From: <Bourne>, DS

Date: Wednesday, March 5, 2014 5:18 PM

To: newgtld@icann.org

Cc: Christine Willett, Trang Nguyen

Subject: Despegar Online SRL's .HOTEL Statement of Opposition & CPE

Comments

To Whom It May Concern:

Please find Despegar Online SRL's statement of opposition and Community Priority Evaluation (CPE) comments (including corresponding Exhibits) regarding HOTEL Top-Level-Domain S.a.r.l's .HOTEL gTLD Application (Application ID: 1-1032-95136) attached to this email. Please forward it to the Community Priority Evaluation panel for consideration.

Please let me know if you have any questions or would like any additional information.

Best, Andrés Patetta Despegar Online SRL



Despegar Online SRL ("Despegar") is a leading multinational tourism organization and a branch of the largest online travel agency in Latin America. Despegar enables customers to book airline tickets, hotel rooms, rental cars, vacation packages, and other travel-related services. Despegar also powers travel bookings for various airlines, hotels, rental car agencies, and other tourism-related organizations internationally. Despegar serves more than five million clients annually and has a presence in 21 countries. Its services and online content are accessible in the .COM gTLD and various ccTLDs.

As a leading member of the hotel and travel industry in Latin America, Despegar opposes Applicant's HOTEL Top-Level-Domain S.a.r.l ("Applicant") .HOTEL gTLD Application (Application ID: 1-1032-95136). Applicant has applied for the .HOTEL gTLD in a way to exclude key players in the hotel and travel industry, including Despegar.

Applicant will prevent key players like Despegar from registering domains in .HOTEL with disregard for the implications this could have for consumers and Internet users, especially those in regions where Despegar serves its over 5 million clients annually. By excluding a key service provider like Despegar, Despegar's customers and other Internet users searching to book a hotel or travel related service will likely be faced with higher prices as Applicant's stated goals include increasing hotels' profit margins. Additionally, given that Despegar offers geographically and linguistically (i.e., Spanish, Portuguese, and English) relevant content and information, Despegar has concerns regarding the Applicant's global reach and language offerings within Applicant's proposed .HOTEL gTLD. Despegar is concerned that its Spanish and Portuguese speaking users that choose to use Despegar for hotel searches and bookings due to these offerings will not be served by the Applicant's .HOTEL gTLD and put at a disadvantage.

For these reasons, Despegar opposes Applicant's .HOTEL application and submits the following comments on why the Applicant should not be granted Community Priority status.





Community Priority Evaluation Comment of Despegar Online SRL on .HOTEL Application by HOTEL Top-Level-Domain S.a.r.l.

Note: For purposes of this comment the term "Applicant" refers to HOTEL Top-Level-Domain S.a.r.l. and the term "Application" refers to the New gTLD community application filed by Applicant for the domain .HOTEL (Application ID: 1-1032-95136).

Introduction.

The .HOTEL Application, as filed by Applicant, is a clear abuse of the community priority option offered in the new gTLD program and, as such, should not be granted the privileged status which this community priority entails. Rather than an application to serve the entire hotel community, this Application is clearly intended to be a TLD which serves only a powerful and limited portion of the hotel *industry* while excluding many other legitimate components of the hotel community. Further, the Application is rather vague on critical governance matters and thus does not show that it would be operated in a fair manner suitable to a true community TLD.

Section 4.2.3 of the Applicant Guidebook (AGB) sets out the Community Priority Evaluation Criteria which are designed to ensure that TLD applications seeking the priority and other benefits of a true community domain are well run and created with the proper intention to serve the entirety of the community to which the TLD pertains. This comment will address each of these in-turn.

Criterion #1: Community Establishment.

The global hotel community is not "clearly delineated" and includes a far broader range of participants than those who will be eligible to register .HOTEL domains should the Application be granted community status and be awarded to the Applicant. In fact, the Application was very intentionally crafted to limit access to the TLD for the sole purpose of increasing the profits and direct bookings of major hotel chains on the room-providing side of the community while walling off everyone else in or related to the hotel community. In response to Question 18(a) the Applicant cites "profitability" and "increased margins" as major goals for the TLD. While these are legitimate and admirable goals for any business, in the present context they fail to address vast swaths of the hotel community when viewed in its proper scope. Consequently, the Applicant should not be granted Community status and be awarded the gTLD in order to increase margins and profitability. This would abuse the community priority option set out in the Applicant Guidebook. If the Applicant chose to apply for the .HOTEL gTLD for commercial reasons (i.e., to increase hotels' profit margins) , the Applicant should be considered a standard application and not be given preference and evade its competition for the gTLD.

The Application uses, for its criteria of who will be eligible to register a .HOTEL domain, the definition found in DIN EN ISO 18513, 2.2.1: "A hotel is an establishment with services and





additional facilities where accommodation and in most cases meals are available (Application Qs. 18(b)(iv), 20(a), (d) and (e))." This restriction explicitly cuts out a number of critical parts of what should be delineated as the hotel "community." These include providers of non-standard lodging/hospitality services such as bed-and-breakfasts, hostels, guest houses, Japanese ryokans and other traditional inns, and the newly-emerging sector of the community in which private individuals can offer their own homes and apartments to visiting tourists on websites such as AirBnB.com, CouchSurfing.org, WarmShowers.org, and the like. (Exhibit C) Such lodging locations may not have "additional facilities" or "meals" as required under the ISO definition yet they are clearly members of the hotel community. Applicant expressly understands that its definition of the community is overly narrow and that broader criteria exist. The Applicant specifically mentions that "[a]nother definition states that 'A hotel is an establishment that provides paid lodging on a short-term basis' (Wikipedia)'" (Application, Q. 20(d)), yet the Applicant intends to use the ISO definition as its sole eligibility criterion.

Applicant also places obstacles to TLD ownership in the path of smaller hotel community members who are not considered preferred hotels or members. The Applicant states: "The Registry will set aside a list of domain names that will be reserved for the 325 major hotel industry brands including sub-brands...This list...is based on the annual ranking of the 325 largest hotel companies worldwide." (Application, Q. 18(c)) As stated in the .HOTEL Application, "[r]egistrant verification will be based on existing, established membership lists and other data in public industry directories." (Application, Q. 18(b)(iv)) If a registrant is not on such lists it "may be required to provide further evidence supporting their eligibility." *Id*. If a small hotel operator, or other member of the hotel community, does not appear in established membership lists and industry directories it must overcome additional hurdles, which are especially burdensome to small businesses without the benefit of staff or significant budgets. Finally, it is stated that "Registry will set aside a list of domain names that will be reserved for the 325 major hotel industry brands" (Application, Q. 20(e)) providing the final proof that the Application is geared towards serving major industry players and treating smaller players and the rest of those segments of the hotel community which provide lodging as an afterthought.

This barely scratches the surface of those left out of Applicant's claimed hotel community. Other critical elements that make up the fully delineated community such as hotel reviewers/critics (the AAA, the Michelin Guide, etc.) (Exhibit A), hotel supply and support vendors, consumer protection groups, and, of course, hotel customers. (Exhibit B) All of these sectors of the hotel community are expressly excluded by Applicant in its claimed "community" TLD Application.

Finally, there is the matter of travel agents – both online and brick-and-mortar – which routinely book tens of thousands of hotel rooms each day for customers around the world and which are an integral part of the hotel community. One of Applicant's stated objectives is to cut out such entities by allowing hotels to "increas[e] their direct bookings." (Application Q. 18(b)(ii)). Further, the Application references a comment by the CEO of the German hotel association, Markus Luthe, submitted to the major industry news site TNOOZ. In the





comment, he laments the dependence on third party sales channels such as Expedia or booking.com...." (Application Q. 18(b)(vi)).

In sum, Applicant clearly shows its intention to monopolize the .HOTEL TLD for the profit of its narrow class of room-providing members only and not for the benefit of the broader hotel community. As such the TLD does not relate to a "clearly delineated" community but, rather, only a clubby subset of the more properly delineated hotel community. The fact that the Application's goal is to increase the profit margins of the Application's target hotels, which are "major hotel industry brands" reveals that there is no reason for this for-profit Application with commercial goals to be granted Community priority to capitalize on commercial profits. If so, this Application would be taking advantage of ICANN's framework for distinguishing Community from standard applicants.

Criterion #2: Nexus between Proposed String and Community

As noted above, the definition of the hotel community used in the Application is especially narrow in relation to the broader, more properly delineated hotel community made up of all its constituent parts. Thus, the .HOTEL string does not match the name of the community as it is defined by Applicant. A provider of lodging or accommodation services may be known as a "hotel" but smaller providers of such services who do not fall within Applicant's narrow criterion for registration are, nevertheless, also known as hotels. Further, a true community TLD must serve, not only its applicant, but all members of the community which it names. This simply isn't present in the Application and so a complete nexus between the .HOTEL TLD and the broadly delineated hotel community does not exist.

Further, "hotel" is a generic word and is not unique as used in the Application. As discussed above, the community which is described in the Application is exceedingly narrow and yet the generic word "hotel" encompasses other significant meaning to the public in general – most importantly describing *all* members of the hotel community beyond those providing rooms.

Criterion #3: Registration Policies.

As drafted, eligibility to be a .HOTEL registrant is very narrow and is not restricted to community members when the delineation of the hotel community is viewed in its broad and proper scope. Apart from using different definitions of a "hotel" in the Application (the more narrow ISO term and the broader Wikipedia term), Applicant's eligibility requirements relate only to a portion of the hotel community and limit registration to hotel room providers who both meet the ISO requirement of providing "additional facilities" and perhaps meals, and can be validated via membership lists and industry directories.

As for Applicant's name selection policies, these are not detailed nor well articulated in the Application. Specifically, "[a]ny applicant that is eligible will be entitled to register any domain name that is not reserved or registered at the time of their registration submission through an ICANN accredited registrar." Application, Q. 18(b)(iv) and Q. 20(e)) In addition,





"Registrants are not limited in the number of domain names they may register." *Id.* Further, as set out in Q. 18(b)(iv) the potential for registrants will be allowed to create third-level names, with no oversight by the registry and with no limitation on the strings, content, or use of such third-levels. This is very problematic since these names may not be consistent with the articulated and proposed community-based purpose of the TLD.

Other areas where the Application is rife with vague policies include its mention of "informal denial procedures" for those denied registration in the .HOTEL gTLD which "will not supercede any formal dispute procedures." (Application, Q. 18(b)(iv) and Q. 20(e)) However. Applicant provides no details on process (e.g., timing, costs, etc.), who will administer the dispute procedures (internal or external), etc. The application also states that "[a] denial of registrant's eligibility will be recorded against the registrant's domain name and they will not be entitled to register a domain name until their circumstances have changed such that their registrant eligibility is confirmed in the required manner." (Application, Q. 18(b)(iv) and Q. 20(d)) However, there is no provision for the registry to track applicants/registrants through a unique registrar repository object id(ROID) as is the case with other registries like .TRAVEL and .XXX. As such, this system could be circumvented by a registrant merely going to a different registrar. Applicant also represents that it "will, from time to time in its sole discretion or upon evidence or advice, but at least once a year, conduct continuing or recurring audits of domain names registered to ensure continued compliance with these requirements." (Application Q. 20(e)) However, very little detail is provided here as well. This could also cause certain registrants to be audited multiple times per year due to repeated requests by third parties to the registry to make it more difficult and costly for these specific registrants, as a result of strategic actions by competing third parties.

The Application also articulates no appeals process if an applicant for registration is denied and the Applicant's plans for an enforcement and dispute policy (Application, Q. 20(e)) fill up a scant single paragraph and offer no specificity. This uncertainty of what processes would be followed in pursuing these mechanisms clearly fails to meet the Applicant Guidebook's standard for "specific enforcement measures."

Lastly, while the Applicant mentions "T[t]he Afilias 24/7 Customer Service Center [which] consists of highly trained staff who collectively are proficient in 15 languages, and who are capable of responding to queries from registrants whose domain name security has been compromised – for example, a victim of domain name hijacking" (Application, Q30(a)), the Applicant does not offer any information or assurance that the Applicant's .HOTEL gTLD, if awarded, would include the targeting of different linguistic and geographic groups, as well as customer support and guidelines in different languages prior to domain name registration. While the Applicant provides information about Afilias's Customer Support for .HOTEL domain name registrants, it does not specify the languages in which Customer Service will be provided or provide evidence that the Applicant will provide any Customer Service to potential domain name registrants before registering .HOTEL domains. Based on its reservation of domain names for the top 325 hotels, Applicant seems to disregard the large number of smaller hotels and hotel chains around the world. Many of these hotels are





located in regions where English is not spoken and these smaller hotels do not have the resources to decipher guidelines and rules in English targeted to major hotels or translate documents, if required for registration. Applicant seems to disregard the number of smaller hotels in less affluent regions where hotels are just starting to come online and where English is not spoken.

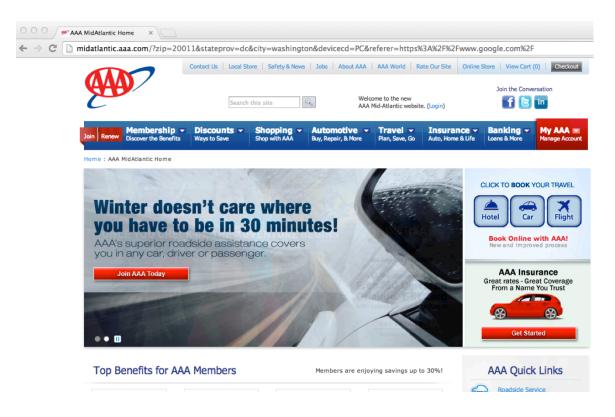
<u>Criterion #4: Community End</u>orsement.

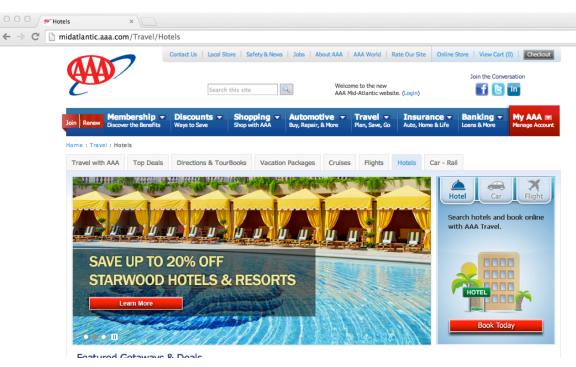
Although Applicant has secured endorsements from certain associations of major hotel room providers, there has been no real opportunity for opposition by the properly delineated hotel community. It is well known that ICANN's New gTLD process has been poorly publicized and, even at this late stage, many operators and leaders in the small and mid-sized business community are unaware of its existence. To expect those who have been excluded from the hotel community in the Application to formally oppose it in writing is simply an unrealistic element of the ICANN process. As such, this Criterion should either be neutral or it should be assumed that those members of the hotel community who will be shut out of the .HOTEL TLD or hotels not included on the Applicant's reserved names list oppose the Application.

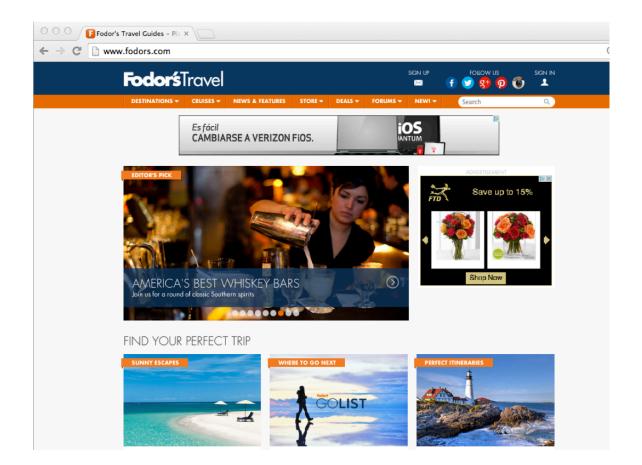
Conclusion.

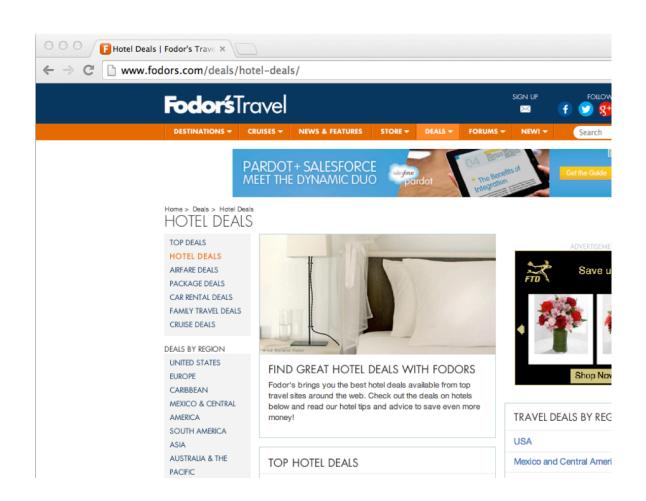
In light of the above, the CPE review for the .HOTEL Application should conclude that it is not entitled to the priorities and privileges accorded a community TLD.

