable Registry Operators whose payments to ICANN accounted for two-thirds of the total amount of fees (converted to U.S. dollars, if applicable) paid to ICANN by all the Applicable Registry Operators during the immediately previous calendar year pursuant to the Applicable Registry Agreements, and (B) the affirmative approval of a majority of the Applicable Registry Operators at the time such approval is obtained. For avoidance of doubt, with respect to clause (B), each Applicable Registry Operator shall have one vote for each top-level domain operated by such Registry Operator pursuant to an Applicable Registry Agreement.

(iii) “Restricted Amendment” means the following: (i) an amendment of Specification 1, (ii) except to the extent addressed in Section 2.10 hereof, an amendment that specifies the price charged by Registry Operator to registrars for domain name registrations, (iii) an amendment to the definition of Registry Services as set forth in the first paragraph of Section 2.1 of Specification 6, or (iv) an amendment to the length of the Term.

(iv) “Working Group” means representatives of the Applicable Registry Operators and other members of the community that ICANN appoints, from time to time, to serve as a working group to consult on amendments to the Applicable Registry Agreements (excluding bilateral amendments pursuant to Section 7.6(d)).
7.7 **No Third-Party Beneficiaries.** This Agreement will not be construed to create any obligation by either ICANN or Registry Operator to any non-party to this Agreement, including any registrar or registered name holder.

7.8 **General Notices.** Except for notices pursuant to Section 7.6, all notices to be given under or in relation to this Agreement will be given either (i) in writing at the address of the appropriate party as set forth below or (ii) via facsimile or electronic mail as provided below, unless that party has given a notice of change of postal or email address, or facsimile number, as provided in this agreement. All notices under Section 7.6 shall be given by both posting of the applicable information on ICANN’s web site and transmission of such information to Registry Operator by electronic mail. Any change in the contact information for notice below will be given by the party within thirty (30) calendar days of such change. Notices, designations, determinations, and specifications made under this Agreement will be in the English language. Other than notices under Section 7.6, any notice required by this Agreement will be deemed to have been properly given (i) if in paper form, when delivered in person or via courier service with confirmation of receipt or (ii) if via facsimile or by electronic mail, upon confirmation of receipt by the recipient’s facsimile machine or email server, provided that such notice via facsimile or electronic mail shall be followed by a copy sent by regular postal mail service within two (2) business days. Any notice required by Section 7.6 will be deemed to have been given when electronically posted on ICANN’s website and upon confirmation of receipt by the email server. In the event other means of notice become practically achievable, such as notice via a secure website, the parties will work together to implement such notice means under this Agreement.

If to ICANN, addressed to:
Internet Corporation for Assigned Names and Numbers
4676 Admiralty Way, Suite 330
Marina Del Rey, California  90292
Telephone:  1-310-823-9358
Facsimile:  1-310-823-8649
Attention:  President and CEO

With a Required Copy to:  General Counsel
Email:  (As specified from time to time.)

If to Registry Operator, addressed to:
[ ____________ ]
[ ____________ ]
[ ____________ ]
Telephone:
Facsimile:
Attention:

With a Required Copy to:
Email:  (As specified from time to time.)

7.9 **Entire Agreement.** This Agreement (including those specifications and documents incorporated by reference to URL locations which form a part of it) constitutes the entire agreement of the parties hereto pertaining to the operation of the TLD and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, between the parties on that subject.

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7.10 English Language Controls. Notwithstanding any translated version of this Agreement and/or specifications that may be provided to Registry Operator, the English language version of this Agreement and all referenced specifications are the official versions that bind the parties hereto. In the event of any conflict or discrepancy between any translated version of this Agreement and the English language version, the English language version controls. Notices, designations, determinations, and specifications made under this Agreement shall be in the English language.

7.11 Ownership Rights. Nothing contained in this Agreement shall be construed as establishing or granting to Registry Operator any property ownership rights or interests in the TLD or the letters, words, symbols or other characters making up the TLD string.

7.12 Severability. This Agreement shall be deemed severable; the invalidity or unenforceability of any term or provision of this Agreement shall not affect the validity or enforceability of the balance of this Agreement or of any other term hereof, which shall remain in full force and effect. If any of the provisions hereof are determined to be invalid or unenforceable, the parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible.

7.13 Court Orders. ICANN will respect any order from a court of competent jurisdiction, including any orders from any jurisdiction where the consent or non-objection of the government was a requirement for the delegation of the TLD. Notwithstanding any other provision of this Agreement, ICANN’s implementation of any such order will not be a breach of this Agreement.

[Note: The following section is applicable to intergovernmental organizations or governmental entities only.]

7.14 Special Provision Relating to Intergovernmental Organizations or Governmental Entities.

(a) ICANN acknowledges that Registry Operator is an entity subject to public international law, including international treaties applicable to Registry Operator (such public international law and treaties, collectively hereinafter the “Applicable Laws”). Nothing in this Agreement and its related specifications shall be construed or interpreted to require Registry Operator to violate Applicable Laws or prevent compliance therewith. The Parties agree that Registry Operator’s compliance with Applicable Laws shall not constitute a breach of this Agreement.

(b) In the event Registry Operator reasonably determines that any provision of this Agreement and its related specifications, or any decisions or policies of ICANN referred to in this Agreement, including but not limited to Temporary Policies and Consensus Policies (such provisions, specifications and policies, collectively hereinafter, “ICANN Requirements”), may conflict with or violate Applicable Law (hereinafter, a “Potential Conflict”), Registry Operator shall provide detailed notice (a “Notice”) of such Potential Conflict to ICANN as early as possible and, in the case of a Potential Conflict with a proposed Consensus Policy, no later than the end of any public comment period on such proposed Consensus Policy. In the event Registry Operator determines that there is Potential Conflict between a proposed Applicable Law and any ICANN Requirement, Registry Operator shall provide detailed Notice of such Potential Conflict to ICANN as early as possible and, in the case of a Potential Conflict with a proposed Consensus Policy, no later than the end of any public comment period on such proposed Consensus Policy.

(c) As soon as practicable following such review, the parties shall attempt to resolve the Potential Conflict by cooperative engagement pursuant to the procedures set forth in Section 5.1. In
addition, Registry Operator shall use its best efforts to eliminate or minimize any impact arising from such Potential Conflict between Applicable Laws and any ICANN Requirement. If, following such cooperative engagement, Registry Operator determines that the Potential Conflict constitutes an actual conflict between any ICANN Requirement, on the one hand, and Applicable Laws, on the other hand, then ICANN shall waive compliance with such ICANN Requirement (provided that the parties shall negotiate in good faith on a continuous basis thereafter to mitigate or eliminate the effects of such non-compliance on ICANN), unless ICANN reasonably and objectively determines that the failure of Registry Operator to comply with such ICANN Requirement would constitute a threat to the Security and Stability of Registry Services, the Internet or the DNS (hereinafter, an “ICANN Determination”). Following receipt of notice by Registry Operator of such ICANN Determination, Registry Operator shall be afforded a period of ninety (90) calendar days to resolve such conflict with an Applicable Law. If the conflict with an Applicable Law is not resolved to ICANN’s complete satisfaction during such period, Registry Operator shall have the option to submit, within ten (10) calendar days thereafter, the matter to binding arbitration as defined in subsection (d) below. If during such period, Registry Operator does not submit the matter to arbitration pursuant to subsection (d) below, ICANN may, upon notice to Registry Operator, terminate this Agreement with immediate effect.

(d) If Registry Operator disagrees with an ICANN Determination, Registry Operator may submit the matter to binding arbitration pursuant to the provisions of Section 5.2, except that the sole issue presented to the arbitrator for determination will be whether or not ICANN reasonably and objectively reached the ICANN Determination. For the purposes of such arbitration, ICANN shall present evidence to the arbitrator supporting the ICANN Determination. If the arbitrator determines that ICANN did not reasonably and objectively reach the ICANN Determination, then ICANN shall waive Registry Operator’s compliance with the subject ICANN Requirement. If the arbitrators or pre-arbitral referee, as applicable, determine that ICANN did reasonably and objectively reach the ICANN Determination, then, upon notice to Registry Operator, ICANN may terminate this Agreement with immediate effect.

(e) Registry Operator hereby represents and warrants that, to the best of its knowledge as of the date of execution of this Agreement, no existing ICANN Requirement conflicts with or violates any Applicable Law.

(f) Notwithstanding any other provision of this Section 7.14, following an ICANN Determination and prior to a finding by an arbitrator pursuant to Section 7.14(d) above, ICANN may, subject to prior consultations with Registry Operator, take such reasonable technical measures as it deems necessary to ensure the Security and Stability of Registry Services, the Internet and the DNS. These reasonable technical measures shall be taken by ICANN on an interim basis, until the earlier of the date of conclusion of the arbitration procedure referred to in Section 7.14(d) above or the date of complete resolution of the conflict with an Applicable Law. In case Registry Operator disagrees with such technical measures taken by ICANN, Registry Operator may submit the matter to binding arbitration pursuant to the provisions of Section 5.2 above, during which process ICANN may continue to take such technical measures. In the event that ICANN takes such measures, Registry Operator shall pay all costs incurred by ICANN as a result of taking such measures. In addition, in the event that ICANN takes such measures, ICANN shall retain and may enforce its rights under the Continued Operations Instrument and Alternative Instrument, as applicable.

* * * * *

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

By: __________________________________________

President and CEO

Date:

[Registry Operator]

By: __________________________________________

Date:
EXHIBIT A

Approved Services

1.1. “Consensus Policies” are those policies established (1) pursuant to the procedure set forth in ICANN's Bylaws and due process, and (2) covering those topics listed in Section 1.2 of this document. The Consensus Policy development process and procedure set forth in ICANN's Bylaws may be revised from time to time in accordance with the process set forth therein.

1.2. Consensus Policies and the procedures by which they are developed shall be designed to produce, to the extent possible, a consensus of Internet stakeholders, including the operators of gTLDs. Consensus Policies shall relate to one or more of the following:

1.2.1. issues for which uniform or coordinated resolution is reasonably necessary to facilitate interoperability, security and/or stability of the Internet or Domain Name System (“DNS”);
1.2.2. functional and performance specifications for the provision of Registry Services;
1.2.3. Security and Stability of the registry database for the TLD;
1.2.4. registry policies reasonably necessary to implement Consensus Policies relating to registry operations or registrars;
1.2.5. resolution of disputes regarding the registration of domain names (as opposed to the use of such domain names); or
1.2.6. restrictions on cross-ownership of registry operators and registrars or registrar resellers and regulations and restrictions with respect to registry operations and the use of registry and registrar data in the event that a registry operator and a registrar or registrar reseller are affiliated.

1.3. Such categories of issues referred to in Section 1.2 shall include, without limitation:

1.3.1. principles for allocation of registered names in the TLD (e.g., first-come/first-served, timely renewal, holding period after expiration);
1.3.2. prohibitions on warehousing of or speculation in domain names by registries or registrars;
1.3.3. reservation of registered names in the TLD that may not be registered initially or that may not be renewed due to reasons reasonably related to (i) avoidance of confusion among or misleading of users, (ii) intellectual property, or (iii) the technical management of the DNS or the Internet (e.g., establishment of reservations of names from registration); and
1.3.4. maintenance of and access to accurate and up-to-date information concerning domain name registrations; and procedures to avoid disruptions of domain name registrations due to suspension or termination of operations by a registry operator or a registrar, including procedures for allocation of responsibility for serving registered domain names in a TLD affected by such a suspension or termination.

1.4. In addition to the other limitations on Consensus Policies, they shall not:
1.4.1. prescribe or limit the price of Registry Services;
1.4.2. modify the terms or conditions for the renewal or termination of the Registry Agreement;
1.4.3. modify the limitations on Temporary Policies (defined below) or Consensus Policies;
1.4.4. modify the provisions in the registry agreement regarding fees paid by Registry Operator to ICANN; or
1.4.5. modify ICANN’s obligations to ensure equitable treatment of registry operators and act in an open and transparent manner.

2. **Temporary Policies.** Registry Operator shall comply with and implement all specifications or policies established by the Board on a temporary basis, if adopted by the Board by a vote of at least two-thirds of its members, so long as the Board reasonably determines that such modifications or amendments are justified and that immediate temporary establishment of a specification or policy on the subject is necessary to maintain the stability or security of Registry Services or the DNS ("Temporary Policies").

2.1. Such proposed specification or policy shall be as narrowly tailored as feasible to achieve those objectives. In establishing any Temporary Policy, the Board shall state the period of time for which the Temporary Policy is adopted and shall immediately implement the Consensus Policy development process set forth in ICANN's Bylaws.

2.1.1. ICANN shall also issue an advisory statement containing a detailed explanation of its reasons for adopting the Temporary Policy and why the Board believes such Temporary Policy should receive the consensus support of Internet stakeholders.

2.1.2. If the period of time for which the Temporary Policy is adopted exceeds 90 days, the Board shall reaffirm its temporary adoption every 90 days for a total period not to exceed one year, in order to maintain such Temporary Policy in effect until such time as it becomes a Consensus Policy. If the one year period expires or, if during such one year period, the Temporary Policy does not become a Consensus Policy and is not reaffirmed by the Board, Registry Operator shall no longer be required to comply with or implement such Temporary Policy.

3. **Notice and Conflicts.** Registry Operator shall be afforded a reasonable period of time following notice of the establishment of a Consensus Policy or Temporary Policy in which to comply with such policy or specification, taking into account any urgency involved. In the event of a conflict between Registry Services and Consensus Policies or any Temporary Policy, the Consensus Policies or Temporary Policy shall control, but only with respect to subject matter in conflict.
SPECIFICATION 2
DATA ESCROW REQUIREMENTS

Registry Operator will engage an independent entity to act as data escrow agent (“Escrow Agent”) for the provision of data escrow services related to the Registry Agreement. The following Technical Specifications set forth in Part A, and Legal Requirements set forth in Part B, will be included in any data escrow agreement between Registry Operator and the Escrow Agent, under which ICANN must be named a third-party beneficiary. In addition to the following requirements, the data escrow agreement may contain other provisions that are not contradictory or intended to subvert the required terms provided below.

PART A – TECHNICAL SPECIFICATIONS

1. Deposits. There will be two types of Deposits: Full and Differential. For both types, the universe of Registry objects to be considered for data escrow are those objects necessary in order to offer all of the approved Registry Services.
   1.1 “Full Deposit” will consist of data that reflects the state of the registry as of 00:00:00 UTC on each Sunday.
   1.2 “Differential Deposit” means data that reflects all transactions that were not reflected in the last previous Full or Differential Deposit, as the case may be. Each Differential Deposit will contain all database transactions since the previous Deposit was completed as of 00:00:00 UTC of each day, but Sunday. Differential Deposits must include complete Escrow Records as specified below that were not included or changed since the most recent full or Differential Deposit (i.e., newly added or modified domain names).

2. Schedule for Deposits. Registry Operator will submit a set of escrow files on a daily basis as follows:
   2.1 Each Sunday, a Full Deposit must be submitted to the Escrow Agent by 23:59 UTC.
   2.2 The other six days of the week, the corresponding Differential Deposit must be submitted to Escrow Agent by 23:59 UTC.

   3.1 Deposit’s Format. Registry objects, such as domains, contacts, name servers, registrars, etc. will be compiled into a file constructed as described in draft-arias-noguchi-registry-data-escrow, see [1]. The aforementioned document describes some elements as optional; Registry Operator will include those elements in the Deposits if they are available. Registry Operator will use the draft version available at the time of signing the Agreement, if not already an RFC. Once the specification is published as an RFC, Registry Operator will implement that specification, no later than 180 days after. UTF-8 character encoding will be used.

   3.2 Extensions. If a Registry Operator offers additional Registry Services that require submission of additional data, not included above, additional “extension schemas” shall be defined in a case by case base to represent that data. These “extension schemas” will be specified as described in [1]. Data related to the “extensions schemas” will be included in the deposit file described in section 3.1. ICANN and the respective Registry shall work together to agree on such new objects’ data escrow specifications.
4. **Processing of Deposit files.** The use of compression is recommended in order to reduce electronic data transfer times, and storage capacity requirements. Data encryption will be used to ensure the privacy of registry escrow data. Files processed for compression and encryption will be in the binary OpenPGP format as per OpenPGP Message Format - RFC 4880, see [2]. Acceptable algorithms for Public-key cryptography, Symmetric-key cryptography, Hash and Compression are those enumerated in RFC 4880, not marked as deprecated in OpenPGP IANA Registry, see [3], that are also royalty-free. The process to follow for a data file in original text format is:

1. The file should be compressed. The suggested algorithm for compression is ZIP as per RFC 4880.
2. The compressed data will be encrypted using the escrow agent's public key. The suggested algorithms for Public-key encryption are Elgamal and RSA as per RFC 4880. The suggested algorithms for Symmetric-key encryption are TripleDES, AES128 and CAST5 as per RFC 4880.
3. The file may be split as necessary if, once compressed and encrypted is larger than the file size limit agreed with the escrow agent. Every part of a split file, or the whole file if split is not used, will be called a processed file in this section.
4. A digital signature file will be generated for every processed file using the Registry's private key. The digital signature file will be in binary OpenPGP format as per RFC 4880 [2], and will not be compressed or encrypted. The suggested algorithms for Digital signatures are DSA and RSA as per RFC 4880. The suggested algorithm for Hashes in Digital signatures is SHA256.
5. The processed files and digital signature files will then be transferred to the Escrow Agent through secure electronic mechanisms, such as, SFTP, SCP, HTTPS file upload, etc. as agreed between the Escrow Agent and the Registry Operator. Non-electronic delivery through a physical medium such as CD-ROMs, DVD-ROMs, or USB storage devices may be used if authorized by ICANN.
6. The Escrow Agent will then validate every (processed) transferred data file using the procedure described in section 8.

5. **File Naming Conventions.** Files will be named according to the following convention:

\[ \text{\{gTLD\}}_{\text{YYYY-MM-DD}}_{\text{\{type\}}}{\text{\_S\{\#\}}}_{\text{\_R\{rev\}}}{\_\text{\{ext\}}} \]

where:

5.1 \{gTLD\} is replaced with the gTLD name; in case of an IDN-TLD, the ASCII-compatible form (A-Label) must be used;
5.2 \{YYYY-MM-DD\} is replaced by the date corresponding to the time used as a timeline watermark for the transactions; i.e. for the Full Deposit corresponding to 2009-08-02T00:00Z, the string to be used would be “2009-08-02”;
5.3 \{type\} is replaced by:
   (1) “full”, if the data represents a Full Deposit;
   (2) “diff”, if the data represents a Differential Deposit;
   (3) “thin”, if the data represents a Bulk Registration Data Access file, as specified in section 3 of Specification 4;
5.4 \{\#\} is replaced by the position of the file in a series of files, beginning with “1”; in case of a lone file, this must be replaced by “1”.
5.5 \{rev\} is replaced by the number of revision (or resend) of the file beginning with “0”;
5.6 \{ext\} is replaced by “sig” if it is a digital signature file of the quasi-homonymous file. Otherwise it is replaced by “ryde”.
6. **Distribution of Public Keys.** Each of Registry Operator and Escrow Agent will distribute its public key to the other party (Registry Operator or Escrow Agent, as the case may be) via email to an email address to be specified. Each party will confirm receipt of the other party's public key with a reply email, and the distributing party will subsequently reconfirm the authenticity of the key transmitted via offline methods, like in person meeting, telephone, etc. In this way, public key transmission is authenticated to a user able to send and receive mail via a mail server operated by the distributing party. Escrow Agent, Registry and ICANN will exchange keys by the same procedure.

7. **Notification of Deposits.** Along with the delivery of each Deposit, Registry Operator will deliver to Escrow Agent and to ICANN a written statement (which may be by authenticated e-mail) that includes a copy of the report generated upon creation of the Deposit and states that the Deposit has been inspected by Registry Operator and is complete and accurate. Registry Operator will include the Deposit’s "id" and "resend" attributes in its statement. The attributes are explained in [1].

8. **Verification Procedure.**
   (1) The signature file of each processed file is validated.
   (2) If processed files are pieces of a bigger file, the latter is put together.
   (3) Each file obtained in the previous step is then decrypted and uncompressed.
   (4) Each data file contained in the previous step is then validated against the format defined in [1].
   (5) If [1] includes a verification process, that will be applied at this step.
   If any discrepancy is found in any of the steps, the Deposit will be considered incomplete.

9. **References.**
PART B – LEGAL REQUIREMENTS

1. **Escrow Agent.** Prior to entering into an escrow agreement, the Registry Operator must provide notice to ICANN as to the identity of the Escrow Agent, and provide ICANN with contact information and a copy of the relevant escrow agreement, and all amendment thereto. In addition, prior to entering into an escrow agreement, Registry Operator must obtain the consent of ICANN to (a) use the specified Escrow Agent, and (b) enter into the form of escrow agreement provided. ICANN must be expressly designated a third-party beneficiary of the escrow agreement. ICANN reserves the right to withhold its consent to any Escrow Agent, escrow agreement, or any amendment thereto, all in its sole discretion.