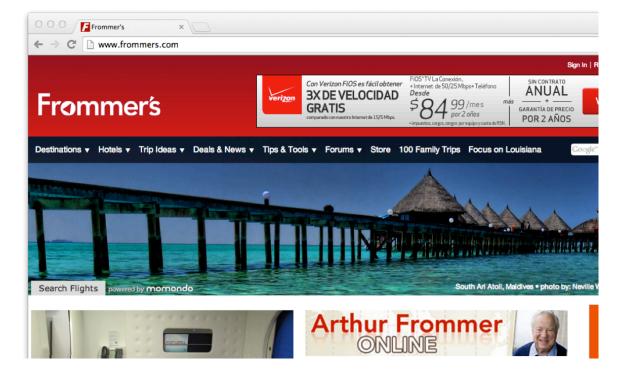
Exhibit A

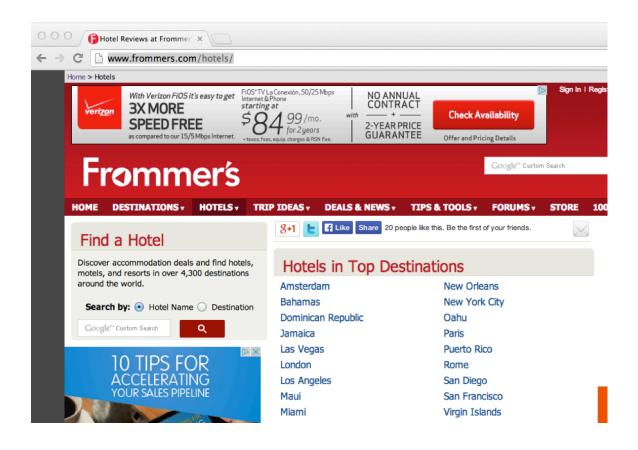


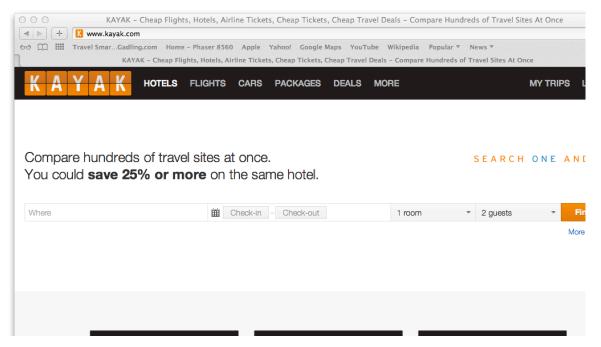


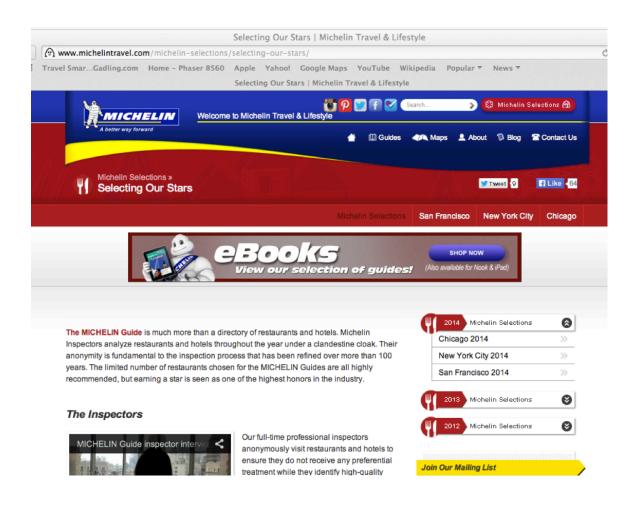


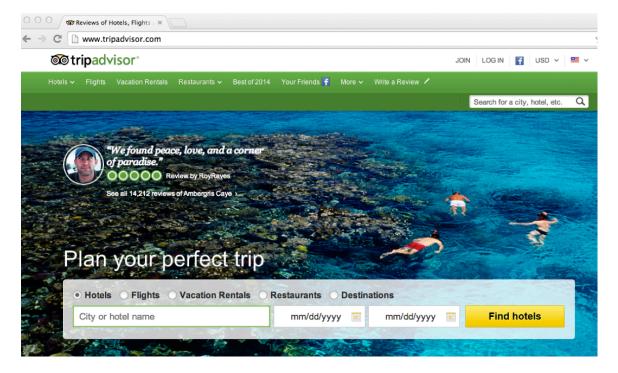












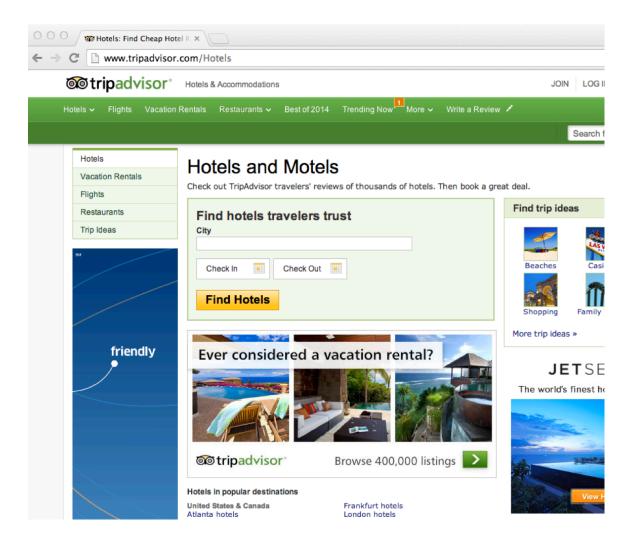


Exhibit B

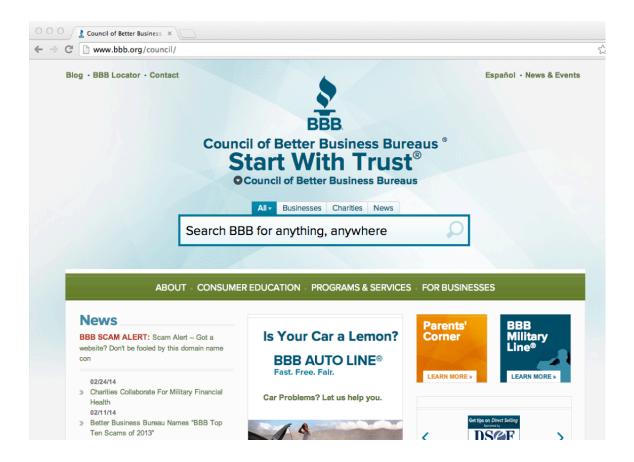






Exhibit C



REMINDER Battlefield Applications are due TODAY.

Airbnb: Our Guests Stay Longer And Spend More Than Hotel Guests, Contributing \$56M To The San Francisco Economy

Posted Nov 9, 2012 by Ryan Lawler (@ryanlawler)

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Over the past few years, there's been some question about what effect peer-topeer lodging marketplace Airbnb has on the hotel and tourism industry. Now the company has some research to show that it's not having a negative effect, and in fact

is actually contributing more to the tourism trade in San Francisco — especially to neighborhoods that aren't usually visited by the typical tourist here.

According to research conducted by real estate and economic development consulting firm HR&A Advisors, Airbnb guests helped contribute \$56 million in total economic activity to the San Francisco economy from June 2011 to May 2012, the vast majority of which was unrelated to the money they spent on lodging. Airbnb guests spent \$12.7 million in lodging during that time, but spent an additional \$43.1 million while staying in town.



About us

How it all began

In 1909 German school teacher Richard Schirrmann founded the first network of youth hostels in Germany to allow children from cities suffering from the effects of war to have recreational time in the safety of the country. At the end of World War 1 the idea of hostelling spread to other European countries and Cora Wilding founded the first Southern Hemisphere hostel in New Zealand in 1932.

YHA today

Today the Youth Hostels Association of New Zealand is a member based incorporated society and a registered charitable organisation.

YHA New Zealand continues to develop its hostel network in support of its charitable objects, with the Association's charitable purpose being demonstrated in the way we work.

Today YHA New Zealand manages 23 hostels, and has Associate partner agreements with 24 independently owned hostels. There are approximately 220 employees in the organisation.

Our network not only supports and facilitates travel; it also promotes knowledge and understanding through the social interaction stimulated by our hostels' communal living and recreational areas. We also actively educate guests and members through a commitment to environmental sustainability which pervades our organisation. We have received many awards and accolades for this over the years.

Affiliation to Hostelling International

YHA New Zealand is affiliated to Hostelling International (http://www.hihostels.com/web/index.en.htm) (HII); which was founded in 1932 as a Federation of Independent National Youth Hostel Associations.

Mission and Values

YHA's Mission and Values are grounded in its charitable objects, defined by the Constitution as:

Aims and Objects

To promote within New Zealand the education, health and well-being of people by providing encouragement and opportunity for the gaining of knowledge and awareness of:

- The culture of the countryside, towns, cities and peoples of New Zealand.
- The environment and the study of the same.
- The culture of other countries and peoples.

In furtherance of its charitable objects the Association shall provide hostels or similar accommodation, promote educational and recreational activities, facilitate travel, and practice and promote environmental sustainability.

YHA New Zealand's Mission

To deliver services to members which enrich their understanding of others and the environment by providing quality accommodation and travel experiences.

Berlin and the Airbnb Community

September 9, 2013 By David Hantman

Leave a Comment

(To read this post in German, click here.)

In recent months, we have highlighted a series of studies outlining how the Airbnb community contributes to the economy in San Francisco, Paris and Amsterdam. Today, we are highlighting a fourth report detailing Airbnb's economic impact in Berlin. And once again, we see how Airbnb is helping families make ends meet, supporting jobs and bringing travelers to more diverse neighborhoods than average tourists. Some key facts from the Berlin study include:

The Airbnb Pu is a space for community to public policy i issues that aff moderated by Hantman, Airk

Global Public

Airbnb is a glc

marketplace t

travelers seek high-quality accommodati

who offer unic

stay.

 The Airbnb community contributed nearly €100 million (approximately \$130 million) in total economic activity in one year.

Search this v

 Airbnb guests spend more time and money in Berlin than hotel guests. Airbnb guests stay an average of 6.3 nights and spend €845 (approximately \$1,111) over the course of their trip, compared to hotel guests who stay an average of 2.3 nights and spend €471 (approximately \$620).

Recent Pos

The Sharing E
Capitol Hill—
USA



New gTLD Application Submitted to ICANN by: HOTEL Top-Level-Domain S.a.r.l

String: hotel

Originally Posted: 13 June 2012

Application ID: 1-1032-95136

Applicant Information

1. Full legal name

HOTEL Top-Level-Domain S.a.r.l

2. Address of the principal place of business

68, av. de la Liberté Luxembourg 1930 LU

3. Phone number

+35220992610

4. Fax number

5. If applicable, website or URL

http://www.dothotel.info

Primary Contact

6(a). Name

Mr. Johannes Lenz-Hawliczek

6(b). Title

Chief Executive Officer

6(c). Address

6(d). Phone Number

+493066909287

6(e). Fax Number

+493066909285

6(f). Email Address

johannes@dothotel.info

Secondary Contact

7(a). Name

Ms. Katrin Ohlmer

7(b). Title

Chief Executive Officer

7(c). Address

7(d). Phone Number

+493078711907

7(e). Fax Number

+493078711908

7(f). Email Address

katrin@dothotel.info

Proof of Legal Establishment

8(a). Legal form of the Applicant

Societe a responsabilite limitee (S.a.r.l.)

8(b). State the specific national or other jursidiction that defines the type of entity identified in 8(a).

The Societe a responsabilite limitee (Limited Liability Company) is defined in the Loi du 10 aout 1915 concernant les societes commerciales of the Grand Duchy of Luxembourg. http://www.legilux.public.lu/leg/a/archives/1915/0090/index.html. The company register is the Registre de Commerce et des Societes, Luxembourg.

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.

 Not Applicable.
- 9(c). If the applying entity is a joint venture, list all joint venture partners.

 Not Applicable.

Applicant Background

- 11(a). Name(s) and position(s) of all directors
- 11(b). Name(s) and position(s) of all officers and partners

Johannes Lenz-Hawliczek	Chief	Executive	Officer
Katrin Ohlmer	Chief	Executive	Officer

11(c). Name(s) and position(s) of all shareholders holding at least 15% of shares

Afilias Limited		Applicable
HOTEL Top-Level-Domain	GmbH 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.

hotel

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

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.

Hotel Top-Level-Domain S.a.r.l. anticipates the introduction of this TLD without operational or rendering problems. Based on a decade of experience launching and operating new TLDs, Afilias, the back-end provider of registry services for this TLD, is confident the launch and operation of this TLD presents no known challenges. The rationale for this opinion includes:

- The string is not complex and is represented in standard ASCII characters and follows relevant technical, operational and policy standards;
- The string length is within lengths currently supported in the root and by ubiquitous Internet programs such as web browsers and mail applications;
 - There are no new standards required for the introduction of this TLD;
- No onerous requirements are being made on registrars, registrants or Internet users, and;
- The existing secure, stable and reliable Afilias SRS, DNS, WHOIS and supporting systems and staff are amply provisioned and prepared to meet the needs of this TLD.
- 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.

Mission and Purpose

The .hotel top-level domain is intended exclusively to serve the global Hotel Community and is designed to help solving existing challenges in a strongly growing online hotel business. It will provide verified, meaningful and easily recognizable domains to the Hotel Community.

The Community for the .hotel top-level domain (the "Hotel Community") consists of entities that are hotels, operate hotels or represent hotels through an association. This Hotel Community intends to use .hotel domain names for their presentation, communication and commerce, and/or promote the hotel community online.

For this reason, the eligible registrants are limited to the following Hotel Community categories:

- Hotels
- Hotel chains
- Hotel associations

There are two primary challenges the Hotel Community faces which this TLD addresses: discoverability and profitability. The .hotel top-level domain supports the Hotel Community's strengths and enhances its worldwide presentation on the Internet for the benefit of the whole community — from single hotels to their representations — through a clear, identifiable domain. This discoverability leads to direct contacts from potential hotel customers, which will reduce dependence on third-party booking portals and increase direct bookings. This benefit will result in increased margins for the Hotel Community and better prices for hotel customers.

18(b). How do you expect that your proposed gTLD will benefit registrants, Internet users, and others?

i.

Speciality - An integrally connected namespace

In our vision, the .hotel top-level domain becomes the essential name space for the communication and interaction of all participants of the global Hotel Community with their target groups like Internet users, the media and suppliers. By becoming the essential source for community members and their customers, the .hotel namespace integrally connects them on the Internet.

Reputation — A secure and trustworthy namespace For hotel customers, .hotel will mean security, reliability, trust and credibility. The verification of each domain name ensures that only eligible entities can register a .hotel domain, therefore Internet users can rest assured that services offered under .hotel domains are only from hotels and not fake services from non-community members. This is a security and service level that is demanded by the global Hotel Community and which will contribute towards a very positive reputation of .hotel.

An intuitive and memorable namespace

Domain names under .hotel are descriptive, precise and create identity for hotels and hotel associations. It enables suppliers and enquirers to come together in a more intuitive manner than today. This is a speciality that has rarely been seen in existing top-level domains, but will become a standard in future top-level domains.

ii.

Competition - Better prices through enhanced options for the Hotel Community

With .hotel, community members will be enabled to choose from a wide pool of contextually relevant domain names and register those which best suit their communication needs. As an addition to gTLDs, ccTLDs and future gTLDs, .hotel will be an ideal supplement to existing and new TLDs. With a bigger choice between TLDs, hotels will experience a more competitive pricing for suitable domain names. Hotels will have numerous options when registering a domain because .hotel opens up a completely vacant namespace where all domain names are still available. Competition also emerges from the fact that .hotel domains offer added values for the target group that no other TLD can offer by the .hotel extension.

Differentiation - The verification makes the difference

The .hotel concept strictly limits the eligible registrants to hotels and their associations, thus creating an exclusive, trusted namespace for the hotel industry worldwide. The .hotel TLD will have a reputation as strong and credible as the hotel brands of the Community it is serving.

Prosperous and promising namespace

This environment creates new business opportunities and fosters the development of innovative services for the benefit of the global hotel community and its participants. With .hotel domains, the global Hotel Community will have the ability to enhance their search engine rankings by delivering more relevant search results. This will benefit in more direct bookings on their respective .hotel websites and increase their position in the global hotel booking market. From a user perspective, potential hotel guests will have a quicker and easier way to find accommodations from legitimate lodging providers.

Innovation

We are planning to support the Hotel Community by innovative domain name connected services such as making websites more easy accessible for mobile devices, offering directory services and search engine optimization.

With a .hotel domain, the Hotel Community has a powerful tool to increase their margins by reducing dependency on external booking portals and increasing their direct bookings. The new .hotel domain names will be suitable for search engines and other forms of communication. Due to verification of domain names, .hotel creates more trust for hotel customers; combined with the ease of search, .hotel offers an innovative approach to supporting the booking needs of its Community.

Another innovation in .hotel is a rights protection mechanism that includes a special focus on securing trademark rights of the Hotel Community.

iii.

Users will understand that in the .hotel namespace only verified hotels can register

their names, thus eliminating the potential for fraud and phishing in that area. The verification also provides consumer confidence as they can be certain they are finding and possibly booking with a legitimate hotel, or working with an established hotel association.

iv.

The .hotel top-level domain is designed to serve the hotel industry worldwide.

The term "HOTEL" is clearly defined based on the norm ISO 18513, 2.2.1: "Establishment with reception, services and additional facilities where accommodation and in most cases meals are available." .Hotel policy is based on this definition.

.hotel second-level domain names are initially restricted to the narrow category of hotels and their organizations (Registrants) as defined by ISO 18513. Therefore, the registration of .hotel domains shall be exclusively limited to registrants from a logical alliance of the hotel industry including:

- 1. Individual Hotels
- 2. Hotel Chains
- 3. Hotel Marketing organizations representing members from 1. and/or 2.
- 4. International, national and local Associations representing Hotels and Hotel Associations representing members from 1. and/or 2.
- 5. Other Organizations representing Hotels, Hotel Owners and other solely Hotel related organizations representing on members from 1. and/or 2.

Registrant verification will be based on existing, established membership lists and other data in public industry directories.

There will be two types of .hotel domain name selection policies:

- 1. Domain Name selection restrictions that emerge from ICANN policies and contracts;
- 2. Domain Name selection restrictions that emerge solely from the Registry's delegated authority.

The core principle of name selection is that the first registrant eligible for a domain name registration will be entitled to register that domain name. The date and time of completion of all registration requirements and registrant eligibility verification data, following completion will determine the applicant's order of priority. Any domain name that is not registered by reason of the ineligibility of the applicant will be available for registration by any eligible party.

Domain Names available for registration

No Limitation - Any applicant that is eligible will be entitled to register any domain name that is not reserved or registered at the time of their registration submission through an ICANN accredited registrar.

No Limitation in Number - Registrants are not limited in the number of domain names they may register.

Registrant Representations - The registration application and registrant agreement will contain positive representations from the registrant that they are entitled to the domain name(s) they are or have registered. Breach of such representation will allow the Registry to take-down ineligible domain names at any time.

Content and Use Restrictions - The Registry has in its discretion developed restrictions on the content and use of any domain name. Such restrictions apply to any domain name registration that occurs after such restrictions come into effect.

Each domain name must, within one year following the date of registration, and thereafter throughout the term of the domain name registration, be used as the domain name for a website displaying hotel community related content relevant to the domain name, or in such other manner (such as email) that the Registry may approve after review. Domain names used as contemplated above may resolve directly to the relevant website or be forwarded or redirected to another domain name displaying hotel content relevant to the domain name.

Restrictions may include, but are not limited to, a requirement to develop a website that uses the registered domain name, to ensure that each registered domain name resolves to a working website, or to ensure that each website using a registered domain name, or redirected from a registered domain name presents content related to the registered .hotel domain name.

The .hotel Registry will, from time to time in its sole discretion or upon evidence or advice, but at least once a year, conduct continuing or recurring audits of domain names registered to ensure continued compliance with these requirements. Failure to comply will result in a notice providing 20-days to comply. Non-compliance following such a notice period may result in take-down of the relevant domain name, at the discretion of the Registry.

Equivalent Rights

The Registry will accept registration requests on a "first-come, first-served" basis. In the event an application does not meet the requirements of the Registry Policies, then such .hotel domain names will remain in the general pool of available names.

Names including the string "hotel" - Where the applicant's held or used names include a name including the word "hotel" in any position (e.g. ABC Hotel, or ABC XYZ Hotel, or Hotel ABC), the Registry will accept during the Sunrise phase or later registration of a name in which the string "hotel" is formed at the first level and the remainder of the name is formed at the second level (e.g. "Hotel ABC" may register the name "ABC.hotel", subject to limitations that may be placed on the string at the second level as a result of the Registry's policy on ICANN Names and other Names.

Third-level Names

All registrants will have the right to use any name at the third level, where they hold the right to the second level name (e.g. where aaa.hotel is held, the registrant will be entitled to use bbb.aaa.hotel, ccc.aaa.hotel etc.), with the exception of 2-letter country codes. Such third level usage is not managed by the Registry.

Registrants are entitled to sell or allocate third level names to entities that are not owned or controlled by the registrant, as long as they fulfil the requirements of eligibility. For example, a hotel chain is entitled to allocate third level names to its local hotels.

It is the role of the .hotel Registry to assure and control the registrant's eligibility to register a domain name to guarantee the community aspect and integrity of the .hotel name space and to avoid disputes. The .hotel Registry anticipates that disputes over the registrant's eligibility will be minimal within the Hotel Community. Nevertheless it has put in place an adequate procedure to assist the hotel community's registrants in dealing with denials of registrant's eligibility in a way that supports community needs and values. The .hotel Registry's informal denial procedures will not super-cede any formal dispute procedures.

Registrant Eligibility Verification

Any domain name registered under the terms set out above is subject to a subsequent registrant eligibility verification process which will start immediately after the

registration process begins. Registrant eligibility verification will occur after domain name registration but before the registered domain name can be used for web services and protocols like email, website, and FTP. This is to avoid mass fraudulent domain name registrations.

Registrant data supplied for registrant eligibility verification purposes will be held and used by the Registry for eligibility verification purposes only, based on European data protection laws. Registrant eligibility verification requires a review by an applicable organization or by the Registry (reviewer). The registrant eligibility verification process starts with the Registry evaluation of each domain registration request. For evaluation purposes, industry databases will be used, like hotel association databases or other electronically available databases. Within 48 hours after registration begins, the registry will provide the evaluation result to the registrar.

In the event the registry cannot verify eligibility with the .hotel requirements, the potential registrant may be required to provide further evidence supporting their eligibility. Once reviewed, the registry will confirm or deny the registration. Confirmation will be conveyed to the registrar by email. In the event of denial of the registrant's registration, the domain name is taken-down in the Registry's discretion. A denial of registrant's eligibility will be recorded against the registrant's domain name and they will not be entitled to register a domain name until their circumstances have changed such that their registrant eligibility is confirmed in the required manner.

Registrant eligibility verification reviews may occur following domain name registration and where a registrant is found to be ineligible subsequent to registration of a domain name(s), and such ineligibility is due to mistake or error on the part of the registrant.

The registry confirms registrant's eligibility for up to one year and the registrant may be reviewed annually or at any other time by the Registry to ensure that registrant's eligibility data have not changed in the prior period and that they continue to be eligible. If any change has occurred the registrant at any time may re-submit their registrant's eligibility data and it may be reviewed and confirmed as for initial registrant eligibility verification.

v. The use of proxy and privacy services to protect the privacy or confidential information of registrants or users will be not allowed. Reasons are legal entities such as a the eligible registrants cannot demand privacy under most legislation and that proxy and privacy services would not allow a proper validation and a public visibility of accurate Whois data inline with the eligibility criteria.

vi.

Our concept for .hotel has been carefully developed in close cooperation with the global Hotel Community and its most important trade associations. Among those are many individual hotels, hotel chains, the International Hotel & Restaurant Association (IH&RA) which is the only representative of the hotel industry today accredited by the United Nations and the only global hotel association; HOTREC, which is the European hotel association based in Brussels; the American Hotel & Lodging Association in Washington, D.C.; and China Hotel Association (CHA). Managing Director Johannes Lenz-Hawliczek is also a member of the Board of Directors of the IH&RA.

Since 2008 our cooperation with the global hotel industry included numerous talks, presentations and discussions with leading representatives of the global hotel industry. Our outreach efforts took us to Malaysia, Thailand, China, Singapore, United Kingdom, Switzerland, Germany, Luxembourg, Belgium, the United States, Austria, Nepal, India, Serbia and Bulgaria. We also networked with representatives from Argentina, Spain, Italy, Macedonia, Montenegro, Greece, Croatia, India, Turkey, Jordan, Syria, Peru, Australia and South Korea. We attended important industry events

to liaise and present the concept for .hotel to our partners from the global hotel industry.

In the 4th quarter of 2010 we started to invite Hotel Community members to join the .hotel Advisory Board, which we finally set up in March 2011. The role of Advisory Board is to advise, support and make recommendations to HOTEL Top-Level-Domain Sarl and its management. The international composition of the .hotel Advisory Board is designed to ensure that the interests of the global hotel community are being represented in a balanced way.

The board members each represent significant parts of the global hotel community, with one member representing the domain name business. Its members are Dr Ghassan Aidi, President of the International Hotel & Restaurant Association IH&RA; Joe McInerney, President and CEO of the American Hotel & Lodging Association AH&LA; Nancy Johnson, Executive Vice President of Carlson Hotels Worldwide and Chairperson of AH&LA; Markus Luthe, member of the executive committee of the European hotel association HOTREC (Hospitality Europe), and Philipp Grabensee, Chairman of the Board of Afilias for the domain name industry.

In 2012 we will continue and intensify our communication efforts to our community, with planned attendance of the most important industry events and an increase in media releases.

One example is a comment the CEO of the German hotel association, Markus Luthe, submitted to the major industry news site TNOOZ in January. In it, he laments the dependence on third party sales channels such as Expedia or booking.com hotels have gotten themselves into, bringing about an increasing loss of sales margins across the industry due to the commissions that have to be paid to these actors. One way to improve this situation for hotels is in Mr Luthe's view for hotels to increase their share of direct bookings with the aid of "industry initiatives such as .hotel", among others.

18(c). What operating rules will you adopt to eliminate or minimize social costs?

Registry Reserved capital cities names

The Registry will set aside all capital cities' names. These names can be released by the Registry upon consultation with the community and the Advisory Board and registered by eligible community members.

Registry Reserved geographic names

The Registry will set aside certain geographic names. These names will be released by the Registry and can be registered by eligible community members.

Registry Reserved Domain Names for the Hotel industry associations and duties

The Registry will set aside a group of domain names that will be used by the hotel industry associations including their names, abbreviations of names and duties. These names can be released by the Registry upon request and registered by eligible community members.

Community Reserved Domain Names for major Hotel industry brands

The Registry will set aside a list of domain names that will be reserved for the 325 major hotel industry brands including sub-brands. Cut-off date for this list is September 2011. These names can be released by the Registry upon request of the brand concerned and registered by eligible community member brand. This list was decided upon in close cooperation with the Advisory Board of .hotel and is based on the annual ranking of the 325 largest hotel companies worldwide.

Registry Reserved generic Domain Names

The Registry will set aside a group of generic domain names that will be reserved for the hotel industry and can be registered by eligible community members.

Disputed Domain Names

The Registry may set aside during regular operations domain names that are being reviewed under dispute resolution procedures. These domain names may become available for registration after the dispute is concluded.

i.

All available .hotel domain names will be registered on a "first-come, first-serve" basis. Reserved names may be allocated on a "first-come, first-served" basis or via other mechanisms like auction or tender.

ii.

HOTEL Top-Level-Domain Sarl will have fair and reasonable wholesale prices that have been vetted with the Community and Registrars worldwide.

iii.

.Hotel domains will be available through accredited registrars who will be provided non-discriminatory access to registry services. The initial domain registrations for .hotel domain will be for periods of one to ten years at the discretion of the registrar.

The reserved names for auction will have discreet pricing.

HOTEL Top-Level-Domain Sarl reserves the right to reduce pricing for promotional purposes in a manner available to all accredited registrars. Registry Operator reserves the right to work with ICANN to initiate an increase in the wholesale price of domains if required. Registry Operator will provide reasonable notice to the registrars of any approved price change.

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.

The .hotel namespace will exclusively serve the global Hotel Community.

The string "Hotel" is an internationally agreed word that has a clear definition of its meaning:

According to DIN EN ISO 18513:2003, "A hotel is an establishment with services and additional facilities where accommodation and in most cases meals are available."

Therefore only entities which fulfil this definition are members of the Hotel Community and eligible to register a domain name under .hotel.

.hotel domains will be available for registration to all companies which are member of the Hotel Community on a local, national and international level. The registration of .hotel domain names shall be dedicated to all entities and organizations representing such entities which fulfil the ISO definition quoted above:

- 1. Individual Hotels
- 2. Hotel Chains
- 3. Hotel Marketing organizations representing members from 1. and/or 2.
- 4. International, national and local Associations representing Hotels and Hotel Associations representing members from 1. and/or 2.
- 5. Other Organizations representing Hotels, Hotel Owners and other solely Hotel related organizations representing on members from 1. and/or 2.

These categories are a logical alliance of members, with the associations and the marketing organizations maintaining membership lists, directories and registers that can be used, among other public lists, directories and registers, to verify eligibility against the .hotel Eligility requirements.

The Hotel Community is clearly delineated, well organized, and pre-existing. This can be demonstrated by many Hotel Associations which organize the representation of hotels' interests towards their target groups (businesses, administration and customers). Among those associations the International Hotel and Restaurant Association (IH&RA) is the oldest one, which was founded in 1869~1946, is the only global business organization representing the hotel industry worldwide and it is the only global business organization representing the hospitality industry (hotels and restaurants) worldwide. Officially recognized by United Nations as the voice of the private sector globally, IH&RA monitors and lobbies all international agencies on behalf of this industry. Its members represent more than 300,000 hotels and thereby the majority of hotels worldwide.

Among community activities international and national congresses play an important role. In addition, many hotel associations and their members use online communication tools such as newsletter, blogs, Facebook and their own websites to communicate with members, customers and industry partners. The biggest gathering of the global Hotel Community is the annual trade show (Internationale Tourismus Boerse — ITB) in Berlin with over 10,000 exhibitors from 180 countries. Hotel Top-Level-Domain S.a.r.L. participates regularly at national and international congresses, trade shows, is invited speaker and cited in relevant media. The string ".hotel" has no other significant meaning, it only stands for Hotels according to the ISO definition. Including the IH&RA, the majority of the Hotel Community support the initiative by Hotel Top-Level-Domain Sarl, including the definition of the community, the Eligibility Requirements, Content Policy and other related domain policies.

HOTEL Top-Level-Domain S.a.r.l. is a member of several hotel associations, e.g.

- International Hotel & Restaurant Association (IH&RA), Lausanne, Switzerland
- American Hotel & Lodging Association (AH&LA), Washington, DC, USA
- Pacific Asia Travel Association (PATA), Bangkok, Thailand
- Deutscher Hotelverband IHA, Berlin, Germany

The Managing Director of HOTEL Top-Level-Domain S.a.r.l., Johannes Lenz-Hawliczek, serves on the Board of Directors of the IH&RA. The board of IH&RA consists of XX members, they represent Hotels, Hotel Chains, ...

HOTEL Top-Level-Domain S.a.r.l. is supported by these organizations as well as by

- International Hotel & Restaurant Association (IH&RA), Lausanne, Switzerland,
- American Hotel & Lodging Association (AH&LA), Washington, DC, USA,
- HOTREC (Hospitality Europe), Brussels, Belgium (European Hotel Meta-Association),
- China Hotel Association (CHA), Beijing, China,
- Global Hotel Alliance, Geneva, Switzerland,

and many more including support letters from leading hotel associations from other continents such as from the Argentinian and South African Hotel Association. The support letters are provided in #20f.

* Accountability to the Community *

The Advisory Board of HOTEL Top-Level-Domain S.a.r.l. was set up to advise, support and make recommendations to the Directors of HOTEL Top-Level-Domain with respect to:

- matters within the areas of their experience and expertise
- the scope of the approval of the .hotel top-level domain
- its subsequent operation.

In addition, the .hotel Advisory Board provides assistance and guidance in

- governing the organization by establishing policies and objectives;
- supporting and reviewing the performance of the management team;
- supporting and reviewing the company's strategy;
- broadening the multi-stakeholder approach and networking of the .hotel top- level domain;
- accounting to the stakeholders for the organization's performance;
- developing domain name registration policies (allocation and administration of domain names).

The members of the .hotel Advisory Board are:

Dr. Ghassan Aidi, President & CEO, International Hotel & Restaurant Association (IH&RA), Lausanne, Switzerland, as a representative of the global hotel association estimated to comprise 300,000 hotels and 8 million restaurants, employ 70 million people and contribute 950 billion USD annually to the global economy.

Markus Luthe, Member of the Executive Committee, Hotels, Restaurants and Cafés in Europe HOTREC, Brussels, Belgium, as representative of a continental hotel organization. HOTREC is the trade association of hotels, restaurants and cafes in the European Union. It is the Voice of Hotels, Restaurants, Cafés and similar establishments in Europe, bringing together 43 national associations representing the hospitality sector - which is composed mainly by SMEs - in 26 countries across Europe, from Portugal to Estonia and from Ireland to Cyprus.

Joe McInerney, President and CEO, American Hotel & Lodging Association (AH&LA), Washington, DC, USA, as representative of a national hotel organization. Serving the hospitality industry for more than a century, AH&LA is the sole national association in the US representing all sectors and stakeholders in the lodging industryI and partnered with 41 state associations to provide local representation.

Nancy Johnson, Executive Vice President, Carlson Hotels Worldwide, Minnetonka, MN, USA, as representative of an International Hotel Chain. Mrs. Johnson is also the current chair (2011-2012) of the AH&LA. In her role with Carlson, Johnson oversees business development efforts for Carlson Hotels' select service hotel brands in the Americas including, Country Inns & Suites By Carlson and Park Inn.

Philipp Grabensee, Chairman of the Board, Afilias Ltd, Dublin, Ireland, as representative of the Domain Name Industry. Afilias is a global provider of Internet infrastructure services that connect people to their data. Afilias' reliable, secure, scalable, and globally available technology supports a wide range of applications including Internet domain registry services and Managed DNS. Accountability

The Accountability mechanisms of the applicant to the Hotel Community include

- A multi-stakeholder staffed Advisory Board that also acts an ombudsman
- A Globally protected Hotel Marks' List as reserved names to protect community interests
- Distribution of annual reports of the HOTEL Top-Level-Domain Sarl about the .hotel top-level domain within the Hotel Community (planned)
- Educational papers, speeches and other public awareness on the .hotel top-level domain (already on-going)

20(c). Provide a description of the community-based purpose of the applied-for gTLD.

* Intended registrants *

Intended registrants of the .hotel domain names are hotels and their organizations worldwide. The .hotel namespace will be exclusive for the Hotel Community. Registrations will be validated for their eligibility according to the .hotel Eligibility criteria:

.hotel domains will be available for registration to all companies which are a member of the Hotel Community on a local, national and international level. The registration of .hotel domain names shall be exclusively limited to the following Hotel Community categories:

- 1. Individual Hotels
- 2. Hotel Chains
- 3. Hotel Marketing organizations representing members from 1. and/or 2.
- 4. International, national and local Associations representing Hotels and Hotel Associations representing members from 1. and/or 2.
- 5. Other Organizations representing Hotels, Hotel Owners and other solely Hotel related organizations representing on members from 1. and/or 2.

Each of these Hotel Community members will benefit from a .hotel domain. As presented in response #18, a .hotel domain will increase visibility, be easily discoverable via search engines, provide increased margins through more direct booking options, and have a positive reputation as a namespace to find legitimate hotels.

* Intended Users *

Users of the .hotel domain names will be the members of the global Hotel Community (mainly as suppliers) and all Internet users globally (mainly as consumers and users).

* Related activities *

HOTEL Top-Level-Domain Sarl has carried out global outreach and educational activities within the Hotel Community and its stakeholders at national and international hotel related events such as the Annual Congresses of the American Hotel & Lodging Association (AH&LA) in New York, since 2010, theAnnual Congresses and Meetings of the International Hotel & Restaurant Association (IH&RA) in Washington, Geneva, Barcelona, Kathmandu, Belgrade, Burgas since 2009, the Annual Congress of the Pacific Asia Travel Association PATA, 2011 in Beijing, the National congresses of German Hotel Association, since 2010, the Meetings of the European Hotel Association HOTREC, since 2011, the Meetings with Hotel Community stakeholders at the world largest tourism fair ITB in Berlin, since 2008.

In conjunction with international press activities, we are maintaining a comprehensive website with articles on .hotel and related topics. In the past, dotHotel has provided extensive guidelines of digital marketing strategies for Hotels; these efforts will continue in the future.

* Lasting nature *

The .hotel top-level domain and its purpose are of a long-lasting nature since digital marketing and distribution and individual digital addresses (domain names) have become an integral component of a hotel's general business practices and thereby also for the Hotel Community as a whole. It is foreseeable and anticipated that digital strategies including .hotel domain names will play an ever increasing role for hotels within the next decade and beyond. The .hotel top-level domain will thereby serve the Hotel Community and its members in a lasting nature and will fulfil its purpose of providing verified, meaningful and easily recognizable domains.

20(d). Explain the relationship between the applied-for gTLD string and the community identified in 20(a).

* Relationship "Name and Community" *

The proposed top-level domain name, "HOTEL", is a widely accepted and recognized string that globally identifies the Hotel Community and especially its members, the hotels. Therefore there is a very strong relationship between the applied-for string and the name of the community.

According to the International Standardization Organization, "A hotel is an establishment with services and additional facilities where accommodation and in most cases meals are available." (ISO 18513:2003). Another definition states that "A hotel is an establishment that provides paid lodging on a short-term basis" (Wikipedia). Hotel operations vary in size, function, and cost. Most hotels and major hospitality companies that operate hotels have set widely accepted industry standards to classify hotel types.

* Relationship "Name and Community members" *

The global Hotel Community consists of more than 500,000 hotels and their associations, all being members of the Hotel Community. There is a very strong relationship also between the members of Hotel Community and the applied-for string, as the string "HOTEL" is the word that is uniting them all. Community members can be clearly identified if they fulfil the requirements of ISO 18513:2003.

* Other connotations *

The word hotel has no other significant meaning and is being understood worldwide to mean establishments of the type described above.

20(e). Provide a description of the applicant's intended registration policies in support of the community-based purpose of the applied-for gTLD.

* Eligibility *

.hotel second-level domain names are initially restricted to the narrow category of hotels and their organizations (Registrants) as defined by ISO 18513. Therefore the registration of .hotel domains shall be exclusively limited to registrants from a logical alliance of the hotel industry including:

- 1. Individual Hotels
- 2. Hotel Chains
- 3. Hotel Marketing organizations representing members from 1. and/or 2.
- 4. International, national and local Associations representing Hotels and Hotel Associations representing members from 1. and/or 2.
- 5. Other Organizations representing Hotels, Hotel Owners and other solely Hotel related organizations representing on members form 1. and/or 2.