2. **Fees.** Registry Operator must pay, or have paid on its behalf, fees to the Escrow Agent directly. If Registry Operator fails to pay any fee by the due date(s), the Escrow Agent will give ICANN written notice of such non-payment and ICANN may pay the past-due fee(s) within ten business days after receipt of the written notice from Escrow Agent. Upon payment of the past-due fees by ICANN, ICANN shall have a claim for such amount against Registry Operator, which Registry Operator shall be required to submit to ICANN together with the next fee payment due under the Registry Agreement.

3. **Ownership.** Ownership of the Deposits during the effective term of the Registry Agreement shall remain with Registry Operator at all times. Thereafter, Registry Operator shall assign any such ownership rights (including intellectual property rights, as the case may be) in such Deposits to ICANN. In the event that during the term of the Registry Agreement any Deposit is released from escrow to ICANN, any intellectual property rights held by Registry Operator in the Deposits will automatically be licensed on a non-exclusive, perpetual, irrevocable, royalty-free, paid-up basis to ICANN or to a party designated in writing by ICANN.

4. **Integrity and Confidentiality.** Escrow Agent will be required to (i) hold and maintain the Deposits in a secure, locked, and environmentally safe facility, which is accessible only to authorized representatives of Escrow Agent, (ii) protect the integrity and confidentiality of the Deposits using commercially reasonable measures and (iii) keep and safeguard each Deposit for one year. ICANN and Registry Operator will be provided the right to inspect Escrow Agent's applicable records upon reasonable prior notice and during normal business hours. Registry Operator and ICANN will be provided with the right to designate a third-party auditor to audit Escrow Agent’s compliance with the technical specifications and maintenance requirements of this Specification 2 from time to time.

If Escrow Agent receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposits, Escrow Agent will promptly notify the Registry Operator and ICANN unless prohibited by law. After notifying the Registry Operator and ICANN, Escrow Agent shall allow sufficient time for Registry Operator or ICANN to challenge any such order, which shall be the responsibility of Registry Operator or ICANN; provided, however, that Escrow Agent does not waive its rights to present its position with respect to any such order. Escrow Agent will cooperate with the Registry Operator or ICANN to support efforts to quash or limit any subpoena, at such party’s expense. Any party requesting additional assistance shall pay Escrow Agent’s standard charges or as quoted upon submission of a detailed request.
5. **Copies.** Escrow Agent may be permitted to duplicate any Deposit, in order to comply with the terms and provisions of the escrow agreement.

6. **Release of Deposits.** Escrow Agent will make available for electronic download (unless otherwise requested) to ICANN or its designee, within twenty-four hours, at the Registry Operator’s expense, all Deposits in Escrow Agent’s possession in the event that the Escrow Agent receives a request from Registry Operator to effect such delivery to ICANN, or receives one of the following written notices by ICANN stating that:

   6.1 the Registry Agreement has expired without renewal, or been terminated; or
   6.2 ICANN failed, with respect to (a) any Full Deposit or (b) five Differential Deposits within any calendar month, to receive, within five calendar days after the Deposit's scheduled delivery date, notification of receipt from Escrow Agent; (x) ICANN gave notice to Escrow Agent and Registry Operator of that failure; and (y) ICANN has not, within seven calendar days after such notice, received notice from Escrow Agent that the Deposit has been received; or
   6.3 ICANN has received notification from Escrow Agent of failed verification of a Full Deposit or of failed verification of five Differential Deposits within any calendar month and (a) ICANN gave notice to Registry Operator of that receipt; and (b) ICANN has not, within seven calendar days after such notice, received notice from Escrow Agent of verification of a remediated version of such Full Deposit or Differential Deposit; or
   6.4 Registry Operator has: (i) ceased to conduct its business in the ordinary course; or (ii) filed for bankruptcy, become insolvent or anything analogous to any of the foregoing under the laws of any jurisdiction anywhere in the world; or
   6.5 Registry Operator has experienced a failure of critical registry functions and ICANN has asserted its rights pursuant to Section 2.13 of the Registry Agreement; or
   6.6 a competent court, arbitral, legislative, or government agency mandates the release of the Deposits to ICANN.

   Unless Escrow Agent has previously released the Registry Operator’s Deposits to ICANN or its designee, Escrow Agent will deliver all Deposits to ICANN upon termination of the Registry Agreement or the Escrow Agreement.

7. **Verification of Deposits.**

   7.1 Within twenty-four hours after receiving each Deposit or corrected Deposit, Escrow Agent must verify the format and completeness of each Deposit and deliver to ICANN a copy of the verification report generated for each Deposit. Reports will be delivered electronically, as specified from time to time by ICANN.

   7.2 If Escrow Agent discovers that any Deposit fails the verification procedures, Escrow Agent must notify, either by email, fax or phone, Registry Operator and ICANN of such nonconformity within twenty-four hours after receiving the non-conformant Deposit. Upon notification of such verification failure, Registry Operator must begin developing modifications, updates, corrections, and other fixes of the Deposit necessary for the Deposit to pass the verification procedures and deliver such fixes to Escrow Agent as promptly as possible.

8. **Amendments.** Escrow Agent and Registry Operator shall amend the terms of the Escrow Agreement to conform to this Specification 2 within ten (10) calendar days of any amendment or modification to this Specification 2. In the event of a conflict between this Specification 2 and the Escrow Agreement, this Specification 2 shall control.

9. **Indemnity.** Registry Operator shall indemnify and hold harmless Escrow Agent and each of its directors, officers, agents, employees, members, and stockholders ("Escrow Agent Indemnitees")
absolutely and forever from and against any and all claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, and any other expenses whatsoever, including reasonable attorneys' fees and costs, that may be asserted by a third party against any Escrow Agent Indemnitees in connection with the Escrow Agreement or the performance of Escrow Agent or any Escrow Agent Indemnitees thereunder (with the exception of any claims based on the misrepresentation, negligence, or misconduct of Escrow Agent, its directors, officers, agents, employees, contractors, members, and stockholders). Escrow Agent shall indemnify and hold harmless Registry Operator and ICANN, and each of their respective directors, officers, agents, employees, members, and stockholders ("Indemnitees") absolutely and forever from and against any and all claims, actions, damages, suits, liabilities, obligations, costs, fees, charges, and any other expenses whatsoever, including reasonable attorneys' fees and costs, that may be asserted by a third party against any Indemnitee in connection with the misrepresentation, negligence or misconduct of Escrow Agent, its directors, officers, agents, employees and contractors.
SPECIFICATION 3

FORMAT AND CONTENT FOR REGISTRY OPERATOR MONTHLY REPORTING

Registry Operator shall provide one set of monthly reports per gTLD to __________ with the following content. ICANN may request in the future that the reports be delivered by other means and using other formats. ICANN will use reasonable commercial efforts to preserve the confidentiality of the information reported until three months after the end of the month to which the reports relate.

1. Per-Registrar Transactions Report. This report shall be compiled in a comma separated-value formatted file as specified in RFC 4180. The file shall be named “gTLD-transactions-yyyymm.csv”, where “gTLD” is the gTLD name; in case of an IDN-TLD, the A-label shall be used; “yyyymm” is the year and month being reported. The file shall contain the following fields per registrar:

<table>
<thead>
<tr>
<th>Field #</th>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>registrar-name</td>
<td>registrar's full corporate name as registered with IANA</td>
</tr>
<tr>
<td>02</td>
<td>iana-id</td>
<td><a href="http://www.iana.org/assignments/registrar-ids">http://www.iana.org/assignments/registrar-ids</a></td>
</tr>
<tr>
<td>03</td>
<td>total-domains</td>
<td>total domains under sponsorship</td>
</tr>
<tr>
<td>04</td>
<td>total-nameservers</td>
<td>total name servers registered for TLD</td>
</tr>
<tr>
<td>05</td>
<td>net-adds-1-yr</td>
<td>number of domains successfully registered with an initial term of one year (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>06</td>
<td>net-adds-2-yr</td>
<td>number of domains successfully registered with an initial term of two years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>07</td>
<td>net-adds-3-yr</td>
<td>number of domains successfully registered with an initial term of three years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>08</td>
<td>net-adds-4-yr</td>
<td>number of domains successfully registered with an initial term of four years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>09</td>
<td>net-adds-5-yr</td>
<td>number of domains successfully registered with an initial term of five years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>10</td>
<td>net-adds-6-yr</td>
<td>number of domains successfully registered with an initial term of six years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>11</td>
<td>net-adds-7-yr</td>
<td>number of domains successfully registered with an initial term of seven years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>net-adds-8-yr</td>
<td>number of domains successfully registered with an initial term of eight years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>13</td>
<td>net-adds-9-yr</td>
<td>number of domains successfully registered with an initial term of nine years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>14</td>
<td>net-adds-10-yr</td>
<td>number of domains successfully registered with an initial term of ten years (and not deleted within the add grace period)</td>
</tr>
<tr>
<td>15</td>
<td>net-renews-1-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of one year (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>16</td>
<td>net-renews-2-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of two years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>17</td>
<td>net-renews-3-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of three years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>18</td>
<td>net-renews-4-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of four years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>19</td>
<td>net-renews-5-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of five years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>20</td>
<td>net-renews-6-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of six years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>21</td>
<td>net-renews-7-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of seven years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>22</td>
<td>net-renews-8-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of eight years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>23</td>
<td>net-renews-9-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of nine years (and not deleted within the renew grace period)</td>
</tr>
<tr>
<td>Number</td>
<td>Field Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>24</td>
<td>net-renews-10-yr</td>
<td>number of domains successfully renewed either automatically or by command with a new renewal period of ten years (and not deleted within the renewal grace period)</td>
</tr>
<tr>
<td>25</td>
<td>transfer-gaining-successful</td>
<td>transfers initiated by this registrar that were ack'd by the other registrar – either by command or automatically</td>
</tr>
<tr>
<td>26</td>
<td>transfer-gaining-nacked</td>
<td>transfers initiated by this registrar that were n'acked by the other registrar</td>
</tr>
<tr>
<td>27</td>
<td>transfer-losing-successful</td>
<td>transfers initiated by another registrar that this registrar ack'd – either by command or automatically</td>
</tr>
<tr>
<td>28</td>
<td>transfer-losing-nacked</td>
<td>transfers initiated by another registrar that this registrar n'acked</td>
</tr>
<tr>
<td>29</td>
<td>transfer-disputed-won</td>
<td>number of transfer disputes in which this registrar prevailed</td>
</tr>
<tr>
<td>30</td>
<td>transfer-disputed-lost</td>
<td>number of transfer disputes this registrar lost</td>
</tr>
<tr>
<td>31</td>
<td>transfer-disputed-nodecision</td>
<td>number of transfer disputes involving this registrar with a split or no decision</td>
</tr>
<tr>
<td>32</td>
<td>deleted-domains-grace</td>
<td>domains deleted within the add grace period</td>
</tr>
<tr>
<td>33</td>
<td>deleted-domains-nograce</td>
<td>domains deleted outside the add grace period</td>
</tr>
<tr>
<td>34</td>
<td>restored-domains</td>
<td>domain names restored from redemption period</td>
</tr>
<tr>
<td>35</td>
<td>restored-noreport</td>
<td>total number of restored names for which the registrar failed to submit a restore report</td>
</tr>
<tr>
<td>36</td>
<td>agp-exemption-requests</td>
<td>total number of AGP (add grace period) exemption requests</td>
</tr>
<tr>
<td>37</td>
<td>agp-exemptions-granted</td>
<td>total number of AGP (add grace period) exemption requests granted</td>
</tr>
<tr>
<td>38</td>
<td>agp-exempted-domains</td>
<td>total number of names affected by granted AGP (add grace period) exemption requests</td>
</tr>
<tr>
<td>39</td>
<td>attempted-adds</td>
<td>number of attempted (successful and failed) domain name create commands</td>
</tr>
</tbody>
</table>

The first line shall include the field names exactly as described in the table above as a “header line” as described in section 2 of RFC 4180. The last line of each report shall include totals for each column across all registrars; the first field of this line shall read “Totals” while the second field shall be left empty in that line. No other lines besides the ones described above shall be included. Line breaks shall be `<U+000D, U+000A>` as described in RFC 4180.
2. Registry Functions Activity Report. This report shall be compiled in a comma separated-value formatted file as specified in RFC 4180. The file shall be named “gTLD-activity-yyyymm.csv”, where “gTLD” is the gTLD name; in case of an IDN-TLD, the A-label shall be used; “yyyymm” is the year and month being reported. The file shall contain the following fields:

<table>
<thead>
<tr>
<th>Field #</th>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>operational-registars</td>
<td>number of operational registrars at the end of the reporting period</td>
</tr>
<tr>
<td>02</td>
<td>ramp-up-registars</td>
<td>number of registrars that have received a password for access to OT&amp;E at the end of the reporting period</td>
</tr>
<tr>
<td>03</td>
<td>pre-ramp-up-registars</td>
<td>number of registrars that have requested access, but have not yet entered the ramp-up period at the end of the reporting period</td>
</tr>
<tr>
<td>04</td>
<td>zfa-passwords</td>
<td>number of active zone file access passwords at the end of the reporting period</td>
</tr>
<tr>
<td>05</td>
<td>whois-43-queries</td>
<td>number of WHOIS (port-43) queries responded during the reporting period</td>
</tr>
<tr>
<td>06</td>
<td>web-whois-queries</td>
<td>number of Web-based Whois queries responded during the reporting period, not including searchable Whois</td>
</tr>
<tr>
<td>07</td>
<td>searchable-whois-queries</td>
<td>number of searchable Whois queries responded during the reporting period, if offered</td>
</tr>
<tr>
<td>08</td>
<td>dns-udp-queries-received</td>
<td>number of DNS queries received over UDP transport during the reporting period</td>
</tr>
<tr>
<td>09</td>
<td>dns-udp-queries-responded</td>
<td>number of DNS queries received over UDP transport that were responded during the reporting period</td>
</tr>
<tr>
<td>10</td>
<td>dns-tcp-queries-received</td>
<td>number of DNS queries received over TCP transport during the reporting period</td>
</tr>
<tr>
<td>11</td>
<td>dns-tcp-queries-responded</td>
<td>number of DNS queries received over TCP transport that were responded during the reporting period</td>
</tr>
<tr>
<td>12</td>
<td>srs-dom-check</td>
<td>number of SRS (EPP and any other interface) domain name “check” requests responded during the reporting period</td>
</tr>
<tr>
<td>13</td>
<td>srs-dom-create</td>
<td>number of SRS (EPP and any other interface) domain name “create” requests responded during the reporting period</td>
</tr>
<tr>
<td>14</td>
<td>srs-dom-delete</td>
<td>number of SRS (EPP and any other interface) domain name “delete” requests responded during the reporting period</td>
</tr>
<tr>
<td>15</td>
<td>srs-dom-info</td>
<td>number of SRS (EPP and any other interface) domain name “info” requests responded during the reporting period</td>
</tr>
<tr>
<td>16</td>
<td>srs-dom-renew</td>
<td>number of SRS (EPP and any other interface) domain name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“renew” requests responded during the reporting period</td>
</tr>
<tr>
<td>17</td>
<td>srs-dom-rgp-restore-report</td>
<td>number of SRS (EPP and any other interface) domain name RGP “restore” requests responded during the reporting period</td>
</tr>
<tr>
<td>18</td>
<td>srs-dom-rgp-restore-request</td>
<td>number of SRS (EPP and any other interface) domain name RGP “restore” requests delivering a restore report responded during the reporting period</td>
</tr>
<tr>
<td>19</td>
<td>srs-dom-transfer-approve</td>
<td>number of SRS (EPP and any other interface) domain name “transfer” requests to approve transfers responded during the reporting period</td>
</tr>
<tr>
<td>20</td>
<td>srs-dom-transfer-cancel</td>
<td>number of SRS (EPP and any other interface) domain name “transfer” requests to cancel transfers responded during the reporting period</td>
</tr>
<tr>
<td>21</td>
<td>srs-dom-transfer-query</td>
<td>number of SRS (EPP and any other interface) domain name “transfer” requests to query about a transfer responded during the reporting period</td>
</tr>
<tr>
<td>22</td>
<td>srs-dom-transfer-reject</td>
<td>number of SRS (EPP and any other interface) domain name “transfer” requests to reject transfers responded during the reporting period</td>
</tr>
<tr>
<td>23</td>
<td>srs-dom-transfer-request</td>
<td>number of SRS (EPP and any other interface) domain name “transfer” requests to request transfers responded during the reporting period</td>
</tr>
<tr>
<td>24</td>
<td>srs-dom-update</td>
<td>number of SRS (EPP and any other interface) domain name “update” requests (not including RGP restore requests) responded during the reporting period</td>
</tr>
<tr>
<td>25</td>
<td>srs-host-check</td>
<td>number of SRS (EPP and any other interface) host “check” requests responded during the reporting period</td>
</tr>
<tr>
<td>26</td>
<td>srs-host-create</td>
<td>number of SRS (EPP and any other interface) host “create” requests responded during the reporting period</td>
</tr>
<tr>
<td>27</td>
<td>srs-host-delete</td>
<td>number of SRS (EPP and any other interface) host “delete” requests responded during the reporting period</td>
</tr>
<tr>
<td>28</td>
<td>srs-host-info</td>
<td>number of SRS (EPP and any other interface) host “info” requests responded during the reporting period</td>
</tr>
<tr>
<td>29</td>
<td>srs-host-update</td>
<td>number of SRS (EPP and any other interface) host “update” requests responded during the reporting period</td>
</tr>
<tr>
<td>30</td>
<td>srs-cont-check</td>
<td>number of SRS (EPP and any other interface) contact “check” requests responded during the reporting period</td>
</tr>
<tr>
<td>31</td>
<td>srs-cont-create</td>
<td>number of SRS (EPP and any other interface) contact “create” requests responded during the reporting period</td>
</tr>
<tr>
<td></td>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>32</td>
<td>srs-cont-delete</td>
<td>number of SRS (EPP and any other interface) contact “delete” requests responded during the reporting period</td>
</tr>
<tr>
<td>33</td>
<td>srs-cont-info</td>
<td>number of SRS (EPP and any other interface) contact “info” requests responded during the reporting period</td>
</tr>
<tr>
<td>34</td>
<td>srs-cont-transfer-approve</td>
<td>number of SRS (EPP and any other interface) contact “transfer” requests to approve transfers responded during the reporting period</td>
</tr>
<tr>
<td>35</td>
<td>srs-cont-transfer-cancel</td>
<td>number of SRS (EPP and any other interface) contact “transfer” requests to cancel transfers responded during the reporting period</td>
</tr>
<tr>
<td>36</td>
<td>srs-cont-transfer-query</td>
<td>number of SRS (EPP and any other interface) contact “transfer” requests to query about a transfer responded during the reporting period</td>
</tr>
<tr>
<td>37</td>
<td>srs-cont-transfer-reject</td>
<td>number of SRS (EPP and any other interface) contact “transfer” requests to reject transfers responded during the reporting period</td>
</tr>
<tr>
<td>38</td>
<td>srs-cont-transfer-request</td>
<td>number of SRS (EPP and any other interface) contact “transfer” requests to request transfers responded during the reporting period</td>
</tr>
<tr>
<td>39</td>
<td>srs-cont-update</td>
<td>number of SRS (EPP and any other interface) contact “update” requests responded during the reporting period</td>
</tr>
</tbody>
</table>

The first line shall include the field names exactly as described in the table above as a “header line” as described in section 2 of RFC 4180. No other lines besides the ones described above shall be included. Line breaks shall be <U+000D, U+000A> as described in RFC 4180.
SPECIFICATION 4

SPECIFICATION FOR REGISTRATION DATA PUBLICATION SERVICES

1. Registration Data Directory Services. Until ICANN requires a different protocol, Registry Operator will operate a WHOIS service available via port 43 in accordance with RFC 3912, and a web-based Directory Service at <whois.nic.TLD> providing free public query-based access to at least the following elements in the following format. ICANN reserves the right to specify alternative formats and protocols, and upon such specification, the Registry Operator will implement such alternative specification as soon as reasonably practicable.

1.1. The format of responses shall follow a semi-free text format outline below, followed by a blank line and a legal disclaimer specifying the rights of Registry Operator, and of the user querying the database.

1.2. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys, followed by a colon and a space as delimiters, followed by the value.

1.3. For fields where more than one value exists, multiple key/value pairs with the same key shall be allowed (for example to list multiple name servers). The first key/value pair after a blank line should be considered the start of a new record, and should be considered as identifying that record, and is used to group data, such as hostnames and IP addresses, or a domain name and registrant information, together.