It is the role of the .hotel Registry to assure and control the registrant's eligibility to register a domain name to guarantee the community aspect and integrity of the .hotel name space and to avoid disputes. The .hotel Registry anticipates that disputes over the registrant's eligibility will be minimal within the hotel community. Nevertheless it has put in place an adequate procedure to assist the hotel community's registrants in dealing with denials of registrant's eligibility in a way that supports community needs and values. The .hotel Registry's informal denial procedures will not super-cede any formal dispute procedures.

Any domain name registered according to the eligibility criteria described above is subject to a subsequent registrant eligibility verification process which will start immediately after the registration process starts. Registrant eligibility verification will occur after domain name registration but before the registered domain name can be used for web services and protocols like email, website, and FTP. This is to avoid mass fraudulent domain name registrations.

Registrant data supplied for registrant eligibility verification purposes will be held and used by the Registry for eligibility verification purposes only, based on European data protection laws. Registrant eligibility verification requires a review by an applicable organization or by the Registry (reviewer).

The registrant eligibility verification process starts with the Registry evaluation each domain registration for eligibility. For evaluation purposes industry databases will be used, like hotel association databases or other electronically available

databases. Within 48 hours after registration started, the registry will provide the evaluation result to the registrar.

In case the reviewer will review the registered domain name and can not validate the domain name he may require further material supporting the registrant's eligibility. Once reviewed the reviewer will confirm or deny the registration. Confirmation will be conveyed to the registrar by email. In the case of denial of the registrant's domain name registration is taken-down in the Registry's discretion. A denial of registrant's eligibility will be recorded against the registrant's domain name and they will not be entitled to register a domain name until their circumstances have changed such that their registrant eligibility is confirmed in the required manner.

Registrant eligibility verification reviews may occur following domain name registration and where a registrant is found to be ineligible subsequent to registration of a domain name(s), and such ineligibility is due to mistake or error on the part of the registrant, their registration fee may be refunded.

The registry confirms registrant's eligibility for up to one year and the registrant may be reviewed annually or at any other time by the Registry to ensure that registrant's eligibility data have not changed in the prior period and that they continue to be eligible. If any change has occurred the registrant at any time may re-submit their registrant's eligibility data and it may be reviewed and confirmed as for initial registrant eligibility verification.

The registrant's eligibility is the central requirement to hold a .hotel domain name. It is therefore necessary that registrants maintain their eligibility throughout the term of the registration, including renewal. If the registrant ceases to be a member of the hotel community as defined by current policies and practices of the Registry, then the registrant must give notice of such change within 20 days of ceasing to be eligible to the registrar.

In the event that the registrant does not notify the Registrar of a change of status, the registrar will report to the registry and the registry may take-down all registrations held by the registrant immediately upon becoming informed of the change of status. The Registry may require further information from the registrant to determine registrant's eligibility.

In addition to the obligation on the registrant to notify the Registrar of any change of its status, each hotel community that is assisting the Registry in the registrant eligibility verification process may be required to solicit and receive an update of all registrant eligibility verification data from each registrant. Any registrant eligibility verification organization shall provide the Registry with all such information and shall confirm to the Registry that the registrant continues to be eligible to hold the domain name it has registered. In the event that the registrant is no longer entitled to hold the domain name, the Registry shall inform the registrar and the registrar the registrant of that determination and the registrant will be given 20 days to provide updated and correct data that confirms its eligibility. Where such information is not provided, or, if provided, does not support the registrant's eligibility, the Registry will so inform the registrant and provide the registrant with a right to request a review of the denial as if it had been an initial registration. At the time when such review period has ended and the registrant remains ineligible, the Registry shall take-down the domain name and it has to be returned to the list of available domain names.

The Registry's rights to require notice of a change of status, to take-down a domain name unilaterally and to require information is contained in the registrant agreement of the registrar by reference to these policies.

The Registry will set aside a list of domain names that will be reserved for the 325

^{*} Types of names *

major hotel industry brands including sub-brands. Cut-off date for this list is September 2011. These names can be released by the Registry upon request of the brand concerned and registered by eligible community member brand.

* Domain Names available for registration *

No Limitation - Any applicant that is eligible will be entitled to register any domain name that is not reserved or registered at the time of their registration submission through an ICANN accredited registrar.

No Limitation in Number - Registrants are not limited in the number of domain names they may register.

Registrant Representations - The registration application and registrant agreement will contain positive representations from the registrant that they are entitled to the domain name(s) they are or have registered. Breach of such representation will allow the Registry to take-down ineligible domain names at any time.

* Content and Use Restrictions *

The Registry has in its discretion developed restrictions on the content and use of any domain name. Such restrictions apply to any domain name registration that occurs after such restrictions come into effect.

Each domain name must, within one year following the date of registration, and thereafter throughout the term of the domain name registration, be used as the domain name for a website displaying hotel community related content relevant to the domain name, or in such other manner (such as email) that the Registry may approve after review. Domain names used as contemplated above may resolve directly to the relevant website or be forwarded or redirected to another domain name displaying hotel content relevant to the domain name.

Restrictions may include, but are not limited to, a requirement to develop a website that uses the registered domain name, to ensure that each registered domain name resolves to a working website, or to ensure that each website using a registered domain name, or redirected from a registered domain name presents content related to the registered .hotel domain name.

The .hotel Registry will, from time to time in its sole discretion or upon evidence or advice, but at least once a year, conduct continuing or recurring audits of domain names registered to ensure continued compliance with these requirements. Failure to comply will result in a notice providing 20-days to comply. Non-compliance following such a notice period may result in take-down of the relevant domain name, at the discretion of the Registry.

* Enforcement and dispute policy *

The registry will set-up a process for any questions and challenges that may arise from registrations. Complainants will be provided a single point of contact via the registry's website to submit any questions and complaints regarding alleged abuse. The registry will randomly check 2% of registered domains to verify they have content. The registry also follows the standard dispute policies as defined in Q 28 and Q 39.

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.

Hotel Top-Level-Domain S.a.r.l. will protect names with national or geographic significance by reserving the country and territory names at the second level and at all other levels within the TLD, as per the requirements in the New TLD Registry Agreement (Specification 5, paragraph 5).

Hotel Top-Level-Domain S.a.r.l. will employ a series of rules to translate the geographical names required to be reserved by Specification 5, paragraph 5 to a form consistent with the "host names" format used in domain names.

Considering the Governmental Advisory Committee (GAC) advice "Principles regarding new gTLDs", these domains will be blocked, at no cost to governments, public authorities, or IGOs, before the TLD is introduced (Sunrise), so that no parties may apply for them. Hotel Top-Level-Domain S.a.r.l. will publish a list of these names before Sunrise, so our registrars and their prospective applicants can be aware that these names are reserved.

Hotel Top-Level-Domain S.a.r.l. will define a procedure so that governments can request the above reserved domain(s) if they would like to take possession of them. This procedure will be based on existing methodology developed for the release of country names in the .INFO TLD. For example, Hotel Top-Level-Domain S.a.r.l. will require a written request from the country's GAC representative, or a written request from the country's relevant Ministry or Department. Hotel Top-Level-Domain S.a.r.l. will allow the designated beneficiary (the Registrant) to register the name, with an accredited Afilias Registrar, possibly using an authorization number transmitted directly to the designated beneficiary in the country concerned.

As defined by Specification 5, paragraph 5, such geographic domains may be released to the extent that Registry Operator reaches agreement with the applicable government(s). Registry operator will work with respective GAC representatives of the country's relevant Ministry of Department to obtain their release of the names to the Registry Operator.

If internationalized domains names (IDNs) are introduced in the TLD in the future, Hotel Top-Level-Domain S.a.r.l. will also reserve the IDN versions of the country

names in the relevant script(s) before IDNs become available to the public. If we find it advisable and practical, Hotel Top-Level-Domain S.a.r.l. will confer with relevant language authorities so that we can reserve the IDN domains properly along with their variants.

Regarding GAC advice regarding second-level domains not specified via Specification 5, paragraph 5: All domains awarded to registrants are subject to the Uniform Domain Name Dispute

Resolution Policy (UDRP), and to any properly-situated court proceeding. Hotel Top-Level-Domain S.a.r.l. will ensure appropriate procedures to allow governments, public authorities or IGO's to challenge abuses of names with national or geographic significance at the second level. In its registry-registrar agreement, and flowing down to registrar-registrant agreements, Hotel Top-Level-Domain S.a.r.l. will institute a provision to suspend domains names in the event of a dispute. Hotel Top-Level-Domain S.a.r.l. may exercise that right in the case of a dispute over a geographic name.

Registry Services

23. Provide name and full description of all the Registry Services to be provided.

Throughout the technical portion (#23 - #44) of this application, answers are provided directly from Afilias, the back-end provider of registry services for this TLD. HOTEL TOP-LEVEL-DOMAIN S.A.R.L. chose Afilias as its back-end provider because Afilias has more experience successfully applying to ICANN and launching new TLDs than any other provider. Afilias is the ICANN-contracted registry operator of the .INFO and .MOBI TLDs, and Afilias is the back-end registry services provider for other ICANN TLDs including .ORG, .ASIA, .AERO, and .XXX.

Registry services for this TLD will be performed by Afilias in the same responsible manner used to support 16 top level domains today. Afilias supports more ICANN-contracted TLDs (6) than any other provider currently. Afilias' primary corporate mission is to deliver secure, stable and reliable registry services. This TLD will utilize an existing, proven team and platform for registry services with:

- A stable and secure, state-of-the-art, EPP-based SRS with ample storage capacity, data security provisions and scalability that is proven with registrars who account for over 95% of all gTLD domain name registration activity (over 375 registrars);
- A reliable, 100% available DNS service (zone file generation, publication and dissemination) tested to withstand severe DDoS attacks and dramatic growth in Internet use:
- A WHOIS service that is flexible and standards compliant, with search capabilities to address both registrar and end-user needs; includes consideration for evolving standards, such as RESTful, or draft-kucherawy-wierds;
- Experience introducing IDNs in the following languages: German (DE), Spanish (ES), Polish (PL), Swedish (SV), Danish (DA), Hungarian (HU), Icelandic (IS), Latvian (LV), Lithuanian (LT), Korean (KO), Simplified and Traditional Chinese (CN), Devanagari (HI-DEVA), Russian (RU), Belarusian (BE), Ukrainian (UK), Bosnian (BS), Serbian (SR), Macedonian (MK) and Bulgarian (BG) across the TLDs it serves;
- A registry platform that is both IPv6 and DNSSEC enabled;
- An experienced, respected team of professionals active in standards development of innovative services such as DNSSEC and IDN support;
- · Methods to limit domain abuse, remove outdated and inaccurate data, and ensure the

integrity of the SRS, and;

 \bullet Customer support and reporting capabilities to meet financial and administrative needs, e.g., 24x7 call center support, integration support, billing, and daily, weekly, and monthly reporting.

Afilias will support this TLD in accordance with the specific policies and procedures of HOTEL TOP-LEVEL-DOMAIN S.A.R.L. (the "registry operator"), leveraging a proven registry infrastructure that is fully operational, staffed with professionals, massively provisioned, and immediately ready to launch and maintain this TLD.

The below response includes a description of the registry services to be provided for this TLD, additional services provided to support registry operations, and an overview of Afilias' approach to registry management.

* Registry services to be provided *

To support this TLD, HOTEL TOP-LEVEL-DOMAIN S.A.R.L. and Afilias will offer the following registry services, all in accordance with relevant technical standards and policies:

- Receipt of data from registrars concerning registration for domain names and nameservers, and provision to registrars of status information relating to the EPP-based domain services for registration, queries, updates, transfers, renewals, and other domain management functions. Please see our responses to questions #24, #25, and #27 for full details, which we request be incorporated here by reference.
- Operation of the registry DNS servers: The Afilias DNS system, run and managed by Afilias, is a massively provisioned DNS infrastructure that utilizes among the most sophisticated DNS architecture, hardware, software and redundant design created. Afilias' industry-leading system works in a seamless way to incorporate nameservers from any number of other secondary DNS service vendors. Please see our response to question #35 for full details, which we request be incorporated here by reference.
- Dissemination of TLD zone files: Afilias' distinctive architecture allows for realtime updates and maximum stability for zone file generation, publication and dissemination. Please see our response to question #34 for full details, which we request be incorporated here by reference.
- Dissemination of contact or other information concerning domain registrations: A port 43 WHOIS service with basic and expanded search capabilities with requisite measures to prevent abuse. Please see our response to question #26 for full details, which we request be incorporated here by reference.
- Internationalized Domain Names (IDNs): Ability to support all protocol valid Unicode characters at every level of the TLD, including alphabetic, ideographic and right-to-left scripts, in conformance with the ICANN IDN Guidelines. Please see our response to question #44 for full details, which we request be incorporated here by reference.
- DNS Security Extensions (DNSSEC): A fully DNSSEC-enabled registry, with a stable and efficient means of signing and managing zones. This includes the ability to safeguard keys and manage keys completely. Please see our response to question #43 for full details, which we request be incorporated here by reference.

Each service will meet or exceed the contract service level agreement. All registry services for this TLD will be provided in a standards-compliant manner.

* Security *

Afilias addresses security in every significant aspect — physical, data and network as well as process. Afilias' approach to security permeates every aspect of the registry services provided. A dedicated security function exists within the company to continually identify existing and potential threats, and to put in place comprehensive mitigation plans for each identified threat. In addition, a rapid security response plan exists to respond comprehensively to unknown or unidentified threats. The specific threats and Afilias mitigation plans are defined in our response to question #30(b); please see that response for complete information. In

short, Afilias is committed to ensuring the confidentiality, integrity, and availability of all information.

* New registry services *

No new registry services are planned for the launch of this TLD.

* Additional services to support registry operation *

Numerous supporting services and functions facilitate effective management of the TLD. These support services are also supported by Afilias, including:

- Customer support: 24x7 live phone and e-mail support for customers to address any access, update or other issues they may encounter. This includes assisting the customer identification of the problem as well as solving it. Customers include registrars and the registry operator, but not registrants except in unusual circumstances. Customers have access to a web-based portal for a rapid and transparent view of the status of pending issues.
- Financial services: billing and account reconciliation for all registry services according to pricing established in respective agreements.

Reporting is an important component of supporting registry operations. Afilias will provide reporting to the registry operator and registrars, and financial reporting.

* Reporting provided to registry operator *

Afilias provides an extensive suite of reports to the registry operator, including daily, weekly and monthly reports with data at the transaction level that enable the registry operator to track and reconcile at whatever level of detail preferred. Afilias provides the exact data required by ICANN in the required format to enable the registry operator to meet its technical reporting requirements to ICANN.

In addition, Afilias offers access to a data warehouse capability that will enable near real-time data to be available 24x7. This can be arranged by informing the Afilias Account Manager regarding who should have access. Afilias' data warehouse capability enables drill-down analytics all the way to the transaction level.

* Reporting available to registrars *

Afilias provides an extensive suite of reporting to registrars and has been doing so in an exemplary manner for more than ten years. Specifically, Afilias provides daily, weekly and monthly reports with detail at the transaction level to enable registrars to track and reconcile at whatever level of detail they prefer.

Reports are provided in standard formats, facilitating import for use by virtually any registrar analytical tool. Registrar reports are available for download via a secure administrative interface. A given registrar will only have access to its own reports. These include the following:

- Daily Reports: Transaction Report, Billable Transactions Report, and Transfer Reports;
- Weekly: Domain Status and Nameserver Report, Weekly Nameserver Report, Domains Hosted by Nameserver Weekly Report, and;
- Monthly: Billing Report and Monthly Expiring Domains Report.

Weekly registrar reports are maintained for each registrar for four weeks. Weekly reports older than four weeks will be archived for a period of six months, after which they will be deleted.

* Financial reporting *

Registrar account balances are updated real-time when payments and withdrawals are

posted to the registrars' accounts. In addition, the registrar account balances are updated as and when they perform billable transactions at the registry level.

Afilias provides Deposit/Withdrawal Reports that are updated periodically to reflect payments received or credits and withdrawals posted to the registrar accounts.

The following reports are also available: a) Daily Billable Transaction Report, containing details of all the billable transactions performed by all the registrars in the SRS, b) daily e-mail reports containing the number of domains in the registry and a summary of the number and types of billable transactions performed by the registrars, and c) registry operator versions of most registrar reports (for example, a daily Transfer Report that details all transfer activity between all of the registrars in the SRS).

* Afilias approach to registry support *

Afilias, the back end registry services provider for this TLD, is dedicated to managing the technical operations and support of this TLD in a secure, stable and reliable manner. Afilias has worked closely with HOTEL TOP-LEVEL-DOMAIN S.A.R.L. to review specific needs and objectives of this TLD. The resulting comprehensive plans are illustrated in technical responses #24-44, drafted by Afilias given HOTEL TOP-LEVEL-DOMAIN S.A.R.L. requirements. Afilias and HOTEL TOP-LEVEL-DOMAIN S.A.R.L. also worked together to provide financial responses for this application which demonstrate cost and technology consistent with the size and objectives of this TLD.

Afilias is the registry services provider for this and several other TLD applications. Over the past 11 years of providing services for gTLD and ccTLDs, Afilias has accumulated experience about resourcing levels necessary to provide high quality services with conformance to strict service requirements. Afilias currently supports over 20 million domain names, spread across 16 TLDs, with over 400 accredited registrars.

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way.

With over a decade of registry experience, Afilias has the depth and breadth of experience that ensure existing and new needs are addressed, all while meeting or exceeding service level requirements and customer expectations. This is evident in Afilias' participation in business, policy and technical organizations supporting registry and Internet technology within ICANN and related organizations. This allows Afilias to be at the forefront of security initiatives such as: DNSSEC, wherein Afilias worked with Public Interest Registry (PIR) to make the .ORG registry the first DNSSEC enabled gTLD and the largest TLD enabled at the time; in enhancing the Internet experience for users across the globe by leading development of IDNs; in pioneering the use of open-source technologies by its usage of PostgreSQL, and; being the first to offer near-real-time dissemination of DNS zone data.

The ability to observe tightening resources for critical functions and the capacity to add extra resources ahead of a threshold event are factors that Afilias is well versed in. Afilias' human resources team, along with well-established relationships with external organizations, enables it to fill both long-term and short-term resource needs expediently.

Afilias' growth from a few domains to serving 20 million domain names across 16 TLDs

and 400 accredited registrars indicates that the relationship between the number of people required and the volume of domains supported is not linear. In other words, servicing 100 TLDs does not automatically require 6 times more staff than servicing 16 TLDs. Similarly, an increase in the number of domains under management does not require in a linear increase in resources. Afilias carefully tracks the relationship between resources deployed and domains to be serviced, and pro-actively reviews this metric in order to retain a safe margin of error. This enables Afilias to add, train and prepare new staff well in advance of the need, allowing consistent delivery of high quality services.