1.4. Domain Name Data:

1.4.1. Query format: whois EXAMPLE.TLD

1.4.2. Response format:

Domain Name: EXAMPLE.TLD
Domain ID: D1234567-TLD
WHOIS Server: whois.example.tld
Referral URL: http://www.example.tld
Updated Date: 2009-05-29T20:13:00Z
Creation Date: 2000-10-08T00:45:00Z
Registry Expiry Date: 2010-10-08T00:44:59Z
Sponsoring Registrar: EXAMPLE REGISTRAR LLC
Sponsoring Registrar IANA ID: 5555555
Domain Status: clientDeleteProhibited
Domain Status: clientRenewProhibited
Domain Status: clientTransferProhibited
Domain Status: serverUpdateProhibited
Registrant ID: 5372808-ERL
Registrant Name: EXAMPLE REGISTRANT
Registrant Organization: EXAMPLE ORGANIZATION
Registrant Street: 123 EXAMPLE STREET
Registrant City: ANYTOWN
Registrant State/Province: AP
Registrant Postal Code: A1A1A1
Registrant Country: EX
Registrant Phone: +1.5555551212
Registrant Phone Ext: 1234
Registrant Fax: +1.5555551213
Registrant Fax Ext: 4321
Registrant Email: EMAIL@EXAMPLE.TLD
Admin ID: 5372809-ERL
Admin Name: EXAMPLE REGISTRANT ADMINISTRATIVE
Admin Organization: EXAMPLE REGISTRANT ORGANIZATION
Admin Street: 123 EXAMPLE STREET
Admin City: ANYTOWN
Admin State/Province: AP
Admin Postal Code: A1A1A1
Admin Country: EX
Admin Phone: +1.5555551212
Admin Phone Ext: 1234
Admin Fax: +1.5555551213
Admin Fax Ext:
Admin Email: EMAIL@EXAMPLE.TLD
Tech ID: 5372811-ERL
Tech Name: EXAMPLE REGISTRAR TECHNICAL
Tech Organization: EXAMPLE REGISTRAR LLC
Tech Street: 123 EXAMPLE STREET
Tech City: ANYTOWN
Tech State/Province: AP
Tech Postal Code: A1A1A1
Tech Country: EX
Tech Phone: +1.1235551234
Tech Phone Ext: 1234
Tech Fax: +1.5555551213
Tech Fax Ext: 93
Tech Email: EMAIL@EXAMPLE.TLD
Name Server: NS01.EXAMPLEREGISTRAR.TLD
Name Server: NS02.EXAMPLEREGISTRAR.TLD
DNSSEC: signedDelegation
DNSSEC: unsigned

>>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

1.5. Registrar Data:

1.5.1. Query format: whois "registrar Example Registrar, Inc."

1.5.2. Response format:

Registrar Name: Example Registrar, Inc.
Street: 1234 Admiralty Way
City: Marina del Rey
State/Province: CA
Postal Code: 90292
Country: US
Phone Number: +1.3105551212
Fax Number: +1.3105551213
Email: registrar@example.tld
WHOIS Server: whois.example-registrar.tld
Referral URL: http://www.example-registrar.tld
Admin Contact: Joe Registrar
Phone Number: +1.3105551213
Fax Number: +1.3105551213
Email: joeregistrar@example-registrar.tld
Admin Contact: Jane Registrar
Phone Number: +1.3105551214
Fax Number: +1.3105551213
Email: janeregistrar@example-registrar.tld
Technical Contact: John Geek
Phone Number: +1.3105551215
Fax Number: +1.3105551216
Email: johngeek@example-registrar.tld

>>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

1.6. Nameserver Data:

1.6.1. Query format: whois "NS1.EXAMPLE.TLD" or whois "nameserver (IP Address)"

1.6.2. Response format:

Server Name: NS1.EXAMPLE.TLD
IP Address: 192.0.2.123
IP Address: 2001:0DB8::1
Registrar: Example Registrar, Inc.
WHOIS Server: whois.example-registrar.tld
Referral URL: http://www.example-registrar.tld

>>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

1.7. The format of the following data fields: domain status, individual and organizational names, address, street, city, state/province, postal code, country, telephone and fax numbers, email addresses, date and times should conform to the mappings specified in EPP RFCs 5730-5734 so that the display of this information (or values return in WHOIS responses) can be uniformly processed and understood.

1.8. Searchability. Offering searchability capabilities on the Directory Services is optional but if offered by the Registry Operator it shall comply with the specification described in this section.

1.8.1. Registry Operator will offer searchability on the web-based Directory Service.

1.8.2. Registry Operator will offer partial match capabilities, at least, on the following fields: domain name, contacts and registrant’s name, and contact and registrant’s postal address, including all the sub-fields described in EPP (e.g., street, city, state or province, etc.).

1.8.3. Registry Operator will offer exact-match capabilities, at least, on the following fields: registrar id, name server name, and name server’s IP address (only applies to IP addresses stored by the registry, i.e., glue records).
1.8.4. Registry Operator will offer Boolean search capabilities supporting, at least, the following logical operators to join a set of search criteria: AND, OR, NOT.

1.8.5. Search results will include domain names matching the search criteria.

1.8.6. Registry Operator will: 1) implement appropriate measures to avoid abuse of this feature (e.g., permitting access only to legitimate authorized users); and 2) ensure the feature is in compliance with any applicable privacy laws or policies.

2. Zone File Access

2.1. Third-Party Access

2.1.1. Zone File Access Agreement. Registry Operator will enter into an agreement with any Internet user that will allow such user to access an Internet host server or servers designated by Registry Operator and download zone file data. The agreement will be standardized, facilitated and administered by a Centralized Zone Data Access Provider (the “CZDA Provider”). Registry Operator will provide access to zone file data per Section 2.1.3 and do so using the file format described in Section 2.1.4. Notwithstanding the foregoing, (a) the CZDA Provider may reject the request for access of any user that does not satisfy the credentialing requirements in Section 2.1.2 below; (b) Registry Operator may reject the request for access of any user that does not provide correct or legitimate credentials under Section 2.1.2 or where Registry Operator reasonably believes will violate the terms of Section 2.1.5 below; and, (c) Registry Operator may revoke access of any user if Registry Operator has evidence to support that the user has violated the terms of Section 2.1.5.

2.1.2. Credentialing Requirements. Registry Operator, through the facilitation of the CZDA Provider, will request each user to provide it with information sufficient to correctly identify and locate the user. Such user information will include, without limitation, company name, contact name, address, telephone number, facsimile number, email address, and the Internet host machine name and IP address.

2.1.3. Grant of Access. Each Registry Operator will provide the Zone File FTP (or other Registry supported) service for an ICANN-specified and managed URL (specifically, <TLD>.zda.icann.org where <TLD> is the TLD for which the registry is responsible) for the user to access the Registry’s zone data archives. Registry Operator will grant the user a non-exclusive, non-transferable, limited right to access Registry Operator’s Zone File FTP server, and to transfer a copy of the top-level domain zone files, and any associated cryptographic checksum files no more than once per 24 hour period using FTP, or other data transport and access protocols that may be prescribed by ICANN. Every zone file access server, the zone files are in the top-level directory called <zone>.zone.gz, with <zone>.zone.gz.md5 and <zone>.zone.gz.sig to verify downloads. If the Registry Operator also provides historical data, it will use the naming pattern <zone>-yyyymmdd.zone.gz, etc.

2.1.4. File Format Standard. Registry Operator will provide zone files using a sub-format of the standard Master File format as originally defined in RFC 1035, Section 5, including all the records present in the actual zone used in the public DNS. Sub-format is as follows:

1. Each record must include all fields in one line as: <domain-name> <TTL> <class> <type> <RDATA>.
2. Class and Type must use the standard mnemonics and must be in lower case.
3. TTL must be present as a decimal integer.
4. Use of /X and /DDD inside domain names is allowed.
5. All domain names must be in lower case.
6. Must use exactly one tab as separator of fields inside a record.
7. All domain names must be fully qualified.
8. No SORIGIN directives.
9. No use of "@" to denote current origin.
10. No use of "blank domain names" at the beginning of a record to continue the use of the domain name in the previous record.
11. No SINCLUDE directives.
12. No STTL directives.
13. No use of parentheses, e.g., to continue the list of fields in a record across a line boundary.
14. No use of comments.
15. No blank lines.
16. The SOA record should be present at the top and (duplicated at) the end of the zone file.
17. With the exception of the SOA record, all the records in a file must be in alphabetical order.
18. One zone per file. If a TLD divides its DNS data into multiple zones, each goes into a separate file named as above, with all the files combined using tar into a file called <tld>.zone.tar.

2.1.5. Use of Data by User. Registry Operator will permit user to use the zone file for lawful purposes; provided that, (a) user takes all reasonable steps to protect against unauthorized access to and use and disclosure of the data, and (b) under no circumstances will Registry Operator be required or permitted to allow user to use the data to, (i) allow, enable, or otherwise support the transmission by e-mail, telephone, or facsimile of mass unsolicited, commercial advertising or solicitations to entities other than user’s own existing customers, or (ii) enable high volume, automated, electronic processes that send queries or data to the systems of Registry Operator or any ICANN-accredited registrar.

2.1.6. Term of Use. Registry Operator, through CZDA Provider, will provide each user with access to the zone file for a period of not less than three (3) months. Registry Operator will allow users to renew their Grant of Access.

2.1.7. No Fee for Access. Registry Operator will provide, and CZDA Provider will facilitate, access to the zone file to user at no cost.

2.2 Co-operation

2.2.1. Assistance. Registry Operator will co-operate and provide reasonable assistance to ICANN and the CZDA Provider to facilitate and maintain the efficient access of zone file data by permitted users as contemplated under this Schedule.

2.3 ICANN Access. Registry Operator shall provide bulk access to the zone files for the TLD to ICANN or its designee on a continuous basis in the manner ICANN may reasonably specify from time to time.

2.4 Emergency Operator Access. Registry Operator shall provide bulk access to the zone files for the TLD to the Emergency Operators designated by ICANN on a continuous basis in the manner ICANN may reasonably specify from time to time.
3. Bulk Registration Data Access to ICANN

3.1. Periodic Access to Thin Registration Data. In order to verify and ensure the operational stability of Registry Services as well as to facilitate compliance checks on accredited registrars, Registry Operator will provide ICANN on a weekly basis (the day to be designated by ICANN) with up-to-date Registration Data as specified below. Data will include data committed as of 00:00:00 UTC on the day previous to the one designated for retrieval by ICANN.

3.1.1. Contents. Registry Operator will provide, at least, the following data for all registered domain names: domain name, domain name repository object id (roid), registrar id (IANA ID), statuses, last updated date, creation date, expiration date, and name server names. For sponsoring registrars, at least, it will provide: registrar name, registrar repository object id (roid), hostname of registrar Whois server, and URL of registrar.

3.1.2. Format. The data will be provided in the format specified in Specification 2 for Data Escrow (including encryption, signing, etc.) but including only the fields mentioned in the previous section, i.e., the file will only contain Domain and Registrar objects with the fields mentioned above. Registry Operator has the option to provide a full deposit file instead as specified in Specification 2.

3.1.3. Access. Registry Operator will have the file(s) ready for download as of 00:00:00 UTC on the day designated for retrieval by ICANN. The file(s) will be made available for download by SFTP, though ICANN may request other means in the future.

3.2. Exceptional Access to Thick Registration Data. In case of a registrar failure, de-accreditation, court order, etc. that prompts the temporary or definitive transfer of its domain names to another registrar, at the request of ICANN, Registry Operator will provide ICANN with up-to-date data for the domain names of the losing registrar. The data will be provided in the format specified in Specification 2 for Data Escrow. The file will only contain data related to the domain names of the losing registrar. Registry Operator will provide the data within 2 business days. Unless otherwise agreed by Registry Operator and ICANN, the file will be made available for download by ICANN in the same manner as the data specified in Section 3.1. of this Specification.
SPECIFICATION 5

SCHEDULE OF RESERVED NAMES AT THE SECOND LEVEL IN GTLD REGISTRIES

Except to the extent that ICANN otherwise expressly authorizes in writing, Registry Operator shall reserve (i.e., Registry Operator shall not register, delegate, use or otherwise make available such labels to any third party, but may register such labels in its own name in order to withhold them from delegation or use) names formed with the following labels from initial (i.e. other than renewal) registration within the TLD:

1. **Example. The label “EXAMPLE”** shall be reserved at the second level and at all other levels within the TLD at which Registry Operator makes registrations.

2. **Two-character labels.** All two-character labels shall be initially reserved. The reservation of a two-character label string may be released to the extent that Registry Operator reaches agreement with the government and country-code manager. The Registry Operator may also propose release of these reservations based on its implementation of measures to avoid confusion with the corresponding country codes.

3. **Tagged Domain Names.** Labels may only include hyphens in the third and fourth position if they represent valid internationalized domain names in their ASCII encoding (for example "xn--ndk061n").

4. **Second-Level Reservations for Registry Operations.** The following names are reserved for use in connection with the operation of the registry for the TLD. Registry Operator may use them, but upon conclusion of Registry Operator's designation as operator of the registry for the TLD they shall be transferred as specified by ICANN: NIC, WWW, IRIS and WHOIS.

5. **Country and Territory Names.** The country and territory names contained in the following internationally recognized lists shall be initially reserved at the second level and at all other levels within the TLD at which the Registry Operator provides for registrations:

   5.1. the short form (in English) of all country and territory names contained on the ISO 3166-1 list, as updated from time to time, including the European Union, which is exceptionally reserved on the ISO 3166-1 list, and its scope extended in August 1999 to any application needing to represent the name European Union &lt;http://www.iso.org/iso/support/country_codes/iso_3166_code_lists/iso-3166-1_decoding_table.htm#EU&gt;

   5.2. the United Nations Group of Experts on Geographical Names, Technical Reference Manual for the Standardization of Geographical Names, Part III Names of Countries of the World; and


   provided, that the reservation of specific country and territory names may be released to the extent that Registry Operator reaches agreement with the applicable government(s), provided, further, that
Registry Operator may also propose release of these reservations, subject to review by ICANN’s Governmental Advisory Committee and approval by ICANN.
SPECIFICATION 6

REGISTRY INTEROPERABILITY AND CONTINUITY SPECIFICATIONS

1. Standards Compliance

1.1. DNS. Registry Operator shall comply with relevant existing RFCs and those published in the future by the Internet Engineering Task Force (IETF) including all successor standards, modifications or additions thereto relating to the DNS and name server operations including without limitation RFCs 1034, 1035, 1982, 2181, 2182, 2671, 3226, 3596, 3597, 4343, and 5966.

1.2. EPP. Registry Operator shall comply with relevant existing RFCs and those published in the future by the Internet Engineering Task Force (IETF) including all successor standards, modifications or additions thereto relating to the provisioning and management of domain names using the Extensible Provisioning Protocol (EPP) in conformance with RFCs 5910, 5730, 5731, 5732, 5733 and 5734. If Registry Operator implements Registry Grace Period (RGP), it will comply with RFC 3915 and its successors. If Registry Operator requires the use of functionality outside the base EPP RFCs, Registry Operator must document EPP extensions in Internet-Draft format following the guidelines described in RFC 3735. Registry Operator will provide and update the relevant documentation of all the EPP Objects and Extensions supported to ICANN prior to deployment.

1.3. DNSSEC. Registry Operator shall sign its TLD zone files implementing Domain Name System Security Extensions (“DNSSEC”). During the Term, Registry Operator shall comply with RFCs 4033, 4034, 4035, 4509 and their successors, and follow the best practices described in RFC 4641 and its successors. If Registry Operator implements Hashed Authenticated Denial of Existence for DNS Security Extensions, it shall comply with RFC 5155 and its successors. Registry Operator shall accept public-key material from child domain names in a secure manner according to industry best practices. Registry shall also publish in its website the DNSSEC Practice Statements (DPS) describing critical security controls and procedures for key material storage, access and usage for its own keys and secure acceptance of registrants’ public-key material. Registry Operator shall publish its DPS following the format described in “DPS-framework” (currently in draft format, see http://tools.ietf.org/html/draft-ietf-dnsop-dnssec-dps-framework) within 180 days after the “DPS-framework” becomes an RFC.

1.4. IDN. If the Registry Operator offers Internationalized Domain Names (“IDNs”), it shall comply with RFCs 5890, 5891, 5892, 5893 and their successors. Registry Operator shall comply with the ICANN IDN Guidelines at <http://www.icann.org/en/topics/idn/implementation-guidelines.htm>, as they may be amended, modified, or superseded from time to time. Registry Operator shall publish and keep updated its IDN Tables and IDN Registration Rules in the IANA Repository of IDN Practices as specified in the ICANN IDN Guidelines.

1.5. IPv6. Registry Operator shall be able to accept IPv6 addresses as glue records in its Registry System and publish them in the DNS. Registry Operator shall offer public IPv6 transport for, at least, two of the Registry’s name servers listed in the root zone with the corresponding IPv6 addresses registered with IANA. Registry Operator should follow “DNS IPv6 Transport Operational Guidelines” as described in BCP 91 and the recommendations and considerations described in RFC 4472. Registry Operator shall offer public IPv6 transport for its Registration Data Publication Services as defined in Specification 4 of this Agreement; e.g. Whois (RFC 3912), Web based Whois. Registry Operator shall offer public IPv6 transport for its Shared Registration System (SRS) to any Registrar, no later than six months after receiving the first request in writing from a gTLD accredited Registrar willing to operate with the SRS over IPv6.
2. **Registry Services**

   2.1. **Registry Services.** “Registry Services” are, for purposes of the Registry Agreement, defined as the following: (a) those services that are operations of the registry critical to the following tasks: the receipt of data from registrars concerning registrations of domain names and name servers; provision to registrars of status information relating to the zone servers for the TLD; dissemination of TLD zone files; operation of the registry DNS servers; and dissemination of contact and other information concerning domain name server registrations in the TLD as required by this Agreement; (b) other products or services that the Registry Operator is required to provide because of the establishment of a Consensus Policy as defined in Specification 1; (c) any other products or services that only a registry operator is capable of providing, by reason of its designation as the registry operator; and (d) material changes to any Registry Service within the scope of (a), (b) or (c) above.

   2.2. **Wildcard Prohibition.** For domain names which are either not registered, or the registrant has not supplied valid records such as NS records for listing in the DNS zone file, or their status does not allow them to be published in the DNS, the use of DNS wildcard Resource Records as described in RFCs 1034 and 4592 or any other method or technology for synthesizing DNS Resources Records or using redirection within the DNS by the Registry is prohibited. When queried for such domain names the authoritative name servers must return a “Name Error” response (also known as NXDOMAIN), RCODE 3 as described in RFC 1035 and related RFCs. This provision applies for all DNS zone files at all levels in the DNS tree for which the Registry Operator (or an affiliate engaged in providing Registration Services) maintains data, arranges for such maintenance, or derives revenue from such maintenance.

3. **Registry Continuity**

   3.1. **High Availability.** Registry Operator will conduct its operations using network and geographically diverse, redundant servers (including network-level redundancy, end-node level redundancy and the implementation of a load balancing scheme where applicable) to ensure continued operation in the case of technical failure (widespread or local), or an extraordinary occurrence or circumstance beyond the control of the Registry Operator.

   3.2. **Extraordinary Event.** Registry Operator will use commercially reasonable efforts to restore the critical functions of the registry within 24 hours after the termination of an extraordinary event beyond the control of the Registry Operator and restore full system functionality within a maximum of 48 hours following such event, depending on the type of critical function involved. Outages due to such an event will not be considered a lack of service availability.

   3.3. **Business Continuity.** Registry Operator shall maintain a business continuity plan, which will provide for the maintenance of Registry Services in the event of an extraordinary event beyond the control of the Registry Operator or business failure of Registry Operator, and may include the designation of a Registry Services continuity provider. If such plan includes the designation of a Registry Services continuity provider, Registry Operator shall provide the name and contact information for such Registry Services continuity provider to ICANN. In the case of an extraordinary event beyond the control of the Registry Operator where the Registry Operator cannot be contacted, Registry Operator consents that ICANN may contact the designated Registry Services continuity provider, if one exists. Registry Operator shall conduct Registry Services Continuity testing at least once per year.

4. **Abuse Mitigation**
4.1. **Abuse Contact.** Registry Operator shall provide to ICANN and publish on its website its accurate contact details including a valid email and mailing address as well as a primary contact for handling inquires related to malicious conduct in the TLD, and will provide ICANN with prompt notice of any changes to such contact details.

4.2. **Malicious Use of Orphan Glue Records.** Registry Operators shall take action to remove orphan glue records (as defined at http://www.icann.org/en/committees/security/sac048.pdf) when provided with evidence in written form that such records are present in connection with malicious conduct.

5. **Supported Initial and Renewal Registration Periods**

5.1. **Initial Registration Periods.** Initial registrations of registered names may be made in the registry in one (1) year increments for up to a maximum of ten (10) years. For the avoidance of doubt, initial registrations of registered names may not exceed ten (10) years.

5.2. **Renewal Periods.** Renewal of registered names may be made in one (1) year increments for up to a maximum of ten (10) years. For the avoidance of doubt, renewal of registered names may not extend their registration period beyond ten (10) years from the time of the renewal.
SPECIFICATION 7

MINIMUM REQUIREMENTS FOR RIGHTS PROTECTION MECHANISMS

1. Rights Protection Mechanisms. Registry Operator shall implement and adhere to any rights protection mechanisms ("RPMs") that may be mandated from time to time by ICANN. In addition to such RPMs, Registry Operator may develop and implement additional RPMs that discourage or prevent registration of domain names that violate or abuse another party’s legal rights. Registry Operator will include all ICANN mandated and independently developed RPMs in the registry-registrar agreement entered into by ICANN-accredited registrars authorized to register names in the TLD. Registry Operator shall implement in accordance with requirements established by ICANN each of the mandatory RPMs set forth in the Trademark Clearinghouse (posted at [url to be inserted when final Trademark Clearinghouse is adopted]), which may be revised by ICANN from time to time. Registry Operator shall not mandate that any owner of applicable intellectual property rights use any other trademark information aggregation, notification, or validation service in addition to or instead of the ICANN-designated Trademark Clearinghouse.

2. Dispute Resolution Mechanisms. Registry Operator will comply with the following dispute resolution mechanisms as they may be revised from time to time:

   a. the Trademark Post-Delegation Dispute Resolution Procedure (PDDRP) and the Registration Restriction Dispute Resolution Procedure (RRDRP) adopted by ICANN (posted at [urls to be inserted when final procedure is adopted]). Registry Operator agrees to implement and adhere to any remedies ICANN imposes (which may include any reasonable remedy, including for the avoidance of doubt, the termination of the Registry Agreement pursuant to Section 4.3(e) of the Registry Agreement) following a determination by any PDDRP or RRDRP panel and to be bound by any such determination; and

   b. the Uniform Rapid Suspension system ("URS") adopted by ICANN (posted at [url to be inserted]), including the implementation of determinations issued by URS examiners.
SPECIFICATION 8

CONTINUED OPERATIONS INSTRUMENT

1. The Continued Operations Instrument shall (a) provide for sufficient financial resources to ensure the continued operation of the critical registry functions related to the TLD set forth in Section [__] of the Applicant Guidebook posted at [url to be inserted upon finalization of Applicant Guidebook] (which is hereby incorporated by reference into this Specification 8) for a period of three (3) years following any termination of this Agreement on or prior to the fifth anniversary of the Effective Date or for a period of one (1) year following any termination of this Agreement after the fifth anniversary of the Effective Date but prior to or on the sixth (6th) anniversary of the Effective Date, and (b) be in the form of either (i) an irrevocable standby letter of credit, or (ii) an irrevocable cash escrow deposit, each meeting the requirements set forth in Section [__] of the Applicant Guidebook posted at [url to be inserted upon finalization of Applicant Guidebook] (which is hereby incorporated by reference into this Specification 8).

Registry Operator shall use its best efforts to take all actions necessary or advisable to maintain in effect the Continued Operations Instrument for a period of six (6) years from the Effective Date, and to maintain ICANN as a third party beneficiary thereof. Registry Operator shall provide to ICANN copies of all final documents relating to the Continued Operations Instrument and shall keep ICANN reasonably informed of material developments relating to the Continued Operations Instrument. Registry Operator shall not agree to, or permit, any amendment of, or waiver under, the Continued Operations Instrument or other documentation relating thereto without the prior written consent of ICANN (such consent not to be unreasonably withheld). The Continued Operations Instrument shall expressly state that ICANN may access the financial resources of the Continued Operations Instrument pursuant to Section 2.13 or Section 4.5 [insert for government entity: or Section 7.14] of the Registry Agreement.

2. If, notwithstanding the use of best efforts by Registry Operator to satisfy its obligations under the preceding paragraph, the Continued Operations Instrument expires or is terminated by another party thereto, in whole or in part, for any reason, prior to the sixth anniversary of the Effective Date, Registry Operator shall promptly (i) notify ICANN of such expiration or termination and the reasons therefor and (ii) arrange for an alternative instrument that provides for sufficient financial resources to ensure the continued operation of the Registry Services related to the TLD for a period of three (3) years following any termination of this Agreement on or prior to the fifth anniversary of the Effective Date or for a period of one (1) year following any termination of this Agreement after the fifth anniversary of the Effective Date but prior to or on the sixth (6) anniversary of the Effective Date (an “Alternative Instrument”). Any such Alternative Instrument shall be on terms no less favorable to ICANN than the Continued Operations Instrument and shall otherwise be in form and substance reasonably acceptable to ICANN.

3. Notwithstanding anything to the contrary contained in this Specification 8, at any time, Registry Operator may replace the Continued Operations Instrument with an alternative
instrument that (i) provides for sufficient financial resources to ensure the continued
operation of the Registry Services related to the TLD for a period of three (3) years
following any termination of this Agreement on or prior to the fifth anniversary of the
Effective Date or for a period one (1) year following any termination of this Agreement
after the fifth anniversary of the Effective Date but prior to or on the sixth (6) anniversary
of the Effective Date, and (ii) contains terms no less favorable to ICANN than the
Continued Operations Instrument and is otherwise in form and substance reasonably
acceptable to ICANN. In the event Registry Operation replaces the Continued
Operations Instrument either pursuant to paragraph 2 or this paragraph 3, the terms of this
Specification 8 shall no longer apply with respect to the original Continuing Operations
Instrument, but shall thereafter apply with respect to such replacement instrument(s).
SPECIFICATION 9

Registry Operator Code of Conduct

1. In connection with the operation of the registry for the TLD, Registry Operator will not, and will not allow any parent, subsidiary, Affiliate, subcontractor or other related entity, to the extent such party is engaged in the provision of Registry Services with respect to the TLD (each, a “Registry Related Party”), to:

   a. directly or indirectly show any preference or provide any special consideration to any registrar with respect to operational access to registry systems and related registry services, unless comparable opportunities to qualify for such preferences or considerations are made available to all registrars on substantially similar terms and subject to substantially similar conditions;

   b. register domain names in its own right, except for names registered through an ICANN accredited registrar that are reasonably necessary for the management, operations and purpose of the TLD, provided, that Registry Operator may reserve names from registration pursuant to Section 2.6 of the Registry Agreement;

   c. register names in the TLD or sub-domains of the TLD based upon proprietary access to information about searches or resolution requests by consumers for domain names not yet registered (commonly known as, "front-running");

   d. allow any Affiliated registrar to disclose user data to Registry Operator or any Registry Related Party, except as necessary for the management and operations of the TLD, unless all unrelated third parties (including other registry operators) are given equivalent access to such user data on substantially similar terms and subject to substantially similar conditions; or

   e. disclose confidential registry data or confidential information about its Registry Services or operations to any employee of any DNS services provider, except as necessary for the management and operations of the TLD, unless all unrelated third parties (including other registry operators) are given equivalent access to such confidential registry data or confidential information on substantially similar terms and subject to substantially similar conditions.

2. If Registry Operator or a Registry Related Party also operates as a provider of registrar or registrar-reseller services, Registry Operator will, or will cause such Registry Related Party to, ensure that such services are offered through a legal entity separate from Registry Operator, and maintain separate books of accounts with respect to its registrar or registrar-reseller operations.

3. Registry Operator will conduct internal reviews at least once per calendar year to
ensure compliance with this Code of Conduct. Within twenty (20) calendar days following the end of each calendar year, Registry Operator will provide the results of the internal review, along with a certification executed by an executive officer of Registry Operator certifying as to Registry Operator’s compliance with this Code of Conduct, via email to an address to be provided by ICANN. (ICANN may specify in the future the form and contents of such reports or that the reports be delivered by other reasonable means.) Registry Operator agrees that ICANN may publicly post such results and certification.

4. Nothing set forth herein shall: (i) limit ICANN from conducting investigations of claims of Registry Operator’s non-compliance with this Code of Conduct; or (ii) provide grounds for Registry Operator to refuse to cooperate with ICANN investigations of claims of Registry Operator’s non-compliance with this Code of Conduct.

5. Nothing set forth herein shall limit the ability of Registry Operator or any Registry Related Party, to enter into arms-length transactions in the ordinary course of business with a registrar or reseller with respect to products and services unrelated in all respects to the TLD.

6. Registry Operator may request an exemption to this Code of Conduct, and such exemption may be granted by ICANN in ICANN’s reasonable discretion, if Registry Operator demonstrates to ICANN’s reasonable satisfaction that (i) all domain name registrations in the TLD are registered to, and maintained by, Registry Operator for its own exclusive use, (ii) Registry Operator does not sell, distribute or transfer control or use of any registrations in the TLD to any third party that is not an Affiliate of Registry Operator, and (iii) application of this Code of Conduct to the TLD is not necessary to protect the public interest.
SPECIFICATION 10
REGISTRY PERFORMANCE SPECIFICATIONS

1. **Definitions**

1.1. **DNS.** Refers to the Domain Name System as specified in RFCs 1034, 1035, and related RFCs.

1.2. **DNSSEC proper resolution.** There is a valid DNSSEC chain of trust from the root trust anchor to a particular domain name, e.g., a TLD, a domain name registered under a TLD, etc.

1.3. **EPP.** Refers to the Extensible Provisioning Protocol as specified in RFC 5730 and related RFCs.

1.4. **IP address.** Refers to IPv4 or IPv6 addresses without making any distinction between the two. When there is need to make a distinction, IPv4 or IPv6 is used.

1.5. **Probes.** Network hosts used to perform (DNS, EPP, etc.) tests (see below) that are located at various global locations.

1.6. **RDDS.** Registration Data Directory Services refers to the collective of WHOIS and Web-based WHOIS services as defined in Specification 4 of this Agreement.

1.7. **RTT.** Round-Trip Time or RTT refers to the time measured from the sending of the first bit of the first packet of the sequence of packets needed to make a request until the reception of the last bit of the last packet of the sequence needed to receive the response. If the client does not receive the whole sequence of packets needed to consider the response as received, the request will be considered unanswered.

1.8. **SLR.** Service Level Requirement is the level of service expected for a certain parameter being measured in a Service Level Agreement (SLA).

2. **Service Level Agreement Matrix**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SLR (monthly basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DNS</strong></td>
<td></td>
</tr>
<tr>
<td>DNS service availability</td>
<td>0 min downtime = 100% availability</td>
</tr>
<tr>
<td>DNS name server availability</td>
<td>≤ 432 min of downtime (≈ 99%)</td>
</tr>
<tr>
<td>TCP DNS resolution RTT</td>
<td>≤ 1500 ms, for at least 95% of the queries</td>
</tr>
<tr>
<td>UDP DNS resolution RTT</td>
<td>≤ 500 ms, for at least 95% of the queries</td>
</tr>
<tr>
<td>DNS update time</td>
<td>≤ 60 min, for at least 95% of the probes</td>
</tr>
<tr>
<td><strong>RDDS</strong></td>
<td></td>
</tr>
<tr>
<td>RDDS availability</td>
<td>≤ 864 min of downtime (≈ 98%)</td>
</tr>
<tr>
<td>RDDS query RTT</td>
<td>≤ 2000 ms, for at least 95% of the queries</td>
</tr>
<tr>
<td>RDDS update time</td>
<td>≤ 60 min, for at least 95% of the probes</td>
</tr>
<tr>
<td><strong>EPP</strong></td>
<td></td>
</tr>
<tr>
<td>EPP service availability</td>
<td>≤ 864 min of downtime (≈ 98%)</td>
</tr>
<tr>
<td>EPP session-command RTT</td>
<td>≤ 4000 ms, for at least 90% of the commands</td>
</tr>
<tr>
<td>EPP query-command RTT</td>
<td>≤ 2000 ms, for at least 90% of the commands</td>
</tr>
<tr>
<td>EPP transform-command RTT</td>
<td>≤ 4000 ms, for at least 90% of the commands</td>
</tr>
</tbody>
</table>
Registry Operator is encouraged to do maintenance for the different services at the times and dates of statistically lower traffic for each service. However, note that there is no provision for planned outages or similar; any downtime, be it for maintenance or due to system failures, will be noted simply as downtime and counted for SLA purposes.

3. **DNS**

3.1. **DNS service availability.** Refers to the ability of the group of listed-as-authoritative name servers of a particular domain name (e.g., a TLD), to answer DNS queries from DNS probes. For the service to be considered available at a particular moment, at least, two of the delegated name servers registered in the DNS must have successful results from “DNS tests” to each of their public-DNS registered “IP addresses” to which the name server resolves. If 51% or more of the DNS testing probes see the service as unavailable during a given time, the DNS service will be considered unavailable.

3.2. **DNS name server availability.** Refers to the ability of a public-DNS registered “IP address” of a particular name server listed as authoritative for a domain name, to answer DNS queries from an Internet user. All the public DNS-registered “IP address” of all name servers of the domain name being monitored shall be tested individually. If 51% or more of the DNS testing probes get undefined/unanswered results from “DNS tests” to a name server “IP address” during a given time, the name server “IP address” will be considered unavailable.

3.3. **UDP DNS resolution RTT.** Refers to the RTT of the sequence of two packets, the UDP DNS query and the corresponding UDP DNS response. If the RTT is 5 times greater than the time specified in the relevant SLR, the RTT will be considered undefined.

3.4. **TCP DNS resolution RTT.** Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the DNS response for only one DNS query. If the RTT is 5 times greater than the time specified in the relevant SLR, the RTT will be considered undefined.

3.5. **DNS resolution RTT.** Refers to either “UDP DNS resolution RTT” or “TCP DNS resolution RTT”.

3.6. **DNS update time.** Refers to the time measured from the reception of an EPP confirmation to a transform command on a domain name, until the name servers of the parent domain name answer “DNS queries” with data consistent with the change made. This only applies for changes to DNS information.

3.7. **DNS test.** Means one non-recursive DNS query sent to a particular “IP address” (via UDP or TCP). If DNSSEC is offered in the queried DNS zone, for a query to be considered answered, the signatures must be positively verified against a corresponding DS record published in the parent zone or, if the parent is not signed, against a statically configured Trust Anchor. The answer to the query must contain the corresponding information from the Registry System, otherwise the query will be considered unanswered. A query with a “DNS resolution RTT” 5 times higher than the corresponding SLR, will be considered unanswered. The possible results to a DNS test are: a number in milliseconds corresponding to the “DNS resolution RTT” or, undefined/unanswered.

3.8. **Measuring DNS parameters.** Every minute, every DNS probe will make an UDP or TCP “DNS test” to each of the public-DNS registered “IP addresses” of the name servers of the domain
name being monitored. If a “DNS test” result is undefined/unanswered, the tested IP will be considered unavailable from that probe until it is time to make a new test.

3.9. **Collating the results from DNS probes.** The minimum number of active testing probes to consider a measurement valid is 20 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.

3.10. **Distribution of UDP and TCP queries.** DNS probes will send UDP or TCP “DNS test” approximating the distribution of these queries.

3.11. **Placement of DNS probes.** Probes for measuring DNS parameters shall be placed as near as possible to the DNS resolvers on the networks with the most users across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

4. **RDDS**

4.1. **RDDS availability.** Refers to the ability of all the RDDS services for the TLD, to respond to queries from an Internet user with appropriate data from the relevant Registry System. If 51% or more of the RDDS testing probes see any of the RDDS services as unavailable during a given time, the RDDS will be considered unavailable.

4.2. **WHOIS query RTT.** Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the WHOIS response. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.

4.3. **Web-based-WHOIS query RTT.** Refers to the RTT of the sequence of packets from the start of the TCP connection to its end, including the reception of the HTTP response for only one HTTP request. If Registry Operator implements a multiple-step process to get to the information, only the last step shall be measured. If the RTT is 5-times or more the corresponding SLR, the RTT will be considered undefined.

4.4. **RDDS query RTT.** Refers to the collective of “WHOIS query RTT” and “Web-based-WHOIS query RTT”.

4.5. **RDDS update time.** Refers to the time measured from the reception of an EPP confirmation to a transform command on a domain name, host or contact, up until the servers of the RDDS services reflect the changes made.

4.6. **RDDS test.** Means one query sent to a particular “IP address” of one of the servers of one of the RDDS services. Queries shall be about existing objects in the Registry System and the responses must contain the corresponding information otherwise the query will be considered unanswered. Queries with an RTT 5 times higher than the corresponding SLR will be considered as unanswered. The possible results to an RDDS test are: a number in milliseconds corresponding to the RTT or undefined/unanswered.

4.7. **Measuring RDDS parameters.** Every 5 minutes, RDDS probes will select one IP address from all the public-DNS registered “IP addresses” of the servers for each RDDS service of the TLD being monitored and make an “RDDS test” to each one. If an “RDDS test” result is
undefined/unanswered, the corresponding RDSS service will be considered as unavailable from that probe until it is time to make a new test.

4.8. **Collating the results from RDSS probes.** The minimum number of active testing probes to consider a measurement valid is 10 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.

4.9. **Placement of RDSS probes.** Probes for measuring RDSS parameters shall be placed inside the networks with the most users across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

5. **EPP**

5.1. **EPP service availability.** Refers to the ability of the TLD EPP servers as a group, to respond to commands from the Registry accredited Registrars, who already have credentials to the servers. The response shall include appropriate data from the Registry System. An EPP command with “**EPP command RTT**” 5 times higher than the corresponding SLR will be considered unanswered. If 51% or more of the EPP testing probes see the EPP service as unavailable during a given time, the EPP service will be considered unavailable.

5.2. **EPP session-command RTT.** Refers to the **RTT** of the sequence of packets that includes the sending of a session command plus the reception of the EPP response for only one EPP session command. For the login command it will include packets needed for starting the TCP session. For the logout command it will include packets needed for closing the TCP session. EPP session commands are those described in section 2.9.1 of EPP RFC 5730. If the **RTT** is 5 times or more the corresponding SLR, the **RTT** will be considered undefined.

5.3. **EPP query-command RTT.** Refers to the **RTT** of the sequence of packets that includes the sending of a query command plus the reception of the EPP response for only one EPP query command. It does not include packets needed for the start or close of either the EPP or the TCP session. EPP query commands are those described in section 2.9.2 of EPP RFC 5730. If the **RTT** is 5-times or more the corresponding SLR, the **RTT** will be considered undefined.

5.4. **EPP transform-command RTT.** Refers to the **RTT** of the sequence of packets that includes the sending of a transform command plus the reception of the EPP response for only one EPP transform command. It does not include packets needed for the start or close of either the EPP or the TCP session. EPP transform commands are those described in section 2.9.3 of EPP RFC 5730. If the **RTT** is 5 times or more the corresponding SLR, the **RTT** will be considered undefined.

5.5. **EPP command RTT.** Refers to “**EPP session-command RTT**”, “**EPP query-command RTT**” or “**EPP transform-command RTT**”.

5.6. **EPP test.** Means one EPP command sent to a particular “**IP address**” for one of the EPP servers. Query and transform commands, with the exception of “create”, shall be about existing objects in the Registry System. The response shall include appropriate data from the Registry System. The possible results to an EPP test are: a number in milliseconds corresponding to the “**EPP command RTT**” or undefined/unanswered.
5.7. **Measuring EPP parameters.** Every 5 minutes, EPP probes will select one “IP address” of the EPP servers of the TLD being monitored and make an “EPP test”; every time they should alternate between the 3 different types of commands and between the commands inside each category. If an “EPP test” result is undefined/unanswered, the EPP service will be considered as unavailable from that probe until it is time to make a new test.

5.8. **Collating the results from EPP probes.** The minimum number of active testing probes to consider a measurement valid is 5 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.

5.9. **Placement of EPP probes.** Probes for measuring EPP parameters shall be placed inside or close to Registrars points of access to the Internet across the different geographic regions; care shall be taken not to deploy probes behind high propagation-delay links, such as satellite links.

6. **Emergency Thresholds**

The following matrix presents the Emergency Thresholds that, if reached by any of the services mentioned above for a TLD, would cause the Emergency Transition of the Critical Functions as specified in Section 2.13. of this Agreement.

<table>
<thead>
<tr>
<th>Critical Function</th>
<th>Emergency Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNS service (all servers)</td>
<td>4-hour downtime / week</td>
</tr>
<tr>
<td>DNSSEC proper resolution</td>
<td>4-hour downtime / week</td>
</tr>
<tr>
<td>EPP</td>
<td>24-hour downtime / week</td>
</tr>
<tr>
<td>RDDS (WHOIS/Web-based WHOIS)</td>
<td>24-hour downtime / week</td>
</tr>
<tr>
<td>Data Escrow</td>
<td>Breach of the Registry Agreement caused by missing escrow deposits as described in Specification 2, Part B, Section 6.</td>
</tr>
</tbody>
</table>

7. **Emergency Escalation**

Escalation is strictly for purposes of notifying and investigating possible or potential issues in relation to monitored services. The initiation of any escalation and the subsequent cooperative investigations do not in themselves imply that a monitored service has failed its performance requirements.

Escalations shall be carried out between ICANN and Registry Operators, Registrars and Registry Operator, and Registrars and ICANN. Registry Operators and ICANN must provide said emergency operations departments. Current contacts must be maintained between ICANN and Registry Operators and published to Registrars, where relevant to their role in escalations, prior to any processing of an Emergency Escalation by all related parties, and kept current at all times.