Demonstration of Technical & Operational Capability

24. Shared Registration System (SRS) Performance

THE RESPONSE FOR THIS QUESTION USES ANGLE BRACKETS (THE " (" and ")" CHARACTERS, or &1t; and >), WHICH ICANN INFORMS US (CASE ID 11027) CANNOT BE PROPERLY RENDERED IN TAS DUE TO SECURITY CONCERNS. HENCE, THE ANSWER BELOW AS DISPLAYED IN TAS MAY NOT RENDER THE FULL RESPONSE AS INTENDED. THEREFORE, THE FULL ANSWER TO THIS QUESTION IS ALSO ATTACHED AS A PDF FILE, ACCORDING TO SPECIFIC GUIDANCE FROM ICANN UNDER CASE ID 11027.

Answers for this question (#24) are provided directly from Afilias, the back-end provider of registry services for this TLD.

Afilias operates a state-of-the-art EPP-based Shared Registration System (SRS) that is secure, stable and reliable. The SRS is a critical component of registry operations that must balance the business requirements for the registry and its customers, such as numerous domain acquisition and management functions. The SRS meets or exceeds all ICANN requirements given that Afilias:

- Operates a secure, stable and reliable SRS which updates in real-time and in full compliance with Specification 6 of the new gTLD Registry Agreement;
- · Is committed to continuously enhancing our SRS to meet existing and future needs;
- Currently exceeds contractual requirements and will perform in compliance with Specification 10 of the new gTLD Registry Agreement;
- Provides SRS functionality and staff, financial, and other resources to more than adequately meet the technical needs of this TLD, and;
- Manages the SRS with a team of experienced technical professionals who can seamlessly integrate this TLD into the Afilias registry platform and support the TLD in a secure, stable and reliable manner.

Description of operation of the SRS, including diagrams

Afilias' SRS provides the same advanced functionality as that used in the .INFO and .ORG registries, as well as the fourteen other TLDs currently supported by Afilias. The Afilias registry system is standards-compliant and utilizes proven technology, ensuring global familiarity for registrars, and it is protected by our massively provisioned infrastructure that mitigates the risk of disaster.

EPP functionality is described fully in our response to question #25; please consider those answers incorporated here by reference. An abbreviated list of Afilias SRS functionality includes:

• Domain registration: Afilias provides registration of names in the TLD, in both ASCII and IDN forms, to accredited registrars via EPP and a web-based administration

tool.

- Domain renewal: Afilias provides services that allow registrars the ability to renew domains under sponsorship at any time. Further, the registry performs the automated renewal of all domain names at the expiration of their term, and allows registrars to rescind automatic renewals within a specified number of days after the transaction for a full refund.
- Transfer: Afilias provides efficient and automated procedures to facilitate the transfer of sponsorship of a domain name between accredited registrars. Further, the registry enables bulk transfers of domains under the provisions of the Registry-Registrar Agreement.
- RGP and restoring deleted domain registrations: Afilias provides support for the Redemption Grace Period (RGP) as needed, enabling the restoration of deleted registrations.
- Other grace periods and conformance with ICANN guidelines: Afilias provides support for other grace periods that are evolving as standard practice inside the ICANN community. In addition, the Afilias registry system supports the evolving ICANN guidelines on IDNs.

Afilias also supports the basic check, delete, and modify commands.

As required for all new gTLDs, Afilias provides "thick" registry system functionality. In this model, all key contact details for each domain are stored in the registry. This allows better access to domain data and provides uniformity in storing the information.

Afilias' SRS complies today and will continue to comply with global best practices including relevant RFCs, ICANN requirements, and this TLD's respective domain policies. With over a decade of experience, Afilias has fully documented and tested policies and procedures, and our highly skilled team members are active participants of the major relevant technology and standards organizations, so ICANN can be assured that SRS performance and compliance are met. Full details regarding the SRS system and network architecture are provided in responses to questions #31 and #32; please consider those answers incorporated here by reference.

* SRS servers and software *

All applications and databases for this TLD will run in a virtual environment currently hosted by a cluster of servers equipped with the latest Intel Westmere multi-core processors. (It is possible that by the time this application is evaluated and systems deployed, Westmere processors may no longer be the "latest"; the Afilias policy is to use the most advanced, stable technology available at the time of deployment.) The data for the registry will be stored on storage arrays of solid state drives shared over a fast storage area network. The virtual environment allows the infrastructure to easily scale both vertically and horizontally to cater to changing demand. It also facilitates effective utilization of system resources, thus reducing energy consumption and carbon footprint.

The network firewalls, routers and switches support all applications and servers. Hardware traffic shapers are used to enforce an equitable access policy for connections coming from registrars. The registry system accommodates both IPv4 and IPv6 addresses. Hardware load balancers accelerate TLS/SSL handshaking and distribute load among a pool of application servers.

Each of the servers and network devices are equipped with redundant, hot-swappable components and multiple connections to ancillary systems. Additionally, 24x7 support agreements with a four-hour response time at all our data centers guarantee replacement of failed parts in the shortest time possible.

Examples of current system and network devices used are:

• Servers: Cisco UCS B230 blade servers

- SAN storage arrays: IBM Storwize V7000 with Solid State Drives
- SAN switches: Brocade 5100
- Firewalls: Cisco ASA 5585-X
- Load balancers: F5 Big-IP 6900
- Traffic shapers: Procera PacketLogic PL8720
- Routers: Juniper MX40 3D
- Network switches: Cisco Nexus 7010, Nexus 5548, Nexus 2232

These system components are upgraded and updated as required, and have usage and performance thresholds which trigger upgrade review points. In each data center, there is a minimum of two of each network component, a minimum of 25 servers, and a minimum of two storage arrays.

Technical components of the SRS include the following items, continually checked and upgraded as needed: SRS, WHOIS, web admin tool, DNS, DNS distributor, reporting, invoicing tools, and deferred revenue system (as needed).

All hardware is massively provisioned to ensure stability under all forecast volumes from launch through "normal" operations of average daily and peak capacities. Each and every system application, server, storage and network device is continuously monitored by the Afilias Network Operations Center for performance and availability. The data gathered is used by dynamic predictive analysis tools in real-time to raise alerts for unusual resource demands. Should any volumes exceed established thresholds, a capacity planning review is instituted which will address the need for additions well in advance of their actual need.

* SRS diagram and interconnectivity description *

As with all core registry services, the SRS is run from a global cluster of registry system data centers, located in geographic centers with high Internet bandwidth, power, redundancy and availability. All of the registry systems will be run in a $\langle n+1 \rangle$ setup, with a primary data center and a secondary data center. For detailed site information, please see our responses to questions #32 and #35. Registrars access the SRS in real-time using EPP.

A sample of the Afilias SRS technical and operational capabilities (displayed in Figure 24-a) include:

- Geographically diverse redundant registry systems;
- Load balancing implemented for all registry services (e.g. EPP, WHOIS, web admin) ensuring equal experience for all customers and easy horizontal scalability;
- Disaster Recovery Point objective for the registry is within one minute of the loss of the primary system;
- Detailed and tested contingency plan, in case of primary site failure, and;
- · Daily reports, with secure access for confidentiality protection.

As evidenced in Figure 24-a, the SRS contains several components of the registry system. The interconnectivity ensures near-real-time distribution of the data throughout the registry infrastructure, timely backups, and up-to-date billing information.

The WHOIS servers are directly connected to the registry database and provide realtime responses to queries using the most up-to-date information present in the registry.

Committed DNS-related EPP objects in the database are made available to the DNS Distributor via a dedicated set of connections. The DNS Distributor extracts committed DNS-related EPP objects in real time and immediately inserts them into the zone for dissemination.

The Afilias system is architected such that read-only database connections are executed on database replicas and connections to the database master (where write-access is executed) are carefully protected to ensure high availability.

This interconnectivity is monitored, as is the entire registry system, according to the plans detailed in our response to question #42.

* Synchronization scheme *

Registry databases are synchronized both within the same data center and in the backup data center using a database application called Slony. For further details, please see the responses to questions #33 and #37. Slony replication of transactions from the publisher (master) database to its subscribers (replicas) works continuously to ensure the publisher and its subscribers remain synchronized. When the publisher database completes a transaction the Slony replication system ensures that each replica also processes the transaction. When there are no transactions to process, Slony "sleeps" until a transaction arrives or for one minute, whichever comes first. Slony "wakes up" each minute to confirm with the publisher that there has not been a transaction and thus ensures subscribers are synchronized and the replication time lag is minimized. The typical replication time lag between the publisher and subscribers depends on the topology of the replication cluster, specifically the location of the subscribers relative to the publisher. Subscribers located in the same data center as the publisher are typically updated within a couple of seconds, and subscribers located in a secondary data center are typically updated in less than ten seconds. This ensures real-time or near-real-time synchronization between all databases, and in the case where the secondary data center needs to be activated, it can be done with minimal disruption to registrars.

* SRS SLA performance compliance *

Afilias has a ten-year record of delivering on the demanding ICANN SLAs, and will continue to provide secure, stable and reliable service in compliance with SLA requirements as specified in the new gTLD Registry Agreement, Specification 10, as presented in Figure 24-b.

The Afilias SRS currently handles over 200 million EPP transactions per month for just .INFO and .ORG. Overall, the Afilias SRS manages over 700 million EPP transactions per month for all TLDs under management.

Given this robust functionality, and more than a decade of experience supporting a thick TLD registry with a strong performance history, Afilias, on behalf of HOTEL TOP-LEVEL-DOMAIN S.A.R.L., will meet or exceed the performance metrics in Specification 10 of the new gTLD Registry Agreement. The Afilias services and infrastructure are designed to scale both vertically and horizontally without any downtime to provide consistent performance as this TLD grows. The Afilias architecture is also massively provisioned to meet seasonal demands and marketing campaigns. Afilias' experience also gives high confidence in the ability to scale and grow registry operations for this TLD in a secure, stable and reliable manner.

* SRS resourcing plans *

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way.

Over 100 Afilias team members contribute to the management of the SRS code and

network that will support this TLD. The SRS team is composed of Software Engineers, Quality Assurance Analysts, Application Administrators, System Administrators, Storage Administrators, Network Administrators, Database Administrators, and Security Analysts located at three geographically separate Afilias facilities. The systems and services set up and administered by these team members are monitored 24x7 by skilled analysts at two NOCs located in Toronto, Ontario (Canada) and Horsham, Pennsylvania (USA). In addition to these team members, Afilias also utilizes trained project management staff to maintain various calendars, work breakdown schedules, utilization and resource schedules and other tools to support the technical and management staff. It is this team who will both deploy this TLD on the Afilias infrastructure, and maintain it. Together, the Afilias team has managed 11 registry transitions and six new TLD launches, which illustrate its ability to securely and reliably deliver regularly scheduled updates as well as a secure, stable and reliable SRS service for this TLD.

25. Extensible Provisioning Protocol (EPP)

THE RESPONSE FOR THIS QUESTION USES ANGLE BRACKETS (THE " (" and ") " CHARACTERS, or &1t; and >), WHICH ICANN INFORMS US (CASE ID 11027) CANNOT BE PROPERLY RENDERED IN TAS DUE TO SECURITY CONCERNS. HENCE, THE ANSWER BELOW AS DISPLAYED IN TAS MAY NOT RENDER THE FULL RESPONSE AS INTENDED. THEREFORE, THE FULL ANSWER TO THIS QUESTION IS ALSO ATTACHED AS A PDF FILE, ACCORDING TO SPECIFIC GUIDANCE FROM ICANN UNDER CASE ID 11027.

Answers for this question (#25) are provided by Afilias, the back-end provider of registry services for this TLD.

Afilias has been a pioneer and innovator in the use of EPP. .INFO was the first EPP-based gTLD registry and launched on EPP version 02/00. Afilias has a track record of supporting TLDs on standards-compliant versions of EPP. Afilias will operate the EPP registrar interface as well as a web-based interface for this TLD in accordance with RFCs and global best practices. In addition, Afilias will maintain a proper OT&E (Operational Testing and Evaluation) environment to facilitate registrar system development and testing.

Afilias' EPP technical performance meets or exceeds all ICANN requirements as demonstrated by:

- A completely functional, state-of-the-art, EPP-based SRS that currently meets the needs of various gTLDs and will meet this new TLD's needs;
- A track record of success in developing extensions to meet client and registrar business requirements such as multi-script support for IDNs;
- Supporting six ICANN gTLDs on EPP: .INFO, .ORG, .MOBI, .AERO, .ASIA and .XXX
- EPP software that is operating today and has been fully tested to be standards-compliant;
- Proven interoperability of existing EPP software with ICANN-accredited registrars, and;
- An SRS that currently processes over 200 million EPP transactions per month for both .INFO and .ORG. Overall, Afilias processes over 700 million EPP transactions per month for all 16 TLDs under management.

The EPP service is offered in accordance with the performance specifications defined in the new gTLD Registry Agreement, Specification 10.

* EPP Standards *

The Afilias registry system complies with the following revised versions of the RFCs

and operates multiple ICANN TLDs on these standards, including .INFO, .ORG, .MOBI, .ASIA and .XXX. The systems have been tested by our Quality Assurance ("QA") team for RFC compliance, and have been used by registrars for an extended period of time:

- 3735 Guidelines for Extending EPP
- 3915 Domain Registry Grace Period Mapping
- 5730 Extensible Provisioning Protocol (EPP)
- 5731 Domain Name Mapping
- 5732 Host Mapping
- 5733 Contact Mapping
- 5734 Transport Over TCP
- 5910 Domain Name System (DNS) Security Extensions Mapping for the Extensible Provisioning Protocol (EPP)

This TLD will support all valid EPP commands. The following EPP commands are in operation today and will be made available for this TLD. See attachment #25a for the base set of EPP commands and copies of Afilias XSD schema files, which define all the rules of valid, RFC compliant EPP commands and responses that Afilias supports. Any customized EPP extensions, if necessary, will also conform to relevant RFCs.

Afilias staff members actively participated in the Internet Engineering Task Force (IETF) process that finalized the new standards for EPP. Afilias will continue to actively participate in the IETF and will stay abreast of any updates to the EPP standards.

* EPP software interface and functionality *

Afilias will provide all registrars with a free open-source EPP toolkit. Afilias provides this software for use with both Microsoft Windows and Unix/Linux operating systems. This software, which includes all relevant templates and schema defined in the RFCs, is available on sourceforge.net and will be available through the registry operator's website.

Afilias' SRS EPP software complies with all relevant RFCs and includes the following functionality:

- EPP Greeting: A response to a successful connection returns a greeting to the client. Information exchanged can include: name of server, server date and time in UTC, server features, e.g., protocol versions supported, languages for the text response supported, and one or more elements which identify the objects that the server is capable of managing;
- Session management controls: <login> to establish a connection with a server, and <logout> to end a session;
- EPP Objects: Domain, Host and Contact for respective mapping functions;
- EPP Object Query Commands: Info, Check, and Transfer (query) commands to retrieve object information, and;
- EPP Object Transform Commands: five commands to transform objects: \(\text{create} \) to create an instance of an object, \(\text{delete} \) to remove an instance of an object, \(\text{renew} \) to extend the validity period of an object, \(\text{update} \) to change information associated with an object, and \(\text{transfer} \) to manage changes in client sponsorship of a known object.

Currently, 100% of the top domain name registrars in the world have software that has already been tested and certified to be compatible with the Afilias SRS registry. In total, over 375 registrars, representing over 95% of all registration volume worldwide, operate software that has been certified compatible with the Afilias SRS registry. Afilias' EPP Registrar Acceptance Criteria are available in attachment #25b, EPP OT&E Criteria.

*Free EPP software support *

Afilias analyzes and diagnoses registrar EPP activity log files as needed and is available to assist registrars who may require technical guidance regarding how to fix repetitive errors or exceptions caused by misconfigured client software.

Registrars are responsible for acquiring a TLS/SSL certificate from an approved certificate authority, as the registry-registrar communication channel requires mutual authentication; Afilias will acquire and maintain the server-side TLS/SSL certificate. The registrar is responsible for developing support for TLS/SSL in their client application. Afilias will provide free guidance for registrars unfamiliar with this requirement.

*Registrar data synchronization *

There are two methods available for registrars to synchronize their data with the registry:

- Automated synchronization: Registrars can, at any time, use the EPP $\langle \text{info} \rangle$ command to obtain definitive data from the registry for a known object, including domains, hosts (nameservers) and contacts.
- Personalized synchronization: A registrar may contact technical support and request a data file containing all domains (and associated host (nameserver) and contact information) registered by that registrar, within a specified time interval. The data will be formatted as a comma separated values (CSV) file and made available for download using a secure server.
- * EPP modifications *

There are no unique EPP modifications planned for this TLD.

All ICANN TLDs must offer a Sunrise as part of a rights protection program. Afilias uses EPP extensions that allow registrars to submit trademark and other intellectual property rights (IPR) data to the registry. These extensions are:

- An (ipr:name) element that indicates the name of Registered Mark.
- An (ipr:number) element that indicates the registration number of the IPR.
- An (ipr:ccLocality) element that indicates the origin for which the IPR is established (a national or international trademark registry).
- An (ipr:entitlement) element that indicates whether the applicant holds the trademark as the original "OWNER", "CO-OWNER" or "ASSIGNEE".
- An ipr:appDate element that indicates the date the Registered Mark was applied
 for.
- An (ipr:regDate) element that indicates the date the Registered Mark was issued and registered.
- An (ipr:class) element that indicates the class of the registered mark.
- \bullet An $\langle \text{ipr:type} \rangle$ element that indicates the Sunrise phase the application applies for.

Note that some of these extensions might be subject to change based on ICANN-developed requirements for the Trademark Clearinghouse.

* EPP resourcing plans *

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today.

This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way.

108 Afilias team members directly contribute to the management and development of the EPP based registry systems. As previously noted, Afilias is an active member of IETF and has a long documented history developing and enhancing EPP. These contributors include 11 developers and 14 QA engineers focused on maintaining and enhancing EPP server side software. These engineers work directly with business staff to timely address existing needs and forecast registry/registrar needs to ensure the Afilias EPP software is effective today and into the future. A team of eight data analysts work with the EPP software system to ensure that the data flowing through EPP is securely and reliably stored in replicated database systems. In addition to the EPP developers, QA engineers, and data analysts, other EPP contributors at Afilias include: Technical Analysts, the Network Operations Center and Data Services team members.

26. Whois

Answers for this question (#26) are provided by Afilias, the back-end provider of registry services for this TLD.

Afilias operates the WHOIS (registration data directory service) infrastructure in accordance with RFCs and global best practices, as it does for the 16 TLDs it currently supports. Designed to be robust and scalable, Afilias' WHOIS service has exceeded all contractual requirements for over a decade. It has extended search capabilities, and methods of limiting abuse.

The WHOIS service operated by Afilias meets and exceeds ICANN's requirements. Specifically, Afilias will:

- Offer a WHOIS service made available on port 43 that is flexible and standards-compliant;
- Comply with all ICANN policies, and meeting or exceeding WHOIS performance requirements in Specification 10 of the new gTLD Registry Agreement;
- Enable a Searchable WHOIS with extensive search capabilities that offers ease of use while enforcing measures to mitigate access abuse, and;
- Employ a team with significant experience managing a compliant WHOIS service.