7.1. **Emergency Escalation initiated by ICANN**

Upon reaching 10% of the Emergency thresholds as described in Section 6, ICANN’s emergency operations will initiate an Emergency Escalation with the relevant Registry Operator. An Emergency Escalation consists of the following minimum elements: electronic (i.e., email or SMS) and/or voice contact notification to the Registry Operator’s emergency operations department with detailed information concerning the issue being escalated, including evidence of monitoring failures, cooperative trouble-shooting of the monitoring failure between ICANN staff and the Registry Operator, and the
commitment to begin the process of rectifying issues with either the monitoring service or the service being monitoring.

7.2. Emergency Escalation initiated by Registrars

Registry Operator will maintain an emergency operations departments prepared to handle emergency requests from registrars. In the event that a registrar is unable to conduct EPP transactions with the Registry because of a fault with the Registry Service and is unable to either contact (through ICANN mandated methods of communication) the Registry Operator, or the Registry Operator is unable or unwilling to address the fault, the registrar may initiate an Emergency Escalation to the emergency operations department of ICANN. ICANN then may initiate an Emergency Escalation with the Registry Operator as explained above.

7.3. Notifications of Outages and Maintenance

In the event that a Registry Operator plans maintenance, they will provide related notice to the ICANN emergency operations department, at least, 24 hours ahead of that maintenance. ICANN’s emergency operations department will note planned maintenance times, and suspend Emergency Escalation services for the monitored services during the expected maintenance outage period.

If Registry Operator declares an outage, as per their contractual obligations with ICANN, on services under SLA and performance requirements, it will notify the ICANN emergency operations department. During that declared outage, ICANN’s emergency operations department will note and suspend Emergency Escalation services for the monitored services involved.

8. Covenants of Performance Measurement

8.1. No interference. Registry Operator shall not interfere with measurement Probes, including any form of preferential treatment of the requests for the monitored services. Registry Operator shall respond to the measurement tests described in this Specification as it would do with any other request from Internet users (for DNS and RDDS) or registrars (for EPP).

8.2. ICANN testing registrar. Registry Operator agrees that ICANN will have a testing registrar used for purposes of measuring the SLRs described above. Registry Operator agrees to not provide any differentiated treatment for the testing registrar other than no billing of the transactions. ICANN shall not use the registrar for registering domain names (or other registry objects) for itself or others, except for the purposes of verifying contractual compliance with the conditions described in this Agreement.
1. PURPOSE OF CLEARINGHOUSE

1.1 The Trademark Clearinghouse is a central repository for information to be authenticated, stored, and disseminated, pertaining to the rights of trademark holders. ICANN will enter into an arms-length contract with service provider or providers, awarding the right to serve as a Trademark Clearinghouse Service Provider, i.e., to accept, authenticate, validate and facilitate the transmission of information related to certain trademarks.

1.2 The Clearinghouse will be required to separate its two primary functions: (i) authentication and validation of the trademarks in the Clearinghouse; and (ii) serving as a database to provide information to the new gTLD registries to support pre-launch Sunrise or Trademark Claims Services. Whether the same provider could serve both functions or whether two providers will be determined in the tender process.

1.3 The Registry shall only need to connect with one centralized database to obtain the information it needs to conduct its Sunrise or Trademark Claims Services regardless of the details of the Trademark Clearinghouse Service Provider’s contract(s) with ICANN.

1.4 Trademark Clearinghouse Service Provider may provide ancillary services, as long as those services and any data used for those services are kept separate from the Clearinghouse database.

1.5 The Clearinghouse database will be a repository of authenticated information and disseminator of the information to a limited number of recipients. Its functions will be performed in accordance with a limited charter, and will not have any discretionary powers other than what will be set out in the charter with respect to authentication and validation. The Clearinghouse administrator(s) cannot create policy. Before material changes are made to the Clearinghouse functions, they will be reviewed through the ICANN public participation model.

1.6 Inclusion in the Clearinghouse is not proof of any right, nor does it create any legal rights. Failure to submit trademarks into the Clearinghouse should not be perceived to be lack of vigilance by trademark holders or a waiver of any rights, nor can any negative influence be drawn from such failure.

2. SERVICE PROVIDERS

2.1 The selection of Trademark Clearinghouse Service Provider(s) will be subject to predetermined criteria, but the foremost considerations will be the ability to store, authenticate, validate and disseminate the data at the highest level of technical stability
and security without interference with the integrity or timeliness of the registration process or registry operations.

2.2 Functions – Authentication/Validation; Database Administration. Public commentary has suggested that the best way to protect the integrity of the data and to avoid concerns that arise through sole-source providers would be to separate the functions of database administration and data authentication/validation.

2.2.1 One entity will authenticate registrations ensuring the word marks qualify as registered or are court-validated word marks or word marks that are protected by statute or treaty. This entity would also be asked to ensure that proof of use of marks is provided, which can be demonstrated by furnishing a signed declaration and one specimen of current use.

2.2.2 The second entity will maintain the database and provide Sunrise and Trademark Claims Services (described below).

2.3 Discretion will be used, balancing effectiveness, security and other important factors, to determine whether ICANN will contract with one or two entities - one to authenticate and validate, and the other to, administer in order to preserve integrity of the data.

2.4 Contractual Relationship.

2.4.1 The Clearinghouse shall be separate and independent from ICANN. It will operate based on market needs and collect fees from those who use its services. ICANN may coordinate or specify interfaces used by registries and registrars, and provide some oversight or quality assurance function to ensure rights protection goals are appropriately met.

2.4.2 The Trademark Clearinghouse Service Provider(s) (authenticator/validator and administrator) will be selected through an open and transparent process to ensure low costs and reliable, consistent service for all those utilizing the Clearinghouse services.

2.4.3 The Service Provider(s) providing the authentication of the trademarks submitted into the Clearinghouse shall adhere to rigorous standards and requirements that would be specified in an ICANN contractual agreement.

2.4.4 The contract shall include service level requirements, customer service availability (with the goal of seven days per week, 24 hours per day, 365 days per year), data escrow requirements, and equal access requirements for all persons and entities required to access the Trademark Clearinghouse database.
2.4.5 To the extent practicable, the contract should also include indemnification by Service Provider for errors such as false positives for participants such as Registries, ICANN, Registrants and Registrars.

2.5. Service Provider Requirements. The Clearinghouse Service Provider(s) should utilize regional marks authentication service providers (whether directly or through subcontractors) to take advantage of local experts who understand the nuances of the trademark in question. Examples of specific performance criteria details in the contract award criteria and service-level-agreements are:

2.5.1 provide 24 hour accessibility seven days a week (database administrator);
2.5.2 employ systems that are technically reliable and secure (database administrator);
2.5.3 use globally accessible and scalable systems so that multiple marks from multiple sources in multiple languages can be accommodated and sufficiently cataloged (database administrator and validator);
2.5.4 accept submissions from all over the world - the entry point for trademark holders to submit their data into the Clearinghouse database could be regional entities or one entity;
2.5.5 allow for multiple languages, with exact implementation details to be determined;
2.5.6 provide access to the Registrants to verify and research Trademark Claims Notices;
2.5.7 have the relevant experience in database administration, validation or authentication, as well as accessibility to and knowledge of the various relevant trademark laws (database administrator and authenticator); and
2.5.8 ensure through performance requirements, including those involving interface with registries and registrars, that neither domain name registration timeliness, nor registry or registrar operations will be hindered (database administrator).

3. CRITERIA FOR TRADEMARK INCLUSION IN CLEARINGHOUSE

3.1 The trademark holder will submit to one entity – a single entity for entry will facilitate access to the entire Clearinghouse database. If regional entry points are used, ICANN will publish an information page describing how to locate regional submission points. Regardless of the entry point into the Clearinghouse, the authentication procedures established will be uniform.

3.2 The standards for inclusion in the Clearinghouse are:

3.2.1 Nationally or regionally registered word marks from all jurisdictions.
3.2.2 Any word mark that has been validated through a court of law or other judicial proceeding.
3.2.3 Any word mark protected by a statute or treaty in effect at the time the mark is submitted to the Clearinghouse for inclusion.

3.2.4 Other marks that constitute intellectual property.

3.2.5 Protections afforded to trademark registrations do not extend to applications for registrations, marks within any opposition period or registered marks that were the subject of successful invalidation, cancellation or rectification proceedings.

3.3 The type of data supporting entry of a registered word mark into the Clearinghouse must include a copy of the registration or the relevant ownership information, including the requisite registration number(s), the jurisdictions where the registrations have issued, and the name of the owner of record.

3.4 Data supporting entry of a judicially validated word mark into the Clearinghouse must include the court documents, properly entered by the court, evidencing the validation of a given word mark.

3.5 Data supporting entry into the Clearinghouse of word marks protected by a statute or treaty in effect at the time the mark is submitted to the Clearinghouse for inclusion, must include a copy of the relevant portion of the statute or treaty and evidence of its effective date.

3.6 Data supporting entry into the Clearinghouse of marks that constitute intellectual property of types other than those set forth in sections 3.2.1-3.2.3 above shall be determined by the registry operator and the Clearinghouse based on the services any given registry operator chooses to provide.

3.7 Registrations that include top level extensions such as “icann.org” or “.icann” as the word mark will not be permitted in the Clearinghouse regardless of whether that mark has been registered or it has been otherwise validated or protected (e.g., if a mark existed for icann.org or .icann, neither will not be permitted in the Clearinghouse).

3.8 All mark holders seeking to have their marks included in the Clearinghouse will be required to submit a declaration, affidavit, or other sworn statement that the information provided is true and current and has not been supplied for an improper purpose. The mark holder will also be required to attest that it will keep the information supplied to the Clearinghouse current so that if, during the time the mark is included in the Clearinghouse, a registration gets cancelled or is transferred to another entity, or in the case of a court- or Clearinghouse-validated mark the holder abandons use of the mark, the mark holder has an affirmative obligation to notify the Clearinghouse. There will be penalties for failing to keep information current. Moreover, it is anticipated that there will be a process whereby registrations can be
removed from the Clearinghouse if it is discovered that the marks are procured by fraud or if the data is inaccurate.

3.9 As an additional safeguard, the data will have to be renewed periodically by any mark holder wishing to remain in the Clearinghouse. Electronic submission should facilitate this process and minimize the cost associated with it. The reason for periodic authentication is to streamline the efficiencies of the Clearinghouse and the information the registry operators will need to process and limit the marks at issue to the ones that are in use.

4. USE OF CLEARINGHOUSE DATA

4.1 All mark holders seeking to have their marks included in the Clearinghouse will have to consent to the use of their information by the Clearinghouse. However, such consent would extend only to use in connection with the stated purpose of the Trademark Clearinghouse Database for Sunrise or Trademark Claims services. The reason for such a provision would be to presently prevent the Clearinghouse from using the data in other ways without permission. There shall be no bar on the Trademark Clearinghouse Service Provider or other third party service providers providing ancillary services on a non-exclusive basis.

4.2 In order not to create a competitive advantage, the data in the Trademark Clearinghouse should be licensed to competitors interested in providing ancillary services on equal and non-discriminatory terms and on commercially reasonable terms if the mark holders agree. Accordingly, two licensing options will be offered to the mark holder: (a) a license to use its data for all required features of the Trademark Clearinghouse, with no permitted use of such data for ancillary services either by the Trademark Clearinghouse Service Provider or any other entity; or (b) license to use its data for the mandatory features of the Trademark Clearinghouse and for any ancillary uses reasonably related to the protection of marks in new gTLDs, which would include a license to allow the Clearinghouse to license the use and data in the Trademark Clearinghouse to competitors that also provide those ancillary services. The specific implementation details will be determined, and all terms and conditions related to the provision of such services shall be included in the Trademark Clearinghouse Service Provider’s contract with ICANN and subject to ICANN review.

4.3 Access by a prospective registrant to verify and research Trademark Claims Notices shall not be considered an ancillary service, and shall be provided at no cost to the Registrant. Misuse of the data by the service providers would be grounds for immediate termination.
5. DATA AUTHENTICATION AND VALIDATION GUIDELINES

5.1 One core function for inclusion in the Clearinghouse would be to authenticate that the data meets certain minimum criteria. As such, the following minimum criteria are suggested:

5.1.1 An acceptable list of data authentication sources, i.e. the web sites of patent and trademark offices throughout the world, third party providers who can obtain information from various trademark offices;

5.1.2 Name, address and contact information of the applicant is accurate, current and matches that of the registered owner of the trademarks listed;

5.1.3 Electronic contact information is provided and accurate;

5.1.4 The registration numbers and countries match the information in the respective trademark office database for that registration number.

5.2 For validation of marks by the Clearinghouse that were not protected via a court, statute or treaty, the mark holder shall be required to provide evidence of use of the mark in connection with the bona fide offering for sale of goods or services prior to application for inclusion in the Clearinghouse. Acceptable evidence of use will be a signed declaration and a single specimen of current use, which might consist of labels, tags, containers, advertising, brochures, screen shots, or something else that evidences current use.

6. MANDATORY RIGHTS PROTECTION MECHANISMS

All new gTLD registries will be required to use the Trademark Clearinghouse to support its pre-launch or initial launch period rights protection mechanisms (RPMs). These RPMs, at a minimum, must consist of a Trademark Claims service and a Sunrise process.

6.1 Trademark Claims service

6.1.1 New gTLD Registry Operators must provide Trademark Claims services during an initial launch period for marks in the Trademark Clearinghouse. This launch period must occur for at least the first 60 days that registration is open for general registration.

6.1.2 A Trademark Claims service is intended to provide clear notice to the prospective registrant of the scope of the mark holder’s rights in order to minimize the chilling effect on registrants (Trademark Claims Notice). A form that describes the required elements is attached. The specific statement by
prospective registrant warrants that: (i) the prospective registrant has received notification that the mark(s) is included in the Clearinghouse; (ii) the prospective registrant has received and understood the notice; and (iii) to the best of the prospective registrant’s knowledge, the registration and use of the requested domain name will not infringe on the rights that are the subject of the notice.

6.1.3 The Trademark Claims Notice should provide the prospective registrant access to the Trademark Clearinghouse Database information referenced in the Trademark Claims Notice to enhance understanding of the Trademark rights being claimed by the trademark holder. These links (or other sources) shall be provided in real time without cost to the prospective registrant. Preferably, the Trademark Claims Notice should be provided in the language used for the rest of the interaction with the registrar or registry, but it is anticipated that at the very least in the most appropriate UN-sponsored language (as specified by the prospective registrant or registrar/registry).

6.1.4 If the domain name is registered in the Clearinghouse, the registrar (again through an interface with the Clearinghouse) will promptly notify the mark holders(s) of the registration after it is effectuated.

6.1.5 The Trademark Clearinghouse Database will be structured to report to registries when registrants are attempting to register a domain name that is considered an “Identical Match” with the mark in the Clearinghouse. “Identical Match” means that the domain name consists of the complete and identical textual elements of the mark. In this regard: (a) spaces contained within a mark that are either replaced by hyphens (and vice versa) or omitted; (b) only certain special characters contained within a trademark are spelled out with appropriate words describing it (@ and &); (c) punctuation or special characters contained within a mark that are unable to be used in a second-level domain name may either be (i) omitted or (ii) replaced by spaces, hyphens or underscores and still be considered identical matches; and (d) no plural and no “marks contained” would qualify for inclusion.

6.2 Sunrise service

6.2.1 Sunrise registration services must be offered for a minimum of 30 days during the pre-launch phase and notice must be provided to all trademark holders in the Clearinghouse if someone is seeking a sunrise registration. This notice will be provided to holders of marks in the Clearinghouse that are an Identical Match to the name to be registered during Sunrise.

6.2.2 Sunrise Registration Process. For a Sunrise service, sunrise eligibility requirements (SERs) will be met as a minimum requirement, verified by Clearinghouse data, and
incorporate a Sunrise Dispute Resolution Policy (SDRP).

6.2.3 The proposed SERs include: (i) ownership of a mark (that satisfies the criteria in section 7.2 below), (ii) optional registry elected requirements re: international class of goods or services covered by registration; (iii) representation that all provided information is true and correct; and (iv) provision of data sufficient to document rights in the trademark.

6.2.4 The proposed SDRP must allow challenges based on at least the following four grounds: (i) at time the challenged domain name was registered, the registrant did not hold a trademark registration of national effect (or regional effect) or the trademark had not been court-validated or protected by statute or treaty; (ii) the domain name is not identical to the mark on which the registrant based its Sunrise registration; (iii) the trademark registration on which the registrant based its Sunrise registration is not of national effect (or regional effect) or the trademark had not been court-validated or protected by statute or treaty; or (iv) the trademark registration on which the domain name registrant based its Sunrise registration did not issue on or before the effective date of the Registry Agreement and was not applied for on or before ICANN announced the applications received.

6.2.5 The Clearinghouse will maintain the SERs, validate and authenticate marks, as applicable, and hear challenges.

7. PROTECTION FOR MARKS IN CLEARINGHOUSE

The scope of registered marks that must be honored by registries in providing Trademarks Claims services is broader than those that must be honored by registries in Sunrise services.

7.1 For Trademark Claims services - Registries must recognize and honor all word marks that have been or are: (i) nationally or regionally registered; (ii) court-validated; or (iii) specifically protected by a statute or treaty in effect at the time the mark is submitted to the Clearinghouse for inclusion. No demonstration of use is required.

7.2 For Sunrise services - Registries must recognize and honor all word marks: (i) nationally or regionally registered and for which proof of use – which can be a declaration and a single specimen of current use – was submitted to, and validated by, the Trademark Clearinghouse; or (ii) that have been court-validated; or (iii) that are specifically protected by a statute or treaty currently in effect and that was in effect on or before 26 June 2008.

8. COSTS OF CLEARINGHOUSE

Costs should be completely borne by the parties utilizing the services. Trademark holders will pay to register the Clearinghouse, and registries will pay for Trademark Claims and Sunrise services. Registrars and others who avail themselves of Clearinghouse services will pay the Clearinghouse directly.
TRADEMARK NOTICE

[In English and the language of the registration agreement]

You have received this Trademark Notice because you have applied for a domain name which matches at least one trademark record submitted to the Trademark Clearinghouse.

You may or may not be entitled to register the domain name depending on your intended use and whether it is the same or significantly overlaps with the trademarks listed below.

*Your rights to register this domain name may or may not be protected as noncommercial use or “fair use” by the laws of your country.* [in bold italics or all caps]

Please read the trademark information below carefully, including the trademarks, jurisdictions, and goods and service for which the trademarks are registered. Please be aware that not all jurisdictions review trademark applications closely, so some of the trademark information below may exist in a national or regional registry which does not conduct a thorough or substantive review of trademark rights prior to registration.

*If you have questions, you may want to consult an attorney or legal expert on trademarks and intellectual property for guidance.*

If you continue with this registration, you represent that, you have received and you understand this notice and to the best of your knowledge, your registration and use of the requested domain name will not infringe on the trademark rights listed below.

The following [number] Trademarks are listed in the Trademark Clearinghouse:

1. Mark: Jurisdiction: Goods: [click here for more if maximum character count is exceeded]
   International Class of Goods and Services or Equivalent if applicable: Trademark Registrant: Trademark Registrant Contact:

   [with links to the TM registrations as listed in the TM Clearinghouse]

2. Mark: Jurisdiction: Goods: [click here for more if maximum character count is exceeded]
   International Class of Goods and Services or Equivalent if applicable: Trademark Registrant:

   Trademark Registrant Contact:
   ****** [with links to the TM registrations as listed in the TM Clearinghouse]

X. 1. Mark: Jurisdiction: Goods: [click here for more if maximum character count is exceeded] International Class of Goods and Services or Equivalent if applicable: Trademark Registrant: Trademark Registrant Contact:
DRAFT PROCEDURE

1. Complaint

1.1 Filing the Complaint

a) Proceedings are initiated by electronically filing with a URS Provider a Complaint outlining the trademark rights and the actions complained of entitling the trademark holder to relief.

b) Each Complaint must be accompanied by the appropriate fee, which is under consideration. The fees will be non-refundable.

c) One Complaint is acceptable for multiple related companies against one Registrant, but only if the companies complaining are related. Multiple Registrants can be named in one Complaint only if it can be shown that they are in some way related. There will not be a minimum number of domain names imposed as a prerequisite to filing.

1.2 Contents of the Complaint

The form of the Complaint will be simple and as formulaic as possible. There will be a Form Complaint. The Form Complaint shall include space for the following:

1.2.1 Name, email address and other contact information for the Complaining Party (Parties).

1.2.2 Name, email address and contact information for any person authorized to act on behalf of Complaining Parties.

1.2.3 Name of Registrant (i.e. relevant information available from Whois) and Whois listed available contact information for the relevant domain name(s).

1.2.4 The specific domain name(s) that are the subject of the Complaint. For each domain name, the Complainant shall include a copy of the currently available Whois information and a description and copy, if available, of the offending portion of the website content associated with each domain name that is the subject of the Complaint.

1.2.5 The specific trademark/service marks upon which the Complaint is based and pursuant to which the Complaining Parties are asserting their rights to them, for which goods and in connection with what services.

1.2.6 A statement of the grounds upon which the Complaint is based setting forth facts showing that the Complaining Party is entitled to relief, namely:
1.2.6.1. that the registered domain name is identical or confusingly similar to a word mark: (i) for which the Complainant holds a valid national or regional registration and that is in current use; or (ii) that has been validated through court proceedings; or (iii) that is specifically protected by a statute or treaty in effect at the time the URS complaint is filed.

a. Use can be shown by demonstrating that evidence of use – which can be a declaration and one specimen of current use in commerce - was submitted to, and validated by, the Trademark Clearinghouse)

b. Proof of use may also be submitted directly with the URS Complaint.

and

1.2.6.2. that the Registrant has no legitimate right or interest to the domain name; and

1.2.6.3. that the domain was registered and is being used in bad faith.

A non-exclusive list of circumstances that demonstrate bad faith registration and use by the Registrant include:

a. Registrant has registered or acquired the domain name primarily for the purpose of selling, renting or otherwise transferring the domain name registration to the complainant who is the owner of the trademark or service mark or to a competitor of that complainant, for valuable consideration in excess of documented out-of-pocket costs directly related to the domain name; or

b. Registrant has registered the domain name in order to prevent the trademark holder or service mark from reflecting the mark in a corresponding domain name, provided that Registrant has engaged in a pattern of such conduct; or

c. Registrant registered the domain name primarily for the purpose of disrupting the business of a competitor; or

d. By using the domain name Registrant has intentionally attempted to attract for commercial gain, Internet users to Registrant’s website or other on-line location, by creating a likelihood of confusion with the complainant’s mark as to the source, sponsorship, affiliation, or endorsement of Registrant’s website or location or of a product or service on that website or location.
1.2.7 A box in which the Complainant may submit up to 500 words of explanatory free form text.

1.2.8 An attestation that the Complaint is not being filed for any improper basis and that there is a sufficient good faith basis for filing the Complaint.

2. Fees

2.1 URS Provider will charge fees to the Complainant. Fees are thought to be in the range of USD 300 per proceeding, but will ultimately be set by the Provider.

2.2 Complaints listing fifteen (15) or more disputed domain names registered by the same registrant will be subject to a Response Fee which will be refundable to the prevailing party. Under no circumstances shall the Response Fee exceed the fee charged to the Complainant.

3. Administrative Review

3.1 Complaints will be subjected to an initial administrative review by the URS Provider for compliance with the filing requirements. This is a review to determine that the Complaint contains all of the necessary information, and is not a determination as to whether a *prima facie* case has been established.

3.2 The Administrative Review shall be conducted within two (2) business days of submission of the Complaint to the URS Provider.

3.3 Given the rapid nature of this Procedure, and the intended low level of required fees, there will be no opportunity to correct inadequacies in the filing requirements.

3.4 If a Complaint is deemed non-compliant with filing requirements, the Complaint will be dismissed without prejudice to the Complainant filing a new complaint. The initial filing fee shall not be refunded in these circumstances.

4. Notice and Locking of Domain

4.1 Upon completion of the Administrative Review, the URS Provider must immediately notify the registry operator (via email) ("Notice of Complaint") after the Complaint has been deemed compliant with the filing requirements. Within 24 hours of receipt of the Notice of Complaint from the URS Provider, the registry operator shall “lock” the domain, meaning the registry shall restrict all changes to the registration data, including transfer and deletion of the domain names, but the name will continue to resolve. The registry operator will notify the URS Provider immediately upon locking the domain name ("Notice of Lock").

4.2 Within 24 hours after receiving Notice of Lock from the registry operator, the URS Provider shall notify the Registrant of the Complaint, sending a hard copy of the Notice of Complaint to the addresses listed in the Whois contact information, and providing an electronic copy of the Complaint, advising of the locked status, as well as the potential

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effects if the Registrant fails to respond and defend against the Complaint. Notices
must be clear and understandable to Registrants located globally. The Notice of
Complaint shall be in English and translated by the Provider into the predominant
language used in the registrant’s country or territory.

4.3 All Notices to the Registrant shall be sent through email, fax (where available) and
postal mail. The Complaint and accompanying exhibits, if any, shall be served
electronically.

4.4 The URS Provider shall also electronically notify the registrar of record for the domain
name at issue via the addresses the registrar has on file with ICANN.

5. The Response

5.1 A Registrant will have 14 calendar days from the date the URS Provider sent its Notice of
Complaint to the Registrant to electronically file a Response with the URS Provider.
Upon receipt, the Provider will electronically send a copy of the Response, and
accompanying exhibits, if any, to the Complainant.

5.2 No filing fee will be charged if the Registrant files its Response prior to being declared in
default or not more than thirty (30) days following a Determination. For Responses filed
more than thirty (30) days after a Determination, the Registrant should pay a reasonable
non-refundable fee for re-examination, plus a Response Fee as set forth in section 2.2
above if the Complaint lists twenty-six (26) or more disputed domain names against the
same registrant. The Response Fee will be refundable to the prevailing party.

5.3 Upon request by the Registrant, a limited extension of time to respond may be granted
by the URS Provider if there is a good faith basis for doing so. In no event shall the
extension be for more than seven (7) calendar days.

5.4 The Response shall be no longer than 2,500 words, excluding attachments, and the
content of the Response should include the following:

5.4.1 Confirmation of Registrant data.

5.4.2 Specific admission or denial of each of the grounds upon which the Complaint is
based.

5.4.3 Any defense which contradicts the Complainant’s claims.

5.4.4 A statement that the contents are true and accurate.

5.5 In keeping with the intended expedited nature of the URS and the remedy afforded to a
successful Complainant, affirmative claims for relief by the Registrant will not be
permitted except for an allegation that the Complainant has filed an abusive Complaint.

5.6 Once the Response is filed, and the URS Provider determines that the Response is
compliant with the filing requirements of a Response (which shall be on the same day),
the Complaint, Response and supporting materials will immediately be sent to a qualified Examiner, selected by the URS Provider, for review and Determination. All materials submitted are considered by the Examiner.

5.7 The Response can contain any facts refuting the claim of bad faith registration by setting out any of the following circumstances:

5.7.1 Before any notice to Registrant of the dispute, Registrant’s use of, or demonstrable preparations to use, the domain name or a name corresponding to the domain name in connection with a bona fide offering of goods or services; or

5.7.2 Registrant (as an individual, business or other organization) has been commonly known by the domain name, even if Registrant has acquired no trademark or service mark rights; or

5.7.3 Registrant is making a legitimate or fair use of the domain name, without intent for commercial gain to misleadingly divert consumers or to tarnish the trademark or service mark at issue.

Such claims, if found by the Examiner to be proved based on its evaluation of all evidence, shall result in a finding in favor of the Registrant.

5.8 The Registrant may also assert Defenses to the Complaint to demonstrate that the Registrant’s use of the domain name is not in bad faith by showing, for example, one of the following:

5.8.1 The domain name is generic or descriptive and the Registrant is making fair use of it.

5.8.2 The domain name sites are operated solely in tribute to or in criticism of a person or business that is found by the Examiner to be fair use.

5.8.3 Registrant’s holding of the domain name is consistent with an express term of a written agreement entered into by the disputing Parties and that is still in effect.

5.8.4 The domain name is not part of a wider pattern or series of abusive registrations because the Domain Name is of a significantly different type or character to other domain names registered by the Registrant.

5.9 Other factors for the Examiner to consider:

5.9.1 Trading in domain names for profit, and holding a large portfolio of domain names, are of themselves not indicia of bad faith under the URS. Such conduct, however, may be abusive in a given case depending on the circumstances of the dispute. The Examiner must review each case on its merits.

5.9.2 Sale of traffic (i.e. connecting domain names to parking pages and earning click-per-view revenue) does not in and of itself constitute bad faith under the URS.
Such conduct, however, may be abusive in a given case depending on the circumstances of the dispute. The Examiner will take into account:

5.9.2.1. the nature of the domain name;

5.9.2.2. the nature of the advertising links on any parking page associated with the domain name; and

5.9.2.3. that the use of the domain name is ultimately the Registrant’s responsibility.

6. Default

6.1 If at the expiration of the 14-day answer period (or extended period if granted), the Registrant does not submit an answer, the Complaint proceeds to Default.

6.2 In either case, the Provider shall provide Notice of Default via email to the Complainant and Registrant, and via mail and fax to Registrant. During the Default period, the Registrant will be prohibited from changing content found on the site to argue that it is now a legitimate use and will also be prohibited from changing the Whois information.

6.3 All Default cases proceed to Examination for review on the merits of the claim.

6.4 If after Examination in Default cases, the Examiner rules in favor of Complainant, Registrant shall have the right to seek relief from Default via de novo review by filing a Response at any time up to six months after the date of the Notice of Default. The Registrant will also be entitled to request an extension of an additional six months if the extension is requested before the expiration of the initial six-month period.

6.5 If a Response is filed after: (i) the Respondent was in Default (so long as the Response is filed in accordance with 6.4 above); and (ii) proper notice is provided in accordance with the notice requirements set forth above, the domain name shall again resolve to the original IP address as soon as practical, but shall remain locked as if the Response had been filed in a timely manner before Default. The filing of a Response after Default is not an appeal; the case is considered as if responded to in a timely manner.

6.5 If after Examination in Default case, the Examiner rules in favor of Registrant, the Provider shall notify the Registry Operator to unlock the name and return full control of the domain name registration to the Registrant.

7. Examiners

7.1 One Examiner selected by the Provider will preside over a URS proceeding.

7.2 Examiners should have demonstrable relevant legal background, such as in trademark law, and shall be trained and certified in URS proceedings. Specifically, Examiners shall be provided with instructions on the URS elements and defenses and how to conduct the examination of a URS proceeding.
7.3 Examiners used by any given URS Provider shall be rotated to the extent feasible to avoid “forum or examiner shopping.” URS Providers are strongly encouraged to work equally with all certified Examiners, with reasonable exceptions (such as language needs, non-performance, or malfeasance) to be determined on a case by case analysis.

8. **Examination Standards and Burden of Proof**

8.1 The standards that the qualified Examiner shall apply when rendering its Determination are whether:

8.1.2 The registered domain name is identical or confusingly similar to a word mark: (i) for which the Complainant holds a valid national or regional registration and that is in current use; or (ii) that has been validated through court proceedings; or (iii) that is specifically protected by a statute or treaty currently in effect and that was in effect at the time the URS Complaint is filed; and

8.1.2.1 Use can be shown by demonstrating that evidence of use – which can be a declaration and one specimen of current use – was submitted to, and validated by, the Trademark Clearinghouse.

8.1.2.2 Proof of use may also be submitted directly with the URS Complaint.

8.1.2 The Registrant has no legitimate right or interest to the domain name; and

8.1.3 The domain was registered and is being used in a bad faith.

8.2 The burden of proof shall be clear and convincing evidence.

8.3 For a URS matter to conclude in favor of the Complainant, the Examiner shall render a Determination that there is no genuine issue of material fact. Such Determination may include that: (i) the Complainant has rights to the name; and (ii) the Registrant has no rights or legitimate interest in the name. This means that the Complainant must present adequate evidence to substantiate its trademark rights in the domain name (e.g., evidence of a trademark registration and evidence that the domain name was registered and is being used in bad faith in violation of the URS).

8.4 If the Examiner finds that the Complainant has not met its burden, or that genuine issues of material fact remain in regards to any of the elements, the Examiner will reject the Complaint under the relief available under the URS. That is, the Complaint shall be dismissed if the Examiner finds that evidence was presented or is available to the Examiner to indicate that the use of the domain name in question is a non-infringing use or fair use of the trademark.

8.5 Where there is any genuine contestable issue as to whether a domain name registration and use of a trademark are in bad faith, the Complaint will be denied, the URS proceeding will be terminated without prejudice, e.g., a UDRP, court proceeding or
another URS may be filed. The URS is not intended for use in any proceedings with open questions of fact, but only clear cases of trademark abuse.

8.6 To restate in another way, if the Examiner finds that all three standards are satisfied by clear and convincing evidence and that there is no genuine contestable issue, then the Examiner shall issue a Determination in favor of the Complainant. If the Examiner finds that any of the standards have not been satisfied, then the Examiner shall deny the relief requested, thereby terminating the URS proceeding without prejudice to the Complainant to proceed with an action in court of competent jurisdiction or under the UDRP.

9. Determination

9.1 There will be no discovery or hearing; the evidence will be the materials submitted with the Complaint and the Response, and those materials will serve as the entire record used by the Examiner to make a Determination.

9.2 If the Complainant satisfies the burden of proof, the Examiner will issue a Determination in favor of the Complainant. The Determination will be published on the URS Provider’s website. However, there should be no other preclusive effect of the Determination other than the URS proceeding to which it is rendered.

9.3 If the Complainant does not satisfy the burden of proof, the URS proceeding is terminated and full control of the domain name registration shall be returned to the Registrant.

9.4 Determinations resulting from URS proceedings will be published by the service provider in a format specified by ICANN.

9.5 Determinations shall also be emailed by the URS Provider to the Registrant, the Complainant, the Registrar, and the Registry Operator, and shall specify the remedy and required actions of the registry operator to comply with the Determination.

9.6 To conduct URS proceedings on an expedited basis, examination should begin immediately upon the earlier of the expiration of a fourteen (14) day Response period (or extended period if granted), or upon the submission of the Response. A Determination shall be rendered on an expedited basis, with the stated goal that it be rendered within three (3) business days from when Examination began. Absent extraordinary circumstances, however, Determinations must be issued no later than five (5) days after the Response is filed. Implementation details will be developed to accommodate the needs of service providers once they are selected. (The tender offer for potential service providers will indicate that timeliness will be a factor in the award decision.)

10. Remedy

10.1 If the Determination is in favor of the Complainant, the decision shall be immediately transmitted to the registry operator.
10.2 Immediately upon receipt of the Determination, the registry operator shall suspend the
domain name, which shall remain suspended for the balance of the registration period
and would not resolve to the original web site. The nameservers shall be redirected to
an informational web page provided by the URS Provider about the URS. The URS
Provider shall not be allowed to offer any other services on such page, nor shall it
directly or indirectly use the web page for advertising purposes (either for itself or any
other third party). The Whois for the domain name shall continue to display all of the
information of the original Registrant except for the redirection of the nameservers. In
addition, the Whois shall reflect that the domain name will not be able to be transferred,
deleted or modified for the life of the registration.

10.3 There shall be an option for a successful Complainant to extend the registration period
for one additional year at commercial rates.

10.4 No other remedies should be available in the event of a Determination in favor of the
Complainant.

11. Abusive Complaints

11.1 The URS shall incorporate penalties for abuse of the process by trademark holders.

11.2 In the event a party is deemed to have filed two (2) abusive Complaints, or one (1)
“deliberate material falsehood,” that party shall be barred from utilizing the URS for
one-year following the date of issuance of a Determination finding a complainant to
have: (i) filed its second abusive complaint; or (ii) filed a deliberate material falsehood.

11.3 A Complaint may be deemed abusive if the Examiner determines:

11.3.1 it was presented solely for improper purpose such as to harass, cause
unnecessary delay, or needlessly increase the cost of doing business; and

11.3.2 (i) the claims or other assertions were not warranted by any existing law or the
URS standards; or (ii) the factual contentions lacked any evidentiary support

11.4 An Examiner may find that Complaint contained a deliberate material falsehood if it
contained an assertion of fact, which at the time it was made, was made with the
knowledge that it was false and which, if true, would have an impact on the outcome on
the URS proceeding.

11.5 Two findings of “deliberate material falsehood” shall permanently bar the party from
utilizing the URS.

11.6 URS Providers shall be required to develop a process for identifying and tracking barred
parties, and parties whom Examiners have determined submitted abusive complaints or
deliberate material falsehoods.
11.7 The dismissal of a complaint for administrative reasons or a ruling on the merits, in itself, shall not be evidence of filing an abusive complaint.

11.8 A finding that filing of a complaint was abusive or contained a deliberate materially falsehood can be appealed solely on the grounds that an Examiner abused his/her discretion, or acted in an arbitrary or capricious manner.

12. **Appeal**

12.1 Either party shall have a right to seek a de novo appeal of the Determination based on the existing record within the URS proceeding for a reasonable fee to cover the costs of the appeal. An appellant must identify the specific grounds on which the party is appealing, including why the appellant claims the Examiner’s Determination was incorrect.

12.2 The fees for an appeal shall be borne by the appellant. A limited right to introduce new admissible evidence that is material to the Determination will be allowed upon payment of an additional fee, provided the evidence clearly pre-dates the filing of the Complaint. The Appeal Panel, to be selected by the Provider, may request, in its sole discretion, further statements or documents from either of the Parties.

12.3 Filing an appeal shall not change the domain name’s resolution. For example, if the domain name no longer resolves to the original nameservers because of a Determination in favor or the Complainant, the domain name shall continue to point to the informational page provided by the URS Provider. If the domain name resolves to the original nameservers because of a Determination in favor of the registrant, it shall continue to resolve during the appeal process.

12.4 An appeal must be filed within 14 days after a Determination is issued and any Response must be filed 14 days after an appeal is filed.

12.5 If a respondent has sought relief from Default by filing a Response within six months (or the extended period if applicable) of issuance of initial Determination, an appeal must be filed within 14 days from date the second Determination is issued and any Response must be filed 14 days after the appeal is filed.

12.6 Notice of appeal and findings by the appeal panel shall be sent by the URS Provider via e-mail to the Registrant, the Complainant, the Registrar, and the Registry Operator.

12.7 The Providers’ rules and procedures for appeals, other than those stated above, shall apply.

13. **Other Available Remedies**

The URS Determination shall not preclude any other remedies available to the appellant, such as UDRP (if appellant is the Complainant), or other remedies as may be available in a court of competition jurisdiction. A URS Determination for or against a party shall not prejudice the
party in UDRP or any other proceedings.

14. Review of URS

A review of the URS procedure will be initiated one year after the first Examiner Determination is issued. Upon completion of the review, a report shall be published regarding the usage of the procedure, including statistical information, and posted for public comment on the usefulness and effectiveness of the procedure.
TRADEMARK POST-DELEGATION DISPUTE RESOLUTION PROCEDURE (TRADEMARK PDDRP)
4 JUNE 2012

1. Parties to the Dispute

The parties to the dispute will be the trademark holder and the gTLD registry operator. ICANN shall not be a party.

2. Applicable Rules

2.1 This procedure is intended to cover Trademark post-delegation dispute resolution proceedings generally. To the extent more than one Trademark PDDRP provider (“Provider”) is selected to implement the Trademark PDDRP, each Provider may have additional rules that must be followed when filing a Complaint. The following are general procedures to be followed by all Providers.

2.2 In the Registry Agreement, the registry operator agrees to participate in all post-delegation procedures and be bound by the resulting Determinations.

3. Language

3.1 The language of all submissions and proceedings under the procedure will be English.

3.2 Parties may submit supporting evidence in their original language, provided and subject to the authority of the Expert Panel to determine otherwise, that such evidence is accompanied by an English translation of all relevant text.

4. Communications and Time Limits

4.1 All communications with the Provider must be submitted electronically.

4.2 For the purpose of determining the date of commencement of a time limit, a notice or other communication will be deemed to have been received on the day that it is transmitted to the appropriate contact person designated by the parties.

4.3 For the purpose of determining compliance with a time limit, a notice or other communication will be deemed to have been sent, made or transmitted on the day that it is dispatched.

4.4 For the purpose of calculating a period of time under this procedure, such period will begin to run on the day following the date of receipt of a notice or other communication.

4.5 All references to day limits shall be considered as calendar days unless otherwise specified.
5. **Standing**

5.1 The mandatory administrative proceeding will commence when a third-party complainant (“Complainant”) has filed a Complaint with a Provider asserting that the Complainant is a trademark holder (which may include either registered or unregistered marks as defined below) claiming that one or more of its marks have been infringed, and thereby the Complainant has been harmed, by the registry operator’s manner of operation or use of the gTLD.

5.2 Before proceeding to the merits of a dispute, and before the Respondent is required to submit a substantive Response, or pay any fees, the Provider shall appoint a special one-person Panel to perform an initial “threshold” review (“Threshold Review Panel”).

6. **Standards**

For purposes of these standards, “registry operator” shall include entities directly or indirectly controlling, controlled by or under common control with a registry operator, whether by ownership or control of voting securities, by contract or otherwise where ‘control’ means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of an entity, whether by ownership or control of voting securities, by contract or otherwise.

6.1 **Top Level:**

A complainant must assert and prove, by clear and convincing evidence, that the registry operator’s affirmative conduct in its operation or use of its gTLD string that is identical or confusingly similar to the complainant’s mark, causes or materially contributes to the gTLD doing one of the following:

(a) **taking unfair advantage of the distinctive character or the reputation of the complainant’s mark;** or

(b) **impairing the distinctive character or the reputation of the complainant’s mark;** or

(c) **creating a likelihood of confusion with the complainant’s mark.**

An example of infringement at the top-level is where a TLD string is identical to a trademark and then the registry operator holds itself out as the beneficiary of the mark.