Such extensive knowledge and experience managing a WHOIS service enables Afilias to offer a comprehensive plan for this TLD that meets the needs of constituents of the domain name industry and Internet users. The service has been tested by our QA team for RFC compliance, and has been used by registrars and many other parties for an extended period of time. Afilias' WHOIS service currently serves almost 500 million WHOIS queries per month, with the capacity already built in to handle an order of magnitude increase in WHOIS queries, and the ability to smoothly scale should greater growth be needed.

* WHOIS system description and diagram *

The Afilias WHOIS system, depicted in figure 26-a, is designed with robustness, availability, compliance, and performance in mind. Additionally, the system has provisions for detecting abusive usage (e.g., excessive numbers of queries from one source). The WHOIS system is generally intended as a publicly available single object lookup system. Afilias uses an advanced, persistent caching system to ensure extremely fast query response times.

Afilias will develop restricted WHOIS functions based on specific domain policy and regulatory requirements as needed for operating the business (as long as they are standards compliant). It will also be possible for contact and registrant information to be returned according to regulatory requirements. The WHOIS database supports multiple string and field searching through a reliable, free, secure web-based interface.

* Data objects, interfaces, access and lookups *

Registrars can provide an input form on their public websites through which a visitor is able to perform WHOIS queries. The registry operator can also provide a Web-based search on its site. The input form must accept the string to query, along with the necessary input elements to select the object type and interpretation controls. This input form sends its data to the Afilias port 43 WHOIS server. The results from the WHOIS query are returned by the server and displayed in the visitor's Web browser. The sole purpose of the Web interface is to provide a user-friendly interface for WHOIS queries.

Afilias will provide WHOIS output as per Specification 4 of the new gTLD Registry Agreement. The output for domain records generally consists of the following elements:

- -The name of the domain registered and the sponsoring registrar;
- -The names of the primary and secondary nameserver(s) for the registered domain name;
- -The creation date, registration status and expiration date of the registration;
- -The name, postal address, e-mail address, and telephone and fax numbers of the domain name holder;
- -The name, postal address, e-mail address, and telephone and fax numbers of the technical contact for the domain name holder;
- -The name, postal address, e-mail address, and telephone and fax numbers of the administrative contact for the domain name holder, and;
- -The name, postal address, e-mail address, and telephone and fax numbers of the billing contact for the domain name holder.
- The following additional features are also present in Afilias' WHOIS service:
 -Support for IDNs, including the language tag and the Punycode representation of the IDN in addition to Unicode Hex and Unicode HTML formats;
- -Enhanced support for privacy protection relative to the display of confidential information.

Afilias will also provide sophisticated WHOIS search functionality that includes the ability to conduct multiple string and field searches.

* Query controls *

For all WHOIS queries, a user is required to enter the character string representing the information for which they want to search. The object type and interpretation control parameters to limit the search may also be specified. If object type or interpretation control parameter is not specified, WHOIS will search for the character string in the Name field of the Domain object.

WHOIS queries are required to be either an "exact search" or a "partial search," both of which are insensitive to the case of the input string.

An exact search specifies the full string to search for in the database field. An exact match between the input string and the field value is required.

A partial search specifies the start of the string to search for in the database field. Every record with a search field that starts with the input string is considered a match. By default, if multiple matches are found for a query, then a summary containing up to 50 matching results is presented. A second query is required

to retrieve the specific details of one of the matching records.

If only a single match is found, then full details will be provided. Full detail consists of the data in the matching object as well as the data in any associated objects. For example: a query that results in a domain object includes the data from the associated host and contact objects.

WHOIS query controls fall into two categories: those that specify the type of field, and those that modify the interpretation of the input or determine the level of output to provide. Each is described below.

The following keywords restrict a search to a specific object type:

- -Domain: Searches only domain objects. The input string is searched in the Name field.
- -Host: Searches only nameserver objects. The input string is searched in the Name field and the IP Address field.
- -Contact: Searches only contact objects. The input string is searched in the ID field.
- -Registrar: Searches only registrar objects. The input string is searched in the Name field.

By default, if no object type control is specified, then the Name field of the Domain object is searched.

In addition, Afilias WHOIS systems can perform and respond to WHOIS searches by registrant name, postal address and contact names. Deployment of these features is provided as an option to the registry operator, based upon registry policy and business decision making.

Figure 26-b presents the keywords that modify the interpretation of the input or determine the level of output to provide.

By default, if no interpretation control keywords are used, the output will include full details if a single match is found and a summary if multiple matches are found.

* Unique TLD requirements *

There are no unique WHOIS requirements for this TLD.

* Sunrise WHOIS processes *

All ICANN TLDs must offer a Sunrise as part of a rights protection program. Afilias uses EPP extensions that allow registrars to submit trademark and other intellectual property rights (IPR) data to the registry. The following corresponding data will be displayed in WHOIS for relevant domains:

- -Trademark Name: element that indicates the name of the Registered Mark.
- -Trademark Number: element that indicates the registration number of the IPR.
- -Trademark Locality: element that indicates the origin for which the IPR is established (a national or international trademark registry).
- -Trademark Entitlement: element that indicates whether the applicant holds the trademark as the original "OWNER", "CO-OWNER" or "ASSIGNEE".
- Trademark Application Date: element that indicates the date the Registered Mark was applied for.
- -Trademark Registration Date: element that indicates the date the Registered Mark was issued and registered.
- -Trademark Class: element that indicates the class of the Registered Mark.
- -IPR Type: element that indicates the Sunrise phase the application applies for.
- * IT and infrastructure resources *

All the applications and databases for this TLD will run in a virtual environment hosted by a cluster of servers equipped with the latest Intel Westmere multi-core processors (or a more advanced, stable technology available at the time of deployment). The registry data will be stored on storage arrays of solid-state drives shared over a fast storage area network. The virtual environment allows the infrastructure to easily scale both vertically and horizontally to cater to changing demand. It also facilitates effective utilization of system resources thus reducing energy consumption and carbon footprint.

The applications and servers are supported by network firewalls, routers and switches.

The WHOIS system accommodates both IPv4 and IPv6 addresses.

Each of the servers and network devices are equipped with redundant hot-swappable components and multiple connections to ancillary systems. Additionally, 24x7 support agreements with our hardware vendor with a 4-hour response time at all our data centers quarantees replacement of failed parts in the shortest time possible.

Models of system and network devices used are:

- -Servers: Cisco UCS B230 blade servers
- -SAN storage arrays: IBM Storwize V7000 with Solid State Drives
- -Firewalls: Cisco ASA 5585-X
- -Load balancers: F5 Big-IP 6900
- -Traffic shapers: Procera PacketLogic PL8720
- -Routers: Juniper MX40 3D
- -Network switches: Cisco Nexus 7010, Nexus 5548, Nexus 2232

There will be at least four virtual machines (VMs) offering WHOIS service. Each VM will run at least two WHOIS server instances - one for registrars and one for the public. All instances of the WHOIS service is made available to registrars and the public are rate limited to mitigate abusive behavior.

* Frequency of synchronization between servers *

Registration data records from the EPP publisher database will be replicated to the WHOIS system database on a near-real-time basis whenever an update occurs.

* Specifications 4 and 10 compliance *

The WHOIS service for this TLD will meet or exceed the performance requirements in the new gTLD Registry Agreement, Specification 10. Figure 26-c provides the exact measurements and commitments. Afilias has a 10 year track record of exceeding WHOIS performance and a skilled team to ensure this continues for all TLDs under management.

The WHOIS service for this TLD will meet or exceed the requirements in the new gTLD Registry Agreement, Specification 4.

* RFC 3912 compliance *

Afilias will operate the WHOIS infrastructure in compliance with RFCs and global best practices, as it does with the 16 TLDs Afilias currently supports.

Afilias maintains a registry-level centralized WHOIS database that contains information for every registered domain and for all host and contact objects. The WHOIS service will be available on the Internet standard WHOIS port (port 43) in compliance with RFC 3912. The WHOIS service contains data submitted by registrars during the registration process. Changes made to the data by a registrant are submitted to Afilias by the registrar and are reflected in the WHOIS database and service in near-real-time, by the instance running at the primary data center, and in

under ten seconds by the instance running at the secondary data center, thus providing all interested parties with up-to-date information for every domain. This service is compliant with the new gTLD Registry Agreement, Specification 4.

The WHOIS service maintained by Afilias will be authoritative and complete, as this will be a "thick" registry (detailed domain contact WHOIS is all held at the registry); users do not have to query different registrars for WHOIS information, as there is one central WHOIS system. Additionally, visibility of different types of data is configurable to meet the registry operator's needs.

* Searchable WHOIS *

Afilias offers a searchable WHOIS on a web-based Directory Service. Partial match capabilities are offered on the following fields: domain name, registrar ID, and IP address. In addition, Afilias WHOIS systems can perform and respond to WHOIS searches by registrant name, postal address and contact names.

Providing the ability to search important and high-value fields such as registrant name, address and contact names increases the probability of abusive behavior. An abusive user could script a set of queries to the WHOIS service and access contact data in order to create or sell a list of names and addresses of registrants in this TLD. Making the WHOIS machine readable, while preventing harvesting and mining of WHOIS data, is a key requirement integrated into the Afilias WHOIS systems. For instance, Afilias limits search returns to 50 records at a time. If bulk queries were ever necessary (e.g., to comply with any applicable laws, government rules or requirements, requests of law enforcement, or any dispute resolution process), Afilias makes such query responses available to carefully screened and limited staff members at the registry operator (and customer support staff) via an internal data warehouse. The Afilias WHOIS system accommodates anonymous access as well as pre-identified and profile-defined uses, with full audit and log capabilities.

The WHOIS service has the ability to tag query responses with labels such as "Do not redistribute" or "Special access granted". This may allow for tiered response and reply scenarios. Further, the WHOIS service is configurable in parameters and fields returned, which allow for flexibility in compliance with various jurisdictions, regulations or laws.

Afilias offers exact-match capabilities on the following fields: registrar ID, nameserver name, and nameserver's IP address (only applies to IP addresses stored by the registry, i.e., glue records). Search capabilities are fully available, and results include domain names matching the search criteria (including IDN variants). Afilias manages abuse prevention through rate limiting and CAPTCHA (described below). Queries do not require specialized transformations of internationalized domain names or internationalized data fields

Please see "Query Controls" above for details about search options and capabilities.

* Deterring WHOIS abuse *

Afilias has adopted two best practices to prevent abuse of the WHOIS service: rate limiting and CAPTCHA.

Abuse of WHOIS services on port 43 and via the Web is subject to an automated ratelimiting system. This ensures that uniformity of service to users is unaffected by a few parties whose activities abuse or otherwise might threaten to overload the WHOIS system.

Abuse of web-based public WHOIS services is subject to the use of CAPTCHA (Completely Automated Public Turing test to tell Computers and Humans Apart) technology. The use of CAPTCHA ensures that uniformity of service to users is unaffected by a few parties whose activities abuse or otherwise might threaten to overload the WHOIS system. The

registry operator will adopt a CAPTCHA on its Web-based WHOIS.

Data mining of any sort on the WHOIS system is strictly prohibited, and this prohibition is published in WHOIS output and in terms of service.

For rate limiting on IPv4, there are configurable limits per IP and subnet. For IPv6, the traditional limitations do not apply. Whenever a unique IPv6 IP address exceeds the limit of WHOIS queries per minute, the same rate-limit for the given 64 bits of network prefix that the offending IPv6 IP address falls into will be applied. At the same time, a timer will start and rate-limit validation logic will identify if there are any other IPv6 address within the original 80-bit(<48) prefix. If another offending IPv6 address does fall into the <48 prefix then rate-limit validation logic will penalize any other IPv6 addresses that fall into that given 80-bit (<48) network. As a security precaution, Afilias will not disclose these limits.

Pre-identified and profile-driven role access allows greater granularity and configurability in both access to the WHOIS service, and in volume/frequency of responses returned for queries.

Afilias staff are key participants in the ICANN Security & Stability Advisory Committee's deliberations and outputs on WHOIS, including SAC003, SAC027, SAC033, SAC037, SAC040, and SAC051. Afilias staff are active participants in both technical and policy decision making in ICANN, aimed at restricting abusive behavior.

* WHOIS staff resourcing plans *

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way.

Within Afilias, there are 11 staff members who develop and maintain the compliant WHOIS systems. They keep pace with access requirements, thwart abuse, and continually develop software. Of these resources, approximately two staffers are typically required for WHOIS-related code customization. Other resources provide quality assurance, and operations personnel maintain the WHOIS system itself. This team will be responsible for the implementation and on-going maintenance of the new TLD WHOIS service.

27. Registration Life Cycle

THE RESPONSE FOR THIS QUESTION USES ANGLE BRACKETS (THE " (" and ")" CHARACTERS, OR (and)), WHICH ICANN INFORMS US (CASE ID 11027) CANNOT BE PROPERLY RENDERED IN TAS DUE TO SECURITY CONCERNS. HENCE, THE ANSWER BELOW AS DISPLAYED IN TAS MAY NOT RENDER THE FULL RESPONSE AS INTENDED. THEREFORE, THE FULL ANSWER TO THIS QUESTION IS ALSO ATTACHED AS A PDF FILE, ACCORDING TO SPECIFIC GUIDANCE FROM ICANN UNDER CASE ID 11027.

Answers for this question (#27) are provided by Afilias, the back-end provider of registry services for this TLD.

Afilias has been managing registrations for over a decade. Afilias has had experience

managing registrations for over a decade and supports comprehensive registration lifecycle services including the registration states, all standard grace periods, and can address any modifications required with the introduction of any new ICANN policies.

This TLD will follow the ICANN standard domain lifecycle, as is currently implemented in TLDs such as .ORG and .INFO. The below response includes: a diagram and description of the lifecycle of a domain name in this TLD, including domain creation, transfer protocols, grace period implementation and the respective time frames for each; and the existing resources to support the complete lifecycle of a domain.

As depicted in Figure 27-a, prior to the beginning of the Trademark Claims Service or Sunrise IP protection program[s], Afilias will support the reservation of names in accordance with the new gTLD Registry Agreement, Specification 5.

* Registration period *

After the IP protection programs and the general launch, eligible registrants may choose an accredited registrar to register a domain name. The registrar will check availability on the requested domain name and if available, will collect specific objects such as, the required contact and host information from the registrant. The registrar will then provision the information into the registry system using standard Extensible Provisioning Protocol ("EPP") commands through a secure connection to the registry backend service provider.

When the domain is created, the standard five day Add Grace Period begins, the domain and contact information are available in WHOIS, and normal operating EPP domain statuses will apply. Other specifics regarding registration rules for an active domain include:

- The domain must be unique;
- Restricted or reserved domains cannot be registered;
- The domain can be registered from 1-10 years;
- The domain can be renewed at any time for 1-10 years, but cannot exceed 10 years;
- The domain can be explicitly deleted at any time;
- The domain can be transferred from one registrar to another except during the first 60 days following a successful registration or within 60 days following a transfer; and,

Contacts and hosts can be modified at any time.

The following describe the domain status values recognized in WHOIS when using the EPP protocol following RFC 5731.

- OK or Active: This is the normal status for a domain that has no pending operations or restrictions.
- Inactive: The domain has no delegated name servers.
- Locked: No action can be taken on the domain. The domain cannot be renewed, transferred, updated, or deleted. No objects such as contacts or hosts can be associated to, or disassociated from the domain. This status includes: Delete Prohibited / Server Delete Prohibited, Update Prohibited / Server Update Prohibited, Transfer Prohibited, Server Transfer Prohibited, Renew Prohibited, Server Renew Prohibited.
- Hold: The domain will not be included in the zone. This status includes: Client Hold, Server Hold.
- Transfer Prohibited: The domain cannot be transferred away from the sponsoring registrar. This status includes: Client Transfer Prohibited, Server Transfer Prohibited.

The following describe the registration operations that apply to the domain name during the registration period.

a. Domain modifications: This operation allows for modifications or updates to the

domain attributes to include:

- i. Registrant Contact
- ii. Admin Contact
- iii. Technical Contact
- iv. Billing Contact
- v. Host or nameservers
- vi. Authorization information
- vii. Associated status values

A domain with the EPP status of Client Update Prohibited or Server Update Prohibited may not be modified until the status is removed.

- b. Domain renewals: This operation extends the registration period of a domain by changing the expiration date. The following rules apply:
- i. A domain can be renewed at any time during its registration term,
- ii. The registration term cannot exceed a total of 10 years.

A domain with the EPP status of Client Renew Prohibited or Server Renew Prohibited cannot be renewed.

- c. Domain deletions: This operation deletes the domain from the Shared Registry Services (SRS). The following rules apply:
- i. A domain can be deleted at any time during its registration term, f the domain is deleted during the Add Grace Period or the Renew-Extend Grace Period, the sponsoring registrar will receive a credit,
- ii. A domain cannot be deleted if it has "child" nameservers that are associated to other domains.
- A domain with the EPP status of Client Delete Prohibited or Server Delete Prohibited cannot be deleted.
- d. Domain transfers: A transfer of the domain from one registrar to another is conducted by following the steps below.
- i. The registrant must obtain the applicable $\langle authInfo \rangle$ code from the sponsoring (losing) registrar.
- Every domain name has an authInfo code as per EPP RFC 5731. The authInfo code is a six- to 16-character code assigned by the registrar at the time the name was created. Its purpose is to aid identification of the domain owner so proper authority can be established (it is the "password" to the domain).
- Under the Registry-Registrar Agreement, registrars will be required to provide a copy of the authInfo code to the domain registrant upon his or her request.
- ii. The registrant must provide the authInfo code to the new (gaining) registrar, who will then initiate a domain transfer request. A transfer cannot be initiated without the authInfo code.
- Every EPP \(\dagger\tansfer\rangle\) command must contain the authInfo code or the request will
- fail. The authInfo code represents authority to the registry to initiate a transfer. iii. Upon receipt of a valid transfer request, the registry automatically asks the
- sponsoring (losing) registrar to approve the request within five calendar days.
- When a registry receives a transfer request the domain cannot be modified, renewed or deleted until the request has been processed. This status must not be combined with either Client Transfer Prohibited or Server Transfer Prohibited status.
- If the sponsoring (losing) registrar rejects the transfer within five days, the transfer request is cancelled. A new domain transfer request will be required to reinitiate the process.
- If the sponsoring (losing) registrar does not approve or reject the transfer within five days, the registry automatically approves the request.
- iv. After a successful transfer, it is strongly recommended that registrars change the authInfo code, so that the prior registrar or registrant cannot use it anymore.
- v. Registrars must retain all transaction identifiers and codes associated with successful domain object transfers and protect them from disclosure.
- vi. Once a domain is successfully transferred the status of TRANSFERPERIOD is added to the domain for a period of five days.
- vii. Successful transfers will result in a one year term extension (resulting in a maximum total of 10 years), which will be charged to the gaining registrar.
- e. Bulk transfer: Afilias, supports bulk transfer functionality within the SRS for situations where ICANN may request the registry to perform a transfer of some or all

registered objects (includes domain, contact and host objects) from one registrar to another registrar. Once a bulk transfer has been executed, expiry dates for all domain objects remain the same, and all relevant states of each object type are preserved. In some cases the gaining and the losing registrar as well as the registry must approved bulk transfers. A detailed log is captured for each bulk transfer process and is archived for audit purposes.