6.2 **Second Level**

Complainants are required to prove, by clear and convincing evidence that, through the registry operator’s affirmative conduct:

(a) **there is a substantial pattern or practice of specific bad faith intent by the registry operator to profit from the sale of trademark infringing domain names; and**
(b) the registry operator’s bad faith intent to profit from the systematic registration of domain names within the gTLD that are identical or confusingly similar to the complainant’s mark, which:

(i) takes unfair advantage of the distinctive character or the reputation of the complainant’s mark; or

(ii) impairs the distinctive character or the reputation of the complainant’s mark, or

(iii) creates a likelihood of confusion with the complainant’s mark.

In other words, it is not sufficient to show that the registry operator is on notice of possible trademark infringement through registrations in the gTLD. The registry operator is not liable under the PDDRP solely because: (i) infringing names are in its registry; or (ii) the registry operator knows that infringing names are in its registry; or (iii) the registry operator did not monitor the registrations within its registry.

A registry operator is not liable under the PDDRP for any domain name registration that:
(i) is registered by a person or entity that is unaffiliated with the registry operator; (ii) is registered without the direct or indirect encouragement, inducement, initiation or direction of any person or entity affiliated with the registry operator; and (iii) provides no direct or indirect benefit to the registry operator other than the typical registration fee (which may include other fees collected incidental to the registration process for value added services such enhanced registration security).

An example of infringement at the second level is where a registry operator has a pattern or practice of actively and systematically encouraging registrants to register second level domain names and to take unfair advantage of the trademark to the extent and degree that bad faith is apparent. Another example of infringement at the second level is where a registry operator has a pattern or practice of acting as the registrant or beneficial user of infringing registrations, to monetize and profit in bad faith.

7. Complaint

7.1 Filing:

The Complaint will be filed electronically. Once the Administrative Review has been completed and the Provider deems the Complaint be in compliance, the Provider will electronically serve the Complaint and serve a paper notice on the registry operator that is the subject of the Complaint (“Notice of Complaint”) consistent with the contact information listed in the Registry Agreement.

7.2 Content:

7.2.1 The name and contact information, including address, phone, and email address, of the Complainant, and, to the best of Complainant’s knowledge, the name and address of the current owner of the registration.
7.2.2 The name and contact information, including address, phone, and email address of any person authorized to act on behalf of Complainant.

7.2.3 A statement of the nature of the dispute, and any relevant evidence, which shall include:

(a) The particular legal rights claim being asserted, the marks that form the basis for the dispute and a short and plain statement of the basis upon which the Complaint is being filed.

(b) A detailed explanation of how the Complainant's claim meets the requirements for filing a claim pursuant to that particular ground or standard.

(c) A detailed explanation of the validity of the Complaint and why the Complainant is entitled to relief.

(d) A statement that the Complainant has at least 30 days prior to filing the Complaint notified the registry operator in writing of: (i) its specific concerns and specific conduct it believes is resulting in infringement of Complainant’s trademarks and (ii) it willingness to meet to resolve the issue.

(e) An explanation of how the mark is used by the Complainant (including the type of goods/services, period and territory of use – including all online usage) or otherwise protected by statute, treaty or has been validated by a court or the Clearinghouse.

(f) Copies of any documents that the Complainant considers to evidence its basis for relief, including evidence of current use of the Trademark at issue in the Complaint and domain name registrations.

(g) A statement that the proceedings are not being brought for any improper purpose.

(h) A statement describing how the registration at issue has harmed the trademark owner.

7.3 Complaints will be limited 5,000 words and 20 pages, excluding attachments, unless the Provider determines that additional material is necessary.

7.4 At the same time the Complaint is filed, the Complainant will pay a non-refundable filing fee in the amount set in accordance with the applicable Provider rules. In the event that the filing fee is not paid within 10 days of the receipt of the Complaint by the Provider, the Complaint will be dismissed without prejudice.
8. Administrative Review of the Complaint

8.1 All Complaints will be reviewed by the Provider within five (5) business days of submission to the Provider to determine whether the Complaint contains all necessary information and complies with the procedural rules.

8.2 If the Provider finds that the Complaint complies with procedural rules, the Complaint will be deemed filed, and the proceedings will continue to the Threshold Review. If the Provider finds that the Complaint does not comply with procedural rules, it will electronically notify the Complainant of such non-compliant and provide the Complainant five (5) business days to submit an amended Complaint. If the Provider does not receive an amended Complaint within the five (5) business days provided, it will dismiss the Complaint and close the proceedings without prejudice to the Complainant’s submission of a new Complaint that complies with procedural rules. Filing fees will not be refunded.

8.3 If deemed compliant, the Provider will electronically serve the Complaint on the registry operator and serve the Notice of Complaint consistent with the contact information listed in the Registry Agreement.

9. Threshold Review

9.1 Provider shall establish a Threshold Review Panel, consisting of one panelist selected by the Provider, for each proceeding within five (5) business days after completion of Administrative Review and the Complaint has been deemed compliant with procedural rules.

9.2 The Threshold Review Panel shall be tasked with determining whether the Complainant satisfies the following criteria:

9.2.1 The Complainant is a holder of a word mark that: (i) is nationally or regionally registered and that is in current use; or (ii) has been validated through court proceedings; or (iii) that is specifically protected by a statute or treaty at the time the PDDRP complaint is filed;

9.2.1.1 Use can be shown by demonstrating that evidence of use – which can be a declaration and one specimen of current use – was submitted to, and validated by, the Trademark Clearinghouse

9.2.1.2 Proof of use may also be submitted directly with the Complaint.

9.2.2 The Complainant has asserted that it has been materially harmed as a result of trademark infringement;

9.2.3 The Complainant has asserted facts with sufficient specificity that, if everything the Complainant asserted is true, states a claim under the Top Level Standards herein OR
The Complainant has asserted facts with sufficient specificity that, if everything the Complainant asserted is true, states a claim under the Second Level Standards herein;

9.2.4 The Complainant has asserted that: (i) at least 30 days prior to filing the Complaint the Complainant notified the registry operator in writing of its specific concerns and specific conduct it believes is resulting in infringement of Complainant’s trademarks, and it willingness to meet to resolve the issue; (ii) whether the registry operator responded to the Complainant’s notice of specific concerns; and (iii) if the registry operator did respond, that the Complainant attempted to engage in good faith discussions to resolve the issue prior to initiating the PDDRP.

9.3 Within ten (10) business days of date Provider served Notice of Complaint, the registry operator shall have the opportunity, but is not required, to submit papers to support its position as to the Complainant’s standing at the Threshold Review stage. If the registry operator chooses to file such papers, it must pay a filing fee.

9.4 If the registry operator submits papers, the Complainant shall have ten (10) business days to submit an opposition.

9.5 The Threshold Review Panel shall have ten (10) business days from due date of Complainant’s opposition or the due date of the registry operator’s papers if none were filed, to issue Threshold Determination.

9.6 Provider shall electronically serve the Threshold Determination on all parties.

9.7 If the Complainant has not satisfied the Threshold Review criteria, the Provider will dismiss the proceedings on the grounds that the Complainant lacks standing and declare that the registry operator is the prevailing party.

9.8 If the Threshold Review Panel determines that the Complainant has standing and satisfied the criteria then the Provider to will commence the proceedings on the merits.

10. Response to the Complaint

10.1 The registry operator must file a Response to each Complaint within forty-five (45) days after the date of the Threshold Review Panel Declaration.

10.2 The Response will comply with the rules for filing of a Complaint and will contain the name and contact information for the registry operator, as well as a point-by-point response to the statements made in the Complaint.

10.3 The Response must be filed with the Provider and the Provider must serve it upon the Complainant in electronic form with a hard-copy notice that it has been served.
10.4 Service of the Response will be deemed effective, and the time will start to run for a Reply, upon confirmation that the electronic Response and hard-copy notice of the Response was sent by the Provider to the addresses provided by the Complainant.

10.5 If the registry operator believes the Complaint is without merit, it will affirmatively plead in its Response the specific grounds for the claim.

11. Reply

11.1 The Complainant is permitted ten (10) days from Service of the Response to submit a Reply addressing the statements made in the Response showing why the Complaint is not “without merit.” A Reply may not introduce new facts or evidence into the record, but shall only be used to address statements made in the Response. Any new facts or evidence introduced in a Response shall be disregarded by the Expert Panel.

11.2 Once the Complaint, Response and Reply (as necessary) are filed and served, a Panel will be appointed and provided with all submissions.

12. Default

12.1 If the registry operator fails to respond to the Complaint, it will be deemed to be in default.

12.2 Limited rights to set aside the finding of default will be established by the Provider, but in no event will they be permitted absent a showing of good cause to set aside the finding of default.

12.3 The Provider shall provide notice of Default via email to the Complainant and registry operator.

12.4 All Default cases shall proceed to Expert Determination on the merits.

13. Expert Panel

13.1 The Provider shall establish an Expert Panel within 21 days after receiving the Reply, or if no Reply is filed, within 21 days after the Reply was due to be filed.

13.2 The Provider shall appoint a one-person Expert Panel, unless any party requests a three-member Expert Panel. No Threshold Panel member shall serve as an Expert Panel member in the same Trademark PDDRP proceeding.

13.3 In the case where either party requests a three-member Expert Panel, each party (or each side of the dispute if a matter has been consolidated) shall select an Expert and the two selected Experts shall select the third Expert Panel member. Such selection shall be made pursuant to the Provider's rules or procedures. Trademark PDDRP panelists within a Provider shall be rotated to the extent feasible.
13.4 Expert Panel member must be independent of the parties to the post-delegation challenge. Each Provider will follow its adopted procedures for requiring such independence, including procedures for challenging and replacing a panelist for lack of independence.

14. Costs

14.1 The Provider will estimate the costs for the proceedings that it administers under this procedure in accordance with the applicable Provider rules. Such costs will be estimated to cover the administrative fees of the Provider, the Threshold Review Panel and the Expert Panel, and are intended to be reasonable.

14.2 The Complainant shall be required to pay the filing fee as set forth above in the “Complaint” section, and shall be required to submit the full amount of the Provider estimated administrative fees, the Threshold Review Panel fees and the Expert Panel fees at the outset of the proceedings. Fifty percent of that full amount shall be in cash (or cash equivalent) to cover the Complainant’s share of the proceedings and the other 50% shall be in either cash (or cash equivalent), or in bond, to cover the registry operator’s share if the registry operator prevails.

14.3 If the Panel declares the Complainant to be the prevailing party, the registry operator is required to reimburse Complainant for all Panel and Provider fees incurred. Failure to do shall be deemed a violation of the Trademark PDDRP and a breach of the Registry Agreement, subject to remedies available under the Agreement up to and including termination.

15. Discovery

15.1 Whether and to what extent discovery is allowed is at the discretion of the Panel, whether made on the Panel’s own accord, or upon request from the Parties.

15.2 If permitted, discovery will be limited to that for which each Party has a substantial need.

15.3 In extraordinary circumstances, the Provider may appoint experts to be paid for by the Parties, request live or written witness testimony, or request limited exchange of documents.

15.4 At the close of discovery, if permitted by the Expert Panel, the Parties will make a final evidentiary submission, the timing and sequence to be determined by the Provider in consultation with the Expert Panel.

16. Hearings

16.1 Disputes under this Procedure will be resolved without a hearing unless either party requests a hearing or the Expert Panel determines on its own initiative that one is necessary.
16.2 If a hearing is held, videoconferences or teleconferences should be used if at all possible. If not possible, then the Expert Panel will select a place for hearing if the Parties cannot agree.

16.3 Hearings should last no more than one day, except in the most extraordinary circumstances.

16.4 All dispute resolution proceedings will be conducted in English.

17. **Burden of Proof**

The Complainant bears the burden of proving the allegations in the Complaint; the burden must be by clear and convincing evidence.

18. **Remedies**

18.1 Since registrants are not a party to the action, a recommended remedy cannot take the form of deleting, transferring or suspending registrations (except to the extent registrants have been shown to be officers, directors, agents, employees, or entities under common control with a registry operator).

18.2 Recommended remedies will not include monetary damages or sanctions to be paid to any party other than fees awarded pursuant to section 14.

18.3 The Expert Panel may recommend a variety of graduated enforcement tools against the registry operator if it the Expert Panel determines that the registry operator is liable under this Trademark PDDRP, including:

18.3.1 Remedial measures for the registry to employ to ensure against allowing future infringing registrations, which may be in addition to what is required under the registry agreement, except that the remedial measures shall not:

   (a) Require the Registry Operator to monitor registrations not related to the names at issue in the PDDRP proceeding; or

   (b) Direct actions by the registry operator that are contrary to those required under the Registry Agreement;

18.3.2 Suspension of accepting new domain name registrations in the gTLD until such time as the violation(s) identified in the Determination is(are) cured or a set period of time;

   OR,

18.3.3 In extraordinary circumstances where the registry operator acted with malice, providing for the termination of a Registry Agreement.
18.4 In making its recommendation of the appropriate remedy, the Expert Panel will consider the ongoing harm to the Complainant, as well as the harm the remedies will create for other, unrelated, good faith domain name registrants operating within the gTLD.

18.5 The Expert Panel may also determine whether the Complaint was filed “without merit,” and, if so, award the appropriate sanctions on a graduated scale, including:

18.5.1 Temporary bans from filing Complaints;
18.5.2 Imposition of costs of registry operator, including reasonable attorney fees; and
18.5.3 Permanent bans from filing Complaints after being banned temporarily.

18.6 Imposition of remedies shall be at the discretion of ICANN, but absent extraordinary circumstances, those remedies will be in line with the remedies recommended by the Expert Panel.

19. The Expert Panel Determination

19.1 The Provider and the Expert Panel will make reasonable efforts to ensure that the Expert Determination is issued within 45 days of the appointment of the Expert Panel and absent good cause, in no event later than 60 days after the appointment of the Expert Panel.

19.2 The Expert Panel will render a written Determination. The Expert Determination will state whether or not the Complaint is factually founded and provide the reasons for that Determination. The Expert Determination should be publicly available and searchable on the Provider’s web site.

19.3 The Expert Determination may further include a recommendation of specific remedies. Costs and fees to the Provider, to the extent not already paid, will be paid within thirty (30) days of the Expert Panel’s Determination.

19.4 The Expert Determination shall state which party is the prevailing party.

19.5 While the Expert Determination that a registry operator is liable under the standards of the Trademark PDDRP shall be taken into consideration, ICANN will have the authority to impose the remedies, if any, that ICANN deems appropriate given the circumstances of each matter.

20. Appeal of Expert Determination

20.1 Either party shall have a right to seek a de novo appeal of the Expert Determination of liability or recommended remedy based on the existing record within the Trademark PDDRP proceeding for a reasonable fee to cover the costs of the appeal.

20.2 An appeal must be filed with the Provider and served on all parties within 20 days after an Expert Determination is issued and a response to the appeal must be filed within 20
days after the appeal. Manner and calculation of service deadlines shall in consistent with those set forth in Section 4 above, “Communication and Time Limits.”

20.3 A three-member Appeal Panel is to be selected by the Provider, but no member of the Appeal Panel shall also have been an Expert Panel member.

20.4 The fees for an appeal in the first instance shall be borne by the appellant.

20.5 A limited right to introduce new admissible evidence that is material to the Determination will be allowed upon payment of an additional fee, provided the evidence clearly pre-dates the filing of the Complaint.

20.6 The Appeal Panel may request at its sole discretion, further statements or evidence from any party regardless of whether the evidence pre-dates the filing of the Complaint if the Appeal Panel determines such evidence is relevant.

20.7 The prevailing party shall be entitled to an award of costs of appeal.

20.8 The Providers rules and procedures for appeals, other than those stated above, shall apply.

21. **Challenge of a Remedy**

21.1 ICANN shall not implement a remedy for violation of the Trademark PDDRP for at least 20 days after the issuance of an Expert Determination, providing time for an appeal to be filed.

21.2 If an appeal is filed, ICANN shall stay its implementation of a remedy pending resolution of the appeal.

21.3 If ICANN decides to implement a remedy for violation of the Trademark PDDRP, ICANN will wait ten (10) business days (as observed in the location of its principal office) after notifying the registry operator of its decision. ICANN will then implement the decision unless it has received from the registry operator during that ten (10) business-day period official documentation that the registry operator has either: (a) commenced a lawsuit against the Complainant in a court of competent jurisdiction challenging the Expert Determination of liability against the registry operator, or (b) challenged the intended remedy by initiating dispute resolution under the provisions of its Registry Agreement. If ICANN receives such documentation within the ten (10) business day period, it will not seek to implement the remedy in furtherance of the Trademark PDDRP until it receives: (i) evidence of a resolution between the Complainant and the registry operator; (ii) evidence that registry operator’s lawsuit against Complainant has been dismissed or withdrawn; or (iii) a copy of an order from the dispute resolution provider selected pursuant to the Registry Agreement dismissing the dispute against ICANN whether by reason of agreement of the parties or upon determination of the merits.
21.4 The registry operator may challenge ICANN’s imposition of a remedy imposed in furtherance of an Expert Determination that the registry operator is liable under the PDDRP, to the extent a challenge is warranted, by initiating dispute resolution under the provisions of its Registry Agreement. Any arbitration shall be determined in accordance with the parties’ respective rights and duties under the Registry Agreement. Neither the Expert Determination nor the decision of ICANN to implement a remedy is intended to prejudice the registry operator in any way in the determination of the arbitration dispute. Any remedy involving a termination of the Registry Agreement must be according to the terms and conditions of the termination provision of the Registry Agreement.

21.5 Nothing herein shall be deemed to prohibit ICANN from imposing remedies at any time and of any nature it is otherwise entitled to impose for a registry operator’s non-compliance with its Registry Agreement.

22. Availability of Court or Other Administrative Proceedings

22.1 The Trademark PDDRP is not intended as an exclusive procedure and does not preclude individuals from seeking remedies in courts of law, including, as applicable, review of an Expert Determination as to liability.

22.2 In those cases where a Party submits documented proof to the Provider that a Court action involving the same Parties, facts and circumstances as the Trademark PDDRP was instituted prior to the filing date of the Complaint in the Trademark PDDRP, the Provider shall suspend or terminate the Trademark PDDRP.
1. Parties to the Dispute

The parties to the dispute will be the harmed established institution and the gTLD registry operator. ICANN shall not be a party.

2. Applicable Rules

2.1 This procedure is intended to cover these dispute resolution proceedings generally. To the extent more than one RRDRP provider ("Provider") is selected to implement the RRDRP, each Provider may have additional rules and procedures that must be followed when filing a Complaint. The following are the general procedure to be followed by all Providers.

2.2 In any new community-based gTLD registry agreement, the registry operator shall be required to agree to participate in the RRDRP and be bound by the resulting Determinations.

3. Language

3.1 The language of all submissions and proceedings under the procedure will be English.

3.2 Parties may submit supporting evidence in their original language, provided and subject to the authority of the RRDRP Expert Panel to determine otherwise, that such evidence is accompanied by an English translation of all relevant text.

4. Communications and Time Limits

4.1 All communications with the Provider must be filed electronically.

4.2 For the purpose of determining the date of commencement of a time limit, a notice or other communication will be deemed to have been received on the day that it is transmitted to the appropriate contact person designated by the parties.

4.3 For the purpose of determining compliance with a time limit, a notice or other communication will be deemed to have been sent, made or transmitted on the day that it is dispatched.

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1 Initial complaints that a Registry has failed to comply with registration restrictions shall be processed through a Registry Restriction Problem Report System (RRPRS) using an online form similar to the Whois Data Problem Report System (WDPRS) at InterNIC.net. A nominal processing fee could serve to decrease frivolous complaints. The registry operator shall receive a copy of the complaint and will be required to take reasonable steps to investigate (and remedy if warranted) the reported non-compliance. The Complainant will have the option to escalate the complaint in accordance with this RRDRP, if the alleged non-compliance continues. Failure by the Registry to address the complaint to complainant’s satisfaction does not itself give the complainant standing to file an RRDRP complaint.
4.4 For the purpose of calculating a period of time under this procedure, such period will begin to run on the day following the date of receipt of a notice or other communication.

4.5 All references to day limits shall be considered as calendar days unless otherwise specified.

5. Standing

5.1 The mandatory administrative proceeding will commence when a third-party complainant (“Complainant”) has filed a Complaint with a Provider asserting that the Complainant is a harmed established institution as a result of the community-based gTLD registry operator not complying with the registration restrictions set out in the Registry Agreement.

5.2 Established institutions associated with defined communities are eligible to file a community objection. The “defined community” must be a community related to the gTLD string in the application that is the subject of the dispute. To qualify for standing for a community claim, the Complainant must prove both: it is an established institution, and has an ongoing relationship with a defined community that consists of a restricted population that the gTLD supports.

5.3 Complainants must have filed a claim through the Registry Restriction Problem Report System (RRPRS) to have standing to file an RRDRP.

5.4 The Panel will determine standing and the Expert Determination will include a statement of the Complainant’s standing.