HOTEL TOP-LEVEL-DOMAIN S.A.R.L. will support ICANN's Transfer Dispute Resolution Process. HOTEL TOP-LEVEL-DOMAIN S.A.R.L. will work with Afilias to respond to Requests for Enforcement (law enforcement or court orders) and will follow that process.

1. Auto-renew grace period

The Auto-Renew Grace Period displays as AUTORENEWPERIOD in WHOIS. An auto-renew must be requested by the registrant through the sponsoring registrar and occurs if a domain name registration is not explicitly renewed or deleted by the expiration date and is set to a maximum of 45 calendar days. In this circumstance the registration will be automatically renewed by the registry system the first day after the expiration date. If a Delete, Extend, or Transfer occurs within the AUTORENEWPERIOD the following rules apply:

- i. Delete. If a domain is deleted the sponsoring registrar at the time of the deletion receives a credit for the auto-renew fee. The domain then moves into the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.
- ii. Renew-Extend. A domain can be renewed as long as the total term does not exceed 10 years. The account of the sponsoring registrar at the time of the extension will be charged for the additional number of years the registration is renewed.
- iii. Transfer (other than ICANN-approved bulk transfer). If a domain is transferred, the losing registrar is credited for the auto-renew fee, and the year added by the operation is cancelled. As a result of the transfer, the expiration date of the domain is extended by minimum of one year as long as the total term does not exceed 10 years. The gaining registrar is charged for the additional transfer year(s) even in cases where a full year is not added because of the maximum 10 year registration restriction.

2. Redemption grace period

During this period, a domain name is placed in the PENDING DELETE RESTORABLE status when a registrar requests the deletion of a domain that is not within the Add Grace Period. A domain can remain in this state for up to 30 days and will not be included in the zone file. The only action a registrar can take on a domain is to request that it be restored. Any other registrar requests to modify or otherwise update the domain will be rejected. If the domain is restored it moves into PENDING RESTORE and then OK. After 30 days if the domain is not restored it moves into PENDING DELETE SCHEDULED FOR RELEASE before the domain is released back into the pool of available domains.

3. Pending delete

During this period, a domain name is placed in PENDING DELETE SCHEDULED FOR RELEASE status for five days, and all Internet services associated with the domain will remain disabled and domain cannot be restored. After five days the domain is released back into the pool of available domains.

* Other grace periods *

All ICANN required grace periods will be implemented in the registry backend service provider's system including the Add Grace Period (AGP), Renew-Extend Grace Period (EGP), Transfer Grace Period (TGP), Auto-Renew Grace Period (ARGP), and Redemption Grace Period (RGP). The lengths of grace periods are configurable in the registry system. At this time, the grace periods will be implemented following other gTLDs

such as .ORG. More than one of these grace periods may be in effect at any one time. The following are accompanying grace periods to the registration lifecycle.

* Add grace period *

The Add Grace Period displays as ADDPERIOD in WHOIS and is set to five calendar days following the initial registration of a domain. If the domain is deleted by the registrar during this period, the registry provides a credit to the registrar for the cost of the registration. If a Delete, Renew/Extend, or Transfer operation occurs within the five calendar days, the following rules apply.

- i. Delete. If a domain is deleted within this period the sponsoring registrar at the time of the deletion is credited for the amount of the registration. The domain is deleted from the registry backend service provider's database and is released back into the pool of available domains.
- ii. Renew-Extend. If the domain is renewed within this period and then deleted, the sponsoring registrar will receive a credit for both the registration and the extended amounts. The account of the sponsoring registrar at the time of the renewal will be charged for the initial registration plus the number of years the registration is extended. The expiration date of the domain registration is extended by that number of years as long as the total term does not exceed 10 years.
- iii. Transfer (other than ICANN-approved bulk transfer). Transfers under Part A of the ICANN Policy on Transfer of Registrations between registrars may not occur during the ADDPERIOD or at any other time within the first 60 days after the initial registration. Enforcement is the responsibility of the registrar sponsoring the domain name registration and is enforced by the SRS.

* Renew / extend grace period *

The Renew / Extend Grace Period displays as RENEWPERIOD in WHOIS and is set to five calendar days following an explicit renewal on the domain by the registrar. If a Delete, Extend, or Transfer occurs within the five calendar days, the following rules apply:

- i. Delete. If a domain is deleted within this period the sponsoring registrar at the time of the deletion receives a credit for the renewal fee. The domain then moves into the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.
- ii. Renew/Extend. A domain registration can be renewed within this period as long as the total term does not exceed 10 years. The account of the sponsoring registrar at the time of the extension will be charged for the additional number of years the registration is renewed.
- iii. Transfer (other than ICANN-approved bulk transfer). If a domain is transferred within the Renew-Extend Grace Period, there is no credit to the losing registrar for the renewal fee. As a result of the transfer, the expiration date of the domain registration is extended by a minimum of one year as long as the total term for the domain does not exceed 10 years.
- If a domain is auto-renewed, then extended, and then deleted within the Renew/Extend Grace Period, the registrar will be credited for any auto-renew fee charged and the number of years for the extension. The years that were added to the domain's expiration as a result of the auto-renewal and extension are removed. The deleted domain is moved to the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.

* Transfer Grace Period *

The Transfer Grace period displays as TRANSFERPERIOD in WHOIS and is set to five calendar days after the successful transfer of domain name registration from one registrar to another registrar. Transfers under Part A of the ICANN Policy on Transfer of Registrations between registrars may not occur during the TRANSFERPERIOD or within the first 60 days after the transfer. If a Delete or Renew-Extend occurs within that five calendar days, the following rules apply:

i. Delete. If the domain is deleted by the new sponsoring registrar during this period, the registry provides a credit to the registrar for the cost of the transfer.

The domain then moves into the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.

ii. Renew-Extend. If a domain registration is renewed within the Transfer Grace Period, there is no credit for the transfer. The registrar's account will be charged for the number of years the registration is renewed. The expiration date of the domain registration is extended by the renewal years as long as the total term does not exceed 10 years.

This TLD will conduct an auction for certain domain names. Afilias will manage the domain name auction using existing technology. Upon the completion of the auction, any domain name acquired will then follow the standard lifecycle of a domain.

* Registration lifecycle resources *

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way. Virtually all Afilias resource are involved in the registration lifecycle of domains.

There are a few areas where registry staff devote resources to registration lifecycle issues:

- a. Supporting Registrar Transfer Disputes. The registry operator will have a compliance staffer handle these disputes as they arise; they are very rare in the existing qTLDs.
- b. Afilias has its development and quality assurance departments on hand to modify the grace period functionality as needed, if ICANN issues new Consensus Policies or the RFCs change.

Afilias has more than 30 staff members in these departments.

28. Abuse Prevention and Mitigation

HOTEL TOP-LEVEL-DOMAIN S.A.R.L., working with Afilias, will take the requisite operational and technical steps to promote WHOIS data accuracy, limit domain abuse, remove outdated and inaccurate data, and other security measures to ensure the integrity of the TLD. The specific measures include, but are not limited to:

- Posting a TLD Anti-Abuse Policy that clearly defines abuse, and provide point-of-contact information for reporting suspected abuse;
- · Committing to rapid identification and resolution of abuse, including suspensions;
- Ensuring completeness of WHOIS information at the time of registration;
- Publishing and maintaining procedures for removing orphan glue records for names removed from the zone, and;
- Establishing measures to deter WHOIS abuse, including rate-limiting, determining data syntax validity, and implementing and enforcing requirements from the Registry-Registrar Agreement.

Abuse policy

The Anti-Abuse Policy stated below will be enacted under the contractual authority of the registry operator through the Registry-Registrar Agreement, and the obligations will be passed on to and made binding upon registrants. This policy will be posted on the TLD web site along with contact information for registrants or users to report suspected abuse.

The policy is designed to address the malicious use of domain names. The registry operator and its registrars will make reasonable attempts to limit significant harm to Internet users. This policy is not intended to take the place of the Uniform Domain Name Dispute Resolution Policy (UDRP) or the Uniform Rapid Suspension System (URS), and it is not to be used as an alternate form of dispute resolution or as a brand protection mechanism. Its intent is not to burden law-abiding or innocent registrants and domain users; rather, the intent is to deter those who use domain names maliciously by engaging in illegal or fraudulent activity.

Repeat violations of the abuse policy will result in a case-by-case review of the abuser(s), and the registry operator reserves the right to escalate the issue, with the intent of levying sanctions that are allowed under the TLD anti-abuse policy.

The below policy is a recent version of the policy that has been used by the .INFO registry since 2008, and the .ORG registry since 2009. It has proven to be an effective and flexible tool.

.hotel Anti-Abuse Policy

The following Anti-Abuse Policy is effective upon launch of the TLD. Malicious use of domain names will not be tolerated. The nature of such abuses creates security and stability issues for the registry, registrars, and registrants, as well as for users of the Internet in general. The registry operator definition of abusive use of a domain includes, without limitation, the following:

- Illegal or fraudulent actions;
- Spam: The use of electronic messaging systems to send unsolicited bulk messages. The term applies to email spam and similar abuses such as instant messaging spam, mobile messaging spam, and the spamming of web sites and Internet forums;
- Phishing: The use of counterfeit web pages that are designed to trick recipients into divulging sensitive data such as personally identifying information, usernames, passwords, or financial data;
- Pharming: The redirecting of unknowing users to fraudulent sites or services, typically through, but not limited to, DNS hijacking or poisoning;
- Willful distribution of malware: The dissemination of software designed to infiltrate or damage a computer system without the owner's informed consent. Examples include, without limitation, computer viruses, worms, keyloggers, and Trojan horses.
- Malicious fast-flux hosting: Use of fast-flux techniques with a botnet to disguise the location of web sites or other Internet services, or to avoid detection and mitigation efforts, or to host illegal activities.
- Botnet command and control: Services run on a domain name that are used to control a collection of compromised computers or "zombies," or to direct distributed denial-of-service attacks (DDoS attacks);
- Illegal Access to Other Computers or Networks: Illegally accessing computers, accounts, or networks belonging to another party, or attempting to penetrate security measures of another individual's system (often known as "hacking"). Also, any activity that might be used as a precursor to an attempted system penetration (e.g., port scan, stealth scan, or other information gathering activity).

Pursuant to the Registry-Registrar Agreement, registry operator reserves the right at its sole discretion to deny, cancel, or transfer any registration or transaction, or place any domain name(s) on registry lock, hold, or similar status, that it deems necessary: (1) to protect the integrity and stability of the registry; (2) to comply with any applicable laws, government rules or requirements, requests of law enforcement, or any dispute resolution process; (3) to avoid any liability, civil or criminal, on the part of registry operator, as well as its affiliates, subsidiaries, officers, directors, and employees; (4) per the terms of the registration agreement and this Anti-Abuse Policy, or (5) to correct mistakes made by registry operator or any registrar in connection with a domain name registration. Registry operator also reserves the right to place upon registry lock, hold, or similar status a domain name during resolution of a dispute.

The policy stated above will be accompanied by notes about how to submit a report to the registry operator's abuse point of contact, and how to report an orphan glue record suspected of being used in connection with malicious conduct (see below).

Abuse point of contact and procedures for handling abuse complaints
The registry operator will establish an abuse point of contact. This contact will be
a role-based e-mail address of the form "abuse@registry.hotel". This e-mail address
will allow multiple staff members to monitor abuse reports on a 24x7 basis, and then
work toward closure of cases as each situation calls for. For tracking purposes, the
registry operator will have a ticketing system with which all complaints will be
tracked internally. The reporter will be provided with the ticket reference
identifier for potential follow-up. Afilias will integrate its existing ticketing
system with the registry operator's to ensure uniform tracking and handling of the
complaint. This role-based approach has been used successfully by ISPs, e-mail
service providers, and registrars for many years, and is considered a global best
practice.

The registry operator's designated abuse handlers will then evaluate complaints received via the abuse system address. They will decide whether a particular issue is of concern, and decide what action, if any, is appropriate.

In general, the registry operator will find itself receiving abuse reports from a wide variety of parties, including security researchers and Internet security companies, financial institutions such as banks, Internet users, and law enforcement agencies among others. Some of these parties may provide good forensic data or supporting evidence of the malicious behavior. In other cases, the party reporting an issue may not be familiar with how to provide such data or proof of malicious behavior. It is expected that a percentage of abuse reports to the registry operator will not be actionable, because there will not be enough evidence to support the complaint (even after investigation), and because some reports or reporters will simply not be credible.

The security function includes a communication and outreach function, with information sharing with industry partners regarding malicious or abusive behavior, in order to ensure coordinated abuse mitigation across multiple TLDs.

Assessing abuse reports requires great care, and the registry operator will rely upon professional, trained investigators who are versed in such matters. The goals are accuracy, good record-keeping, and a zero false-positive rate so as not to harm innocent registrants.

Different types of malicious activities require different methods of investigation and documentation. Further, the registry operator expects to face unexpected or complex situations that call for professional advice, and will rely upon professional, trained investigators as needed.

In general, there are two types of domain abuse that must be addressed:
a) Compromised domains. These domains have been hacked or otherwise compromised by criminals, and the registrant is not responsible for the malicious activity taking place on the domain. For example, the majority of domain names that host phishing sites are compromised. The goal in such cases is to get word to the registrant (usually via the registrar) that there is a problem that needs attention with the expectation that the registrant will address the problem in a timely manner. Ideally such domains do not get suspended, since suspension would disrupt legitimate activity on the domain.

b) Malicious registrations. These domains are registered by malefactors for the purpose of abuse. Such domains are generally targets for suspension, since they have no legitimate use.

The standard procedure is that the registry operator will forward a credible alleged case of malicious domain name use to the domain's sponsoring registrar with a request

that the registrar investigate the case and act appropriately. The registrar will be provided evidence collected as a result of the investigation conducted by the trained abuse handlers. As part of the investigation, if inaccurate or false WHOIS registrant information is detected, the registrar is notified about this. The registrar is the party with a direct relationship with—and a direct contract with—the registrant. The registrar will also have vital information that the registry operator will not, such as:

- Details about the domain purchase, such as the payment method used (credit card, PayPal, etc.);
- The identity of a proxy-protected registrant;
- The purchaser's IP address;
- Whether there is a reseller involved, and;
- The registrant's past sales history and purchases in other TLDs (insofar as the registrar can determine this).

Registrars do not share the above information with registry operators due to privacy and liability concerns, among others. Because they have more information with which to continue the investigation, and because they have a direct relationship with the registrant, the registrar is in the best position to evaluate alleged abuse. The registrar can determine if the use violates the registrar's legal terms of service or the registry Anti-Abuse Policy, and can decide whether or not to take any action. While the language and terms vary, registrars will be expected to include language in their registrar-registrant contracts that indemnifies the registrar if it takes action, and allows the registrar to suspend or cancel a domain name; this will be in addition to the registry Anti-Abuse Policy. Generally, registrars can act if the registrant violates the registrar's terms of service, or violates ICANN policy, or if illegal activity is involved, or if the use violates the registry's Anti-Abuse Policy.

If a registrar does not take action within a time period indicated by the registry operator (usually 24 hours), the registry operator might then decide to take action itself. At all times, the registry operator reserves the right to act directly and immediately if the potential harm to Internet users seems significant or imminent, with or without notice to the sponsoring registrar.

The registry operator will be prepared to call upon relevant law enforcement bodies as needed. There are certain cases, for example, Illegal pharmacy domains, where the registry operator will contact the Law Enforcement Agencies to share information about these domains, provide all the evidence collected and work closely with them before any action will be taken for suspension. The specific action is often dependent upon the jurisdiction of which the registry operator, although the operator in all cases will adhere to applicable laws and regulations.

When valid court orders or seizure warrants are received from courts or law enforcement agencies of relevant jurisdiction, the registry operator will order execution in an expedited fashion. Compliance with these will be a top priority and will be completed as soon as possible and within the defined timelines of the order. There are certain cases where Law Enforcement Agencies request information about a domain including but not limited to:

- Registration information
- History of a domain, including recent updates made
- Other domains associated with a registrant's account
- Patterns of registrant portfolio

Requests for such information is handled on a priority basis and sent back to the requestor as soon as possible. Afilias sets a goal to respond to such requests within 24 hours.

The registry operator may also engage in proactive screening of its zone for malicious use of the domains in the TLD, and report problems to the sponsoring registrars. The registry operator could take advantage of a combination of the

following resources, among others:

- ullet Blocklists of domain names and nameservers published by organizations such as SURBL and Spamhaus.
- Anti-phishing feeds, which will provide URLs of compromised and maliciously registered domains being used for phishing.
- Analysis of registration or DNS query data [DNS query data received by the TLD nameservers.]

The registry operator will keep records and track metrics regarding abuse and abuse reports. These will include:

- Number of abuse reports received by the registry's abuse point of contact described above;
- Number of cases and domains referred to registrars for resolution;
- · Number of cases and domains where the registry took direct action;
- Resolution times;
- Number of domains in the TLD that have been blacklisted by major anti-spam blocklist providers, and;
- Phishing site uptimes in the TLD.

Removal of orphan glue records

By definition, orphan glue records used to be glue records. Glue records are related to delegations and are necessary to guide iterative resolvers to delegated nameservers. A glue record becomes an orphan when its parent nameserver record is removed without also removing the corresponding glue record. (Please reference the ICANN SSAC paper SAC048 at: http://www.icann.org/en/committees/security/sac048.pdf.) Orphan glue records may be created when a domain (example.tld) is placed on EPP ServerHold or ClientHold status. When placed on Hold, the domain is removed from the zone and will stop resolving. However, any child nameservers (now orphan glue) of that domain (e.g., ns1.example.tld) are left in the zone. It is important to keep these orphan glue records in the zone so that any innocent sites using that nameserver will continue to resolve. This use of Hold status is an essential tool for suspending malicious domains.

Afilias observes the following procedures, which are being followed by other registries and are generally accepted as DNS best practices. These procedures are also in keeping with ICANN SSAC recommendations.

When a request to delete a domain is received from a registrar, the registry first checks for the existence of glue records. If glue records exist, the registry will check to see if other domains in the registry are using the glue records. If other domains in the registry are using the glue records then the request to delete the domain will fail until no other domains are using the glue records. If no other domains in the registry are using the glue records then the glue records will be removed before the request to delete the domain is satisfied. If no glue records exist then the request to delete the domain will be satisfied.