6. Standards

6.1 For a claim to be successful, the claims must prove that:

6.1.1 The community invoked by the objector is a defined community;

6.1.2 There is a strong association between the community invoked and the gTLD label or string;

6.1.3 The TLD operator violated the terms of the community-based restrictions in its agreement;

6.1.4 There is a measureable harm to the Complainant and the community named by the objector.

7. Complaint

7.1 Filing:
The Complaint will be filed electronically. Once the Administrative Review has been completed and the Provider deems the Complaint to be in compliance, the Provider will electronically serve the Complaint and serve a hard copy and fax notice on the registry operator consistent with the contact information listed in the Registry Agreement.

7.2 Content:

7.2.1 The name and contact information, including address, phone, and email address, of the Complainant, the registry operator and, to the best of Complainant’s knowledge, the name and address of the current owner of the registration.

7.2.2 The name and contact information, including address, phone, and email address of any person authorized to act on behalf of Complainant.

7.2.3 A statement of the nature of the dispute, which must include:

7.2.3.1 The particular registration restrictions in the Registry Agreement with which the registry operator is failing to comply; and

7.2.3.2 A detailed explanation of how the registry operator’s failure to comply with the identified registration restrictions has caused harm to the complainant.

7.2.4 A statement that the proceedings are not being brought for any improper purpose.

7.2.5 A statement that the Complainant has filed a claim through the RRPRS and that the RRPRS process has concluded.

7.2.6 A statement that Complainant has not filed a Trademark Post-Delegation Dispute Resolution Procedure (PDDRP) complaint relating to the same or similar facts or circumstances.

7.3 Complaints will be limited to 5,000 words and 20 pages, excluding attachments, unless the Provider determines that additional material is necessary.

7.4 Any supporting documents should be filed with the Complaint.

7.5 At the same time the Complaint is filed, the Complainant will pay a filing fee in the amount set in accordance with the applicable Provider rules. In the event that the filing fee is not paid within 10 days of the receipt of the Complaint by the Provider, the Complaint will be dismissed without prejudice to the Complainant to file another complaint.

8. Administrative Review of the Complaint

8.1 All Complaints will be reviewed within five (5) business days of submission by panelists designated by the applicable Provider to determine whether the Complainant has complied with the procedural rules.
8.2 If the Provider finds that the Complaint complies with procedural rules, the Complaint will be deemed filed, and the proceedings will continue. If the Provider finds that the Complaint does not comply with procedural rules, it will electronically notify the Complainant of such non-compliance and provide the Complainant five (5) business days to submit an amended Complaint. If the Provider does not receive an amended Complaint within the five (5) business days provided, it will dismiss the Complaint and close the proceedings without prejudice to the Complainant’s submission of a new Complaint that complies with procedural rules. Filing fees will not be refunded if the Complaint is deemed not in compliance.

8.3 If deemed compliant, the Provider will electronically serve the Complaint on the registry operator and serve a paper notice on the registry operator that is the subject of the Complaint consistent with the contact information listed in the Registry Agreement.

9. Response to the Complaint

9.1 The registry operator must file a response to each Complaint within thirty (30) days of service the Complaint.

9.2 The Response will comply with the rules for filing of a Complaint and will contain the names and contact information for the registry operator, as well as a point by point response to the statements made in the Complaint.

9.3 The Response must be electronically filed with the Provider and the Provider must serve it upon the Complainant in electronic form with a hard-copy notice that it has been served.

9.4 Service of the Response will be deemed effective, and the time will start to run for a Reply, upon electronic transmission of the Response.

9.5 If the registry operator believes the Complaint is without merit, it will affirmatively plead in it Response the specific grounds for the claim.

9.6 At the same time the Response is filed, the registry operator will pay a filing fee in the amount set in accordance with the applicable Provider rules. In the event that the filing fee is not paid within ten (10) days of the receipt of the Response by the Provider, the Response will be deemed improper and not considered in the proceedings, but the matter will proceed to Determination.

10 Reply

10.1 The Complainant is permitted ten (10) days from Service of the Response to submit a Reply addressing the statements made in the Response showing why the Complaint is not “without merit.” A Reply may not introduce new facts or evidence into the record, but shall only be used to address statements made in the Response. Any new facts or evidence introduced in a Response shall be disregarded by the Expert Panel.

10.2 Once the Complaint, Response and Reply (as necessary) are filed and served, a Panel will be appointed and provided with all submissions.
11. Default

11.1 If the registry operator fails to respond to the Complaint, it will be deemed to be in default.

11.2 Limited rights to set aside the finding of default will be established by the Provider, but in no event will it be permitted absent a showing of good cause to set aside the finding of Default.

11.3 The Provider shall provide Notice of Default via email to the Complainant and registry operator.

11.4 All Default cases shall proceed to Expert Determination on the merits.

12. Expert Panel

12.1 The Provider shall select and appoint a single-member Expert Panel within (21) days after receiving the Reply, or if no Reply is filed, within 21 days after the Reply was due to be filed.

12.2 The Provider will appoint a one-person Expert Panel unless any party requests a three-member Expert Panel.

12.3 In the case where either party requests a three-member Expert Panel, each party (or each side of the dispute if a matter has been consolidated) shall select an Expert and the two selected Experts shall select the third Expert Panel member. Such selection shall be made pursuant to the Provider’s rules or procedures. RRDRP panelists within a Provider shall be rotated to the extent feasible.

12.4 Expert Panel members must be independent of the parties to the post-delegation challenge. Each Provider will follow its adopted procedures for requiring such independence, including procedures for challenging and replacing an Expert for lack of independence.

13. Costs

13.1 The Provider will estimate the costs for the proceedings that it administers under this procedure in accordance with the applicable Provider Rules. Such costs will cover the administrative fees, including the Filing and Response Fee, of the Provider, and the Expert Panel fees, and are intended to be reasonable.

13.2 The Complainant shall be required to pay the Filing fee as set forth above in the “Complaint” section, and shall be required to submit the full amount of the other Provider-estimated administrative fees, including the Response Fee, and the Expert Panel fees at the outset of the proceedings. Fifty percent of that full amount shall be in cash (or cash equivalent) to cover the Complainant’s share of the proceedings and the other 50% shall be in either cash (or cash equivalent), or in bond, to cover the registry operator’s share if the registry operator prevails.
13.3 If the Panel declares the Complainant to be the prevailing party, the registry operator is required to reimburse Complainant for all Panel and Provider fees incurred, including the Filing Fee. Failure to do shall be deemed a violation of the RRDRP and a breach of the Registry Agreement, subject to remedies available under the Agreement up to and including termination.

13.4 If the Panel declares the registry operator to be the prevailing party, the Provider shall reimburse the registry operator for its Response Fee.

14. **Discovery/Evidence**

14.1 In order to achieve the goal of resolving disputes rapidly and at a reasonable cost, discovery will generally not be permitted. In exceptional cases, the Expert Panel may require a party to provide additional evidence.

14.2 If permitted, discovery will be limited to that for which each Party has a substantial need.

14.3 Without a specific request from the Parties, but only in extraordinary circumstances, the Expert Panel may request that the Provider appoint experts to be paid for by the Parties, request live or written witness testimony, or request limited exchange of documents.

15. **Hearings**

15.1 Disputes under this RRDRP will usually be resolved without a hearing.

15.2 The Expert Panel may decide on its own initiative, or at the request of a party, to hold a hearing. However, the presumption is that the Expert Panel will render Determinations based on written submissions and without a hearing.

15.3 If a request for a hearing is granted, videoconferences or teleconferences should be used if at all possible. If not possible, then the Expert Panel will select a place for hearing if the parties cannot agree.

15.4 Hearings should last no more than one day, except in the most exceptional circumstances.

15.5 If the Expert Panel grants one party’s request for a hearing, notwithstanding the other party’s opposition, the Expert Panel is encouraged to apportion the hearing costs to the requesting party as the Expert Panel deems appropriate.

15.6 All dispute resolution proceedings will be conducted in English.

16. **Burden of Proof**

The Complainant bears the burden of proving its claim; the burden should be by a preponderance of the evidence.
17. **Recommended Remedies**

17.1 Since registrants of domain names registered in violation of the agreement restriction are not a party to the action, a recommended remedy cannot take the form of deleting, transferring or suspending registrations that were made in violation of the agreement restrictions (except to the extent registrants have been shown to be officers, directors, agents, employees, or entities under common control with a registry operator).

17.2 Recommended remedies will not include monetary damages or sanctions to be paid to any party other than fees awarded pursuant to section 13.

17.3 The Expert Panel may recommend a variety of graduated enforcement tools against the registry operator if the Expert Panel determines that the registry operator allowed registrations outside the scope of its promised limitations, including:

17.3.1 Remedial measures, which may be in addition to requirements under the registry agreement, for the registry to employ to ensure against allowing future registrations that do not comply with community-based limitations; except that the remedial measures shall not:

   (a) Require the registry operator to monitor registrations not related to the names at issue in the RRDRP proceeding, or

   (b) Direct actions by the registry operator that are contrary to those required under the registry agreement

17.3.2 Suspension of accepting new domain name registrations in the gTLD until such time as the violation(s) identified in the Determination is(are) cured or a set period of time;

   OR,

17.3.3 In extraordinary circumstances where the registry operator acted with malice providing for the termination of a registry agreement.

17.3 In making its recommendation of the appropriate remedy, the Expert Panel will consider the ongoing harm to the Complainant, as well as the harm the remedies will create for other, unrelated, good faith domain name registrants operating within the gTLD.

18. **The Expert Determination**

18.1 The Provider and the Expert Panel will make reasonable efforts to ensure that the Expert Determination is rendered within 45 days of the appointment of the Expert Panel and absent good cause, in no event later than 60 days after the appointment of the Expert Panel.

18.2 The Expert Panel will render a written Determination. The Expert Determination will state whether or not the Complaint is factually founded and provide the reasons for its
Determination. The Expert Determination should be publicly available and searchable on the Provider’s web site.

18.3 The Expert Determination may further include a recommendation of specific remedies. Costs and fees to the Provider, to the extent not already paid, will be paid within thirty (30) days of the Expert Determination.

18.4 The Expert Determination shall state which party is the prevailing party.

18.5 While the Expert Determination that a community-based restricted gTLD registry operator was not meeting its obligations to police the registration and use of domains within the applicable restrictions shall be considered, ICANN shall have the authority to impose the remedies ICANN deems appropriate, given the circumstances of each matter.

19. Appeal of Expert Determination

19.1 Either party shall have a right to seek a de novo appeal of the Expert Determination based on the existing record within the RRDRP proceeding for a reasonable fee to cover the costs of the appeal.

19.2 An appeal must be filed with the Provider and served on all parties within 20 days after an Expert Determination is issued and a response to the appeal must be filed within 20 days after the appeal. Manner and calculation of service deadlines shall in consistent with those set forth in Section 4 above, “Communication and Time Limits.”

19.3 A three-member Appeal Panel is to be selected by the Provider, but no member of the Appeal Panel shall also have been an Expert Panel member.

19.4 The fees for an appeal in the first instance shall be borne by the appellant.

19.5 A limited right to introduce new admissible evidence that is material to the Determination will be allowed upon payment of an additional fee, provided the evidence clearly pre-dates the filing of the Complaint.

19.6 The Appeal Panel may request at its sole discretion, further statements or evidence from any party regardless of whether the evidence pre-dates the filing of the Complaint if the Appeal Panel determines such evidence is relevant.

19.7 The prevailing party shall be entitled to an award of costs of appeal.

19.8 The Providers rules and procedures for appeals, other than those stated above, shall apply.

20. Breach

20.1 If the Expert determines that the registry operator is in breach, ICANN will then proceed to notify the registry operator that it is in breach. The registry operator will be given the opportunity to cure the breach as called for in the Registry Agreement.
20.2 If registry operator fails to cure the breach then both parties are entitled to utilize the options available to them under the registry agreement, and ICANN may consider the recommended remedies set forth in the Expert Determination when taking action.

20.3 Nothing herein shall be deemed to prohibit ICANN from imposing remedies at any time and of any nature it is otherwise entitled to impose for a registry operator’s non-compliance with its Registry Agreement.

21. Availability of Court or Other Administrative Proceedings

21.1 The RRDRP is not intended as an exclusive procedure and does not preclude individuals from seeking remedies in courts of law, including, as applicable, review of an Expert Determination as to liability.

21.2 The parties are encouraged, but not required to participate in informal negotiations and/or mediation at any time throughout the dispute resolution process but the conduct of any such settlement negotiation is not, standing alone, a reason to suspend any deadline under the proceedings.
Module 6
Top-Level Domain Application – Terms and Conditions

By submitting this application through ICANN’s online interface for a generic Top Level Domain (gTLD) (this application), applicant (including all parent companies, subsidiaries, affiliates, agents, contractors, employees and any and all others acting on its behalf) agrees to the following terms and conditions (these terms and conditions) without modification. Applicant understands and agrees that these terms and conditions are binding on applicant and are a material part of this application.

1. Applicant warrants that the statements and representations contained in the application (including any documents submitted and oral statements made and confirmed in writing in connection with the application) are true and accurate and complete in all material respects, and that ICANN may rely on those statements and representations fully in evaluating this application. Applicant acknowledges that any material misstatement or misrepresentation (or omission of material information) may cause ICANN and the evaluators to reject the application without a refund of any fees paid by Applicant. Applicant agrees to notify ICANN in writing of any change in circumstances that would render any information provided in the application false or misleading.

2. Applicant warrants that it has the requisite organizational power and authority to make this application on behalf of applicant, and is able to make all agreements, representations, waivers, and understandings stated in these terms and conditions and to enter into the form of registry agreement as posted with these terms and conditions.

3. Applicant acknowledges and agrees that ICANN has the right to determine not to proceed with any and all applications for new gTLDs, and that there is no assurance that any additional gTLDs will be created. The decision to review, consider and approve an application to establish one or more
gTLDs and to delegate new gTLDs after such approval is entirely at ICANN’s discretion. ICANN reserves the right to reject any application that ICANN is prohibited from considering under applicable law or policy, in which case any fees submitted in connection with such application will be returned to the applicant.

4. Applicant agrees to pay all fees that are associated with this application. These fees include the evaluation fee (which is to be paid in conjunction with the submission of this application), and any fees associated with the progress of the application to the extended evaluation stages of the review and consideration process with respect to the application, including any and all fees as may be required in conjunction with the dispute resolution process as set forth in the application. Applicant acknowledges that the initial fee due upon submission of the application is only to obtain consideration of an application. ICANN makes no assurances that an application will be approved or will result in the delegation of a gTLD proposed in an application. Applicant acknowledges that if it fails to pay fees within the designated time period at any stage of the application review and consideration process, applicant will forfeit any fees paid up to that point and the application will be cancelled. Except as expressly provided in this Application Guidebook, ICANN is not obligated to reimburse an applicant for or to return any fees paid to ICANN in connection with the application process.

5. Applicant shall indemnify, defend, and hold harmless ICANN (including its affiliates, subsidiaries, directors, officers, employees, consultants, evaluators, and agents, collectively the ICANN Affiliated Parties) from and against any and all third-party claims, damages, liabilities, costs, and expenses, including legal fees and expenses, arising out of or relating to: (a) ICANN’s or an ICANN Affiliated Party’s consideration of the application, and any approval rejection or withdrawal of the application; and/or (b) ICANN’s or an ICANN Affiliated Party’s reliance on information provided by applicant in the application.
6. Applicant hereby releases ICANN and the ICANN Affiliated Parties from any and all claims by applicant that arise out of, are based upon, or are in any way related to, any action, or failure to act, by ICANN or any ICANN Affiliated Party in connection with ICANN’s or an ICANN Affiliated Party’s review of this application, investigation or verification, any characterization or description of applicant or the information in this application, any withdrawal of this application or the decision by ICANN to recommend, or not to recommend, the approval of applicant’s gTLD application. Applicant agrees not to challenge, in Court or in any other Judicial fora, any final decision made by ICANN with respect to the application, and irrevocably waives any right to sue or proceed in Court or any other Judicial fora on the basis of any other legal claim against ICANN and ICANN Affiliated Parties with respect to the application. Applicant acknowledges and accepts that applicant’s nonentitlement to pursue any rights, remedies, or legal claims against ICANN or the ICANN Affiliated Parties in Court or any other Judicial fora with respect to the application shall mean that applicant will forego any recovery of any application fees, monies invested in business infrastructure or other startup costs and any and all profits that applicant may expect to realize from the operation of a Registry for the TLD; provided, that applicant may utilize any accountability mechanism set forth in ICANN’s Bylaws for purposes of challenging any final decision made by ICANN with respect to the application. Applicant acknowledges that any ICANN Affiliated Party is an express Third Party Beneficiary of this Section 6 and may enforce each provision of this Section 6 against applicant.

7. Applicant hereby authorizes ICANN to publish on ICANN’s website, and to disclose or publicize in any other manner, any materials submitted to, or obtained or generated by, ICANN and the ICANN Affiliated Parties in connection with the application, including evaluations, analyses and any other
materials prepared in connection with the evaluation of the application; provided, however, that information will not be disclosed or published to the extent that this Applicant Guidebook expressly states that such information will be kept confidential, except as required by law or judicial process. Except for information afforded confidential treatment, applicant understands and acknowledges that ICANN does not and will not keep the remaining portion of the application or materials submitted with the application confidential.

8. Applicant certifies that it has obtained permission for the posting of any personally identifying information included in this application or materials submitted with this application. Applicant acknowledges that the information that ICANN posts may remain in the public domain in perpetuity, at ICANN’s discretion. Applicant acknowledges that ICANN will handle personal information collected in accordance with its gTLD Program privacy statement http://newgtlds.icann.org/en/applicants/agb/program-privacy, which is incorporated herein by this reference. If requested by ICANN, Applicant will be required to obtain and deliver to ICANN and ICANN's background screening vendor any consents or agreements of the entities and/or individuals named in questions 1-11 of the application form necessary to conduct these background screening activities. In addition, Applicant acknowledges that to allow ICANN to conduct thorough background screening investigations:

a. Applicant may be required to provide documented consent for release of records to ICANN by organizations or government agencies;

b. Applicant may be required to obtain specific government records directly and supply those records to ICANN for review;

c. Additional identifying information may be required to resolve questions of identity of individuals within the applicant organization;
d. Applicant may be requested to supply certain information in the original language as well as in English.

9. Applicant gives ICANN permission to use applicant’s name in ICANN’s public announcements (including informational web pages) relating to Applicant’s application and any action taken by ICANN related thereto.

10. Applicant understands and agrees that it will acquire rights in connection with a gTLD only in the event that it enters into a registry agreement with ICANN, and that applicant’s rights in connection with such gTLD will be limited to those expressly stated in the registry agreement. In the event ICANN agrees to recommend the approval of the application for applicant’s proposed gTLD, applicant agrees to enter into the registry agreement with ICANN in the form published in connection with the application materials. (Note: ICANN reserves the right to make reasonable updates and changes to this proposed draft agreement during the course of the application process, including as the possible result of new policies that might be adopted during the course of the application process). Applicant may not resell, assign, or transfer any of applicant’s rights or obligations in connection with the application.

11. Applicant authorizes ICANN to:

   a. Contact any person, group, or entity to request, obtain, and discuss any documentation or other information that, in ICANN’s sole judgment, may be pertinent to the application;

   b. Consult with persons of ICANN’s choosing regarding the information in the application or otherwise coming into ICANN’s possession, provided, however, that ICANN will use reasonable efforts to ensure that such persons maintain the confidentiality of information in the application that this Applicant Guidebook expressly states will be kept confidential.
12. For the convenience of applicants around the world, the application materials published by ICANN in the English language have been translated into certain other languages frequently used around the world. Applicant recognizes that the English language version of the application materials (of which these terms and conditions is a part) is the version that binds the parties, that such translations are non-official interpretations and may not be relied upon as accurate in all respects, and that in the event of any conflict between the translated versions of the application materials and the English language version, the English language version controls.

13. Applicant understands that ICANN has a long-standing relationship with Jones Day, an international law firm, and that ICANN intends to continue to be represented by Jones Day throughout the application process and the resulting delegation of TLDs. ICANN does not know whether any particular applicant is or is not a client of Jones Day. To the extent that Applicant is a Jones Day client, by submitting this application, Applicant agrees to execute a waiver permitting Jones Day to represent ICANN adverse to Applicant in the matter. Applicant further agrees that by submitting its Application, Applicant is agreeing to execute waivers or take similar reasonable actions to permit other law and consulting firms retained by ICANN in connection with the review and evaluation of its application to represent ICANN adverse to Applicant in the matter.

14. ICANN reserves the right to make reasonable updates and changes to this applicant guidebook and to the application process, including the process for withdrawal of applications, at any time by posting notice of such updates and changes to the ICANN website, including as the possible result of new policies that might be adopted or advice to ICANN from ICANN advisory committees during the course of the application process. Applicant acknowledges that ICANN may make such updates and changes and agrees that its application will be subject to any such updates and changes. In the event that Applicant has completed and submitted its application prior to
such updates or changes and Applicant can demonstrate to ICANN that compliance with such updates or changes would present a material hardship to Applicant, then ICANN will work with Applicant in good faith to attempt to make reasonable accommodations in order to mitigate any negative consequences for Applicant to the extent possible consistent with ICANN's mission to ensure the stable and secure operation of the Internet's unique identifier systems.