If a registrar cannot delete a domain because of the existence of glue records that are being used by other domains, then the registrar may refer to the zone file or the "weekly domain hosted by nameserver report" to find out which domains are using the nameserver in question and attempt to contact the corresponding registrar to request that they stop using the nameserver in the glue record. The registry operator does not plan on performing mass updates of the associated DNS records.

The registry operator will accept, evaluate, and respond appropriately to complaints that orphan glue is being used maliciously. Such reports should be made in writing to the registry operator, and may be submitted to the registry's abuse point-of-contact. If it is confirmed that an orphan glue record is being used in connection with malicious conduct, the registry operator will have the orphan glue record removed from the zone file. Afilias has the technical ability to execute such requests as needed.

Methods to promote WHOIS accuracy

The creation and maintenance of accurate WHOIS records is an important part of registry management. As described in our response to question #26, WHOIS, the registry operator will manage a secure, robust and searchable WHOIS service for this TLD.

WHOIS data accuracy

The registry operator will offer a "thick" registry system. In this model, all key contact details for each domain name will be stored in a central location by the registry. This allows better access to domain data, and provides uniformity in storing the information. The registry operator will ensure that the required fields for WHOIS data (as per the defined policies for the TLD) are enforced at the registry level. This ensures that the registrars are providing required domain registration data. Fields defined by the registry policy to be mandatory are documented as such and must be submitted by registrars. The Afilias registry system verifies formats for relevant individual data fields (e.g. e-mail, and phone-fax numbers). Only valid country codes are allowed as defined by the ISO 3166 code list. The Afilias WHOIS system is extensible, and is capable of using the VAULT system, described further below.

Similar to the centralized abuse point of contact described above, the registry operator can institute a contact email address which could be utilized by third parties to submit complaints for inaccurate or false WHOIS data detected. This information will be processed by Afilias' support department and forwarded to the registrars. The registrars can work with the registrants of those domains to address these complaints. Afilias will audit registrars on a yearly basis to verify whether the complaints being forwarded are being addressed or not. This functionality, available to all registry operators, is activated based on the registry operator's business policy.

Afilias also incorporates a spot-check verification system where a randomly selected set of domain names are checked periodically for accuracy of WHOIS data. Afilias' .PRO registry system incorporates such a verification system whereby 1% of total registrations or 100 domains, whichever number is larger, are spot-checked every month to verify the domain name registrant's critical information provided with the domain registration data. With both a highly qualified corps of engineers and a 24x7 staffed support function, Afilias has the capacity to integrate such spot-check functionality into this TLD, based on the registry operator's business policy. Note: This functionality will not work for proxy protected WHOIS information, where registrars or their resellers have the actual registrant data. The solution to that problem lies with either registry or registrar policy, or a change in the general marketplace practices with respect to proxy registrations.

Finally, Afilias' registry systems have a sophisticated set of billing and pricing functionality which aids registry operators who decide to provide a set of financial incentives to registrars for maintaining or improving WHOIS accuracy. For instance, it is conceivable that the registry operator may decide to provide a discount for the domain registration or renewal fees for validated registrants, or levy a larger cost for the domain registration or renewal of proxy domain names. The Afilias system has the capability to support such incentives on a configurable basis, towards the goal of promoting better WHOIS accuracy.

Role of registrars

As part of the RRA (Registry Registrar Agreement), the registry operator will require the registrar to be responsible for ensuring the input of accurate WHOIS data by their registrants. The Registrar/Registered Name Holder Agreement will include a specific clause to ensure accuracy of WHOIS data, and to give the registrar rights to cancel or suspend registrations if the Registered Name Holder fails to respond to the registrar's query regarding accuracy of data. ICANN's WHOIS Data Problem Reporting System (WDPRS) will be available to those who wish to file WHOIS inaccuracy reports, as per ICANN policy (http://wdprs.internic.net/).

Controls to ensure proper access to domain functions Several measures are in place in the Afilias registry system to ensure proper access to domain functions, including authentication provisions in the RRA relative to notification and contact updates via use of AUTH-INFO codes.

IP address access control lists, TLS/SSL certificates and proper authentication are used to control access to the registry system. Registrars are only given access to perform operations on the objects they sponsor.

Every domain will have a unique AUTH-INFO code. The AUTH-INFO code is a 6- to 16-character code assigned by the registrar at the time the name is created. Its purpose is to aid identification of the domain owner so proper authority can be established. It is the "password" to the domain name. Registrars must use the domain's password in order to initiate a registrar-to-registrar transfer. It is used to ensure that domain updates (update contact information, transfer, or deletion) are undertaken by the proper registrant, and that this registrant is adequately notified of domain update activity. Only the sponsoring registrar of a domain has access to the domain's AUTH-INFO code stored in the registry, and this is accessible only via encrypted, password-protected channels.

Information about other registry security measures such as encryption and security of registrar channels are confidential to ensure the security of the registry system. The details can be found in the response to question #30b.

Validation and abuse mitigation mechanisms

Afilias has developed advanced validation and abuse mitigation mechanisms. These capabilities and mechanisms are described below. These services and capabilities are discretionary and may be utilized by the registry operator based on their policy and business need.

Afilias has the ability to analyze the registration data for known patterns at the time of registration. A database of these known patterns is developed from domains and other associated objects (e.g., contact information) which have been previously detected and suspended after being flagged as abusive. Any domains matching the defined criteria can be flagged for investigation. Once analyzed and confirmed by the domain anti-abuse team members, these domains may be suspended. This provides proactive detection of abusive domains.

Provisions are available to enable the registry operator to only allow registrations by pre-authorized and verified contacts. These verified contacts are given a unique code that can be used for registration of new domains.

Registrant pre-verification and authentication
One of the systems that could be used for validity and identity authentication is
VAULT (Validation and Authentication Universal Lookup). It utilizes information
obtained from a series of trusted data sources with access to billions of records
containing data about individuals for the purpose of providing independent age and id
verification as well as the ability to incorporate additional public or private data
sources as required. At present it has the following: US Residential Coverage - 90%
of Adult Population and also International Coverage - Varies from Country to Country
with a minimum of 80% coverage (24 countries, mostly European).

Various verification elements can be used. Examples might include applicant data such as name, address, phone, etc. Multiple methods could be used for verification include integrated solutions utilizing API (XML Application Programming Interface) or sending batches of requests.

- Verification and Authentication requirements would be based on TLD operator requirements or specific criteria.
- Based on required WHOIS Data; registrant contact details (name, address, phone)

- If address/ZIP can be validated by VAULT, the validation process can continue (North America +25 International countries)
- If in-line processing and registration and EPP/API call would go to the verification clearinghouse and return up to 4 challenge questions.
- If two-step registration is required, then registrants would get a link to complete the verification at a separate time. The link could be specific to a domain registration and pre-populated with data about the registrant.
- If WHOIS data is validated a token would be generated and could be given back to the registrar which registered the domain.
- WHOIS data would reflect the Validated Data or some subset, i.e., fields displayed could be first initial and last name, country of registrant and date validated. Other fields could be generic validation fields much like a "privacy service".
- A "Validation Icon" customized script would be sent to the registrants email address. This could be displayed on the website and would be dynamically generated to avoid unauthorized use of the Icon. When clicked on the Icon would should limited WHOIS details i.e. Registrant: jdoe, Country: USA, Date Validated: March 29, 2011, as well as legal disclaimers.
- Validation would be annually renewed, and validation date displayed in the WHOIS.

Abuse prevention resourcing plans

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way. Abuse prevention and detection is a function that is staffed across the various groups inside Afilias, and requires a team effort when abuse is either well hidden or widespread, or both. While all of Afilias' 200+ employees are charged with responsibility to report any detected abuse, the engineering and analysis teams, numbering over 30, provide specific support based on the type of abuse and volume and frequency of analysis required. The Afilias security and support teams have the authority to initiate mitigation.

Afilias has developed advanced validation and abuse mitigation mechanisms. These capabilities and mechanisms are described below. These services and capabilities are discretionary and may be utilized by the registry operator based on their policy and business need.

This TLD's anticipated volume of registrations in the first three years of operations is listed in response #46. Afilias and the registry operator's anti-abuse function anticipates the expected volume and type of registrations, and together will adequately cover the staffing needs for this TLD. The registry operator will maintain an abuse response team, which may be a combination of internal staff and outside specialty contractors, adjusting to the needs of the size and type of TLD. The team structure planned for this TLD is based on several years of experience responding to, mitigating, and managing abuse for TLDs of various sizes. The team will generally consist of abuse handlers (probably internal), a junior analyst, (either internal or external), and a senior security consultant (likely an external resource providing the registry operator with extra expertise as needed). These responders will be specially trained in the investigation of abuse complaints, and will have the latitude to act expeditiously to suspend domain names (or apply other remedies) when called for.

The exact resources required to maintain an abuse response team must change with the size and registration procedures of the TLD. An initial abuse handler is necessary as a point of contact for reports, even if a part-time responsibility. The abuse handlers monitor the abuse email address for complaints and evaluate incoming reports

from a variety of sources. A large percentage of abuse reports to the registry operator may be unsolicited commercial email. The designated abuse handlers can identify legitimate reports and then decide what action is appropriate, either to act upon them, escalate to a security analyst for closer investigation, or refer them to registrars as per the above-described procedures. A TLD with rare cases of abuse would conform to this structure.

If multiple cases of abuse within the same week occur regularly, the registry operator will consider staffing internally a security analyst to investigate the complaints as they become more frequent. Training an abuse analyst requires 3-6 months and likely requires the active guidance of an experienced senior security analyst for guidance and verification of assessments and recommendations being made.

If this TLD were to regularly experience multiple cases of abuse within the same day, a full-time senior security analyst would likely be necessary. A senior security analyst capable of fulfilling this role should have several years of experience and able to manage and train the internal abuse response team.

The abuse response team will also maintain subscriptions for several security information services, including the blocklists from organizations like SURBL and Spamhaus and anti-phishing and other domain related abuse (malware, fast-flux etc.) feeds. The pricing structure of these services may depend on the size of the domain and some services will include a number of rapid suspension requests for use as needed.

For a large TLD, regular audits of the registry data are required to maintain control over abusive registrations. When a registrar with a significant number of registrations has been compromised or acted maliciously, the registry operator may need to analyze a set of registration or DNS query data. A scan of all the domains of a registrar is conducted only as needed. Scanning and analysis for a large registrar may require as much as a week of full-time effort for a dedicated machine and team.

29. Rights Protection Mechanisms

Rights protection is a core responsibility of the TLD operator, and is supported by a fully-developed plan for rights protection that includes:

- Establishing mechanisms to prevent unqualified registrations (e.g., registrations made in violation of the registry's eligibility restrictions or policies);
- Implementing a robust Sunrise program, utilizing the Trademark Clearinghouse, the services of one of ICANN's approved dispute resolution providers, a trademark validation agent, and drawing upon sunrise policies and rules used successfully in previous gTLD launches;
- Implementing a professional trademark claims program that utilizes the Trademark Clearinghouse, and drawing upon models of similar programs used successfully in previous TLD launches;
- Complying with the URS requirements;
- · Complying with the UDRP;
- Complying with the PDDRP, and;
- ullet Including all ICANN-mandated and independently developed rights protection mechanisms ("RPMs") in the registry-registrar agreement entered into by ICANN-accredited registrars authorized to register names in the TLD.

The response below details the rights protection mechanisms at the launch of the TLD (Sunrise and Trademark Claims Service) which comply with rights protection policies (URS, UDRP, PDDRP, and other ICANN RPMs), outlines additional provisions made for rights protection, and provides the resourcing plans.

Safequards for rights protection at the launch of the TLD

The launch of this TLD will include the operation of a trademark claims service according to the defined ICANN processes for checking a registration request and alerting trademark holders of potential rights infringement.

* Sunrise period *

The Sunrise Period will be an exclusive period of time, prior to the opening of public registration, when trademark and service mark holders will be able to reserve marks that are an identical match in the TLD. Following the Sunrise Period, HOTEL TOP-LEVEL-DOMAIN S.A.R.L. will open registration to qualified applicants.

The anticipated Rollout Schedule for the Sunrise Period will be approximately as follows:

- Launch of the TLD Sunrise Period begins for trademark holders and service mark holders to submit registrations for their exact marks in the TLD. To maximize fairness registrations will be processed via a randomized, round robin system, which will close 60 days following the Sunrise launch date respectively. Following this, HOTEL TOP-LEVEL-DOMAIN S.A.R.L. expects the balance of Sunrise registrations to be awarded in real-time.
- Two months after launch —The Sunrise Period will close and will be followed by a Quiet Period for testing and evaluation.
- One month after close of Quiet Period Registration in the TLD domain will be opened to qualified applicants.
- Immediately after launch the TLD's domain names begin to resolve through standard Web browsers.

* Sunrise Period Requirements & Restrictions *

Those wishing to reserve their marks in the TLD during the Sunrise Period must own a current trademark or service mark listed in the Trademark Clearinghouse.

Notice will 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 (as defined in the Trademark Clearing House) to the name to be registered during Sunrise.

Each Sunrise registration will require a minimum term of five years.

HOTEL TOP-LEVEL-DOMAIN S.A.R.L. will establish the following Sunrise eligibility requirements (SERs) as minimum requirements, verified by Clearinghouse data, and incorporate a Sunrise Dispute Resolution Policy (SDRP). The SERs include: (i) ownership of a mark that satisfies the criteria set forth in section 7.2 of the Trademark Clearing House specifications, (ii) description of 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.

The SDRP will allow challenges based on the following four grounds: (i) at time the challenged domain name was registered, the registrants 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.

* Ongoing rights protection mechanisms *

Several mechanisms will be in place to protect rights in this TLD. As described in our responses to questions #27 and #28, measures are in place to ensure domain transfers and updates are only initiated by the appropriate domain holder, and an experienced team is available to respond to legal actions by law enforcement or court orders.

This TLD will conform to all ICANN RPMs including URS (defined below), UDRP, PDDRP, and all measures defined in Specification 7 of the new TLD agreement.

* Uniform Rapid Suspension (URS) *

The registry operator will implement decisions rendered under the URS on an ongoing basis. Per the URS policy posted on ICANN's Web site as of this writing, the registry operator will receive notice of URS actions from the ICANN-approved URS providers. These emails will be directed immediately to the registry operator's support staff, which is on duty 24x7. The support staff will be responsible for creating a ticket for each case, and for executing the directives from the URS provider. All support staff will receive pertinent training.

As per ICANN'S URS guidelines, 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 remain in the TLD DNS zone file and will thus continue to resolve. The support staff will "lock" the domain by associating the following EPP statuses with the domain and relevant contact objects:

- ServerUpdateProhibited, with an EPP reason code of "URS"
- ServerDeleteProhibited, with an EPP reason code of "URS"
- ServerTransferProhibited, with an EPP reason code of "URS"
- The registry operator's support staff will then notify the URS provider immediately upon locking the domain name, via email.

The registry operator's support staff will retain all copies of emails from the URS providers, assign them a tracking or ticket number, and will track the status of each opened URS case through to resolution via spreadsheet or database.

The registry operator's support staff will execute further operations upon notice from the URS providers. The URS provider is required to specify the remedy and required actions of the registry operator, with notification to the registrant, the complainant, and the registrar.

As per the URS guidelines, if the complainant prevails, 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 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."

* Rights protection via the RRA *

The following will be memorialized and be made binding via the Registry-Registrar and Registrar-Registrant Agreements:

- The registry may reject a registration request or a reservation request, or may delete, revoke, suspend, cancel, or transfer a registration or reservation under the following criteria:
- a. to enforce registry policies and ICANN requirements; each as amended from time to

time;

- b. that is not accompanied by complete and accurate information as required by ICANN requirements and/or registry policies or where required information is not updated and/or corrected as required by ICANN requirements and/or registry policies; c. to protect the integrity and stability of the registry, its operations, and the TLD system;
- d. to comply with any applicable law, regulation, holding, order, or decision issued by a court, administrative authority, or dispute resolution service provider with jurisdiction over the registry;
- e. to establish, assert, or defend the legal rights of the registry or a third party or to avoid any civil or criminal liability on the part of the registry and/or its affiliates, subsidiaries, officers, directors, representatives, employees, contractors, and stockholders;
- f. to correct mistakes made by the registry or any accredited registrar in connection with a registration; or
- g. as otherwise provided in the Registry-Registrar Agreement and/or the Registrar-Registrant Agreement.
- * Reducing opportunities for behaviors such as phishing or pharming *

In our response to question #28, the registry operator has described its anti-abuse program. Rather than repeating the policies and procedures here, please see our response to question #28 for full details.

With specific respect to phishing and pharming, it should be noted by ICANN that this will be a single entity TLD in which HOTEL TOP-LEVEL-DOMAIN S.A.R.L. has direct control over each registrant (they are typically on staff or otherwise contractually bound) and how each registration may be used. Further, there will be no open registration period for this TLD, as it will never be an "open" TLD. Since all criminal activity (such as phishing and pharming) is precluded by the mission, values and policies of the registry operator (and its parent organization), criminal activity is not expected to be a problem. If such activity occurs due to hacking or other compromises, the registry operator will take prompt and effective steps to eliminate the activity.

In the case of this TLD, HOTEL TOP-LEVEL-DOMAIN S.A.R.L. will apply an approach that addresses registered domain names (rather than potentially registered domains). This approach will not infringe upon the rights of eligible registrants to register domains, and allows HOTEL TOP-LEVEL-DOMAIN S.A.R.L. internal controls, as well as community-developed UDRP and URS policies and procedures if needed, to deal with complaints, should there be any.

Afilias is a member of various security fora which provide access to lists of names in each TLD which may be used for malicious purposes. Such identified names will be subject to the TLD anti-abuse policy, including rapid suspensions after due process.

* Rights protection resourcing plans *

Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way.

Supporting RPMs requires several departments within the registry operator as well as within Afilias. The implementation of Sunrise and the Trademark Claims service and on-going RPM activities will pull from the 102 Afilias staff members of the

engineering, product management, development, security and policy teams at Afilias and the support staff of the registry operator, which is on duty 24x7. A trademark validator will also be assigned within the registry operator, whose responsibilities may require as much as 50% of full-time employment if the domains under management were to exceed several million. No additional hardware or software resources are required to support this as Afilias has fully-operational capabilities to manage abuse today.

30(a). Security Policy: Summary of the security policy for the proposed registry

The answer to question #30a is provided by Afilias, the back-end provider of registry services for this TLD.

Afilias aggressively and actively protects the registry system from known threats and vulnerabilities, and has deployed an extensive set of security protocols, policies and procedures to thwart compromise. Afilias' robust and detailed plans are continually updated and tested to ensure new threats are mitigated prior to becoming issues. Afilias will continue these rigorous security measures, which include:

• Multiple layers of security and access controls throughout registry and support

- Multiple layers of security and access controls throughout registry and support systems;
- ullet 24x7 monitoring of all registry and DNS systems, support systems and facilities;
- Unique, proven registry design that ensures data integrity by granting only authorized access to the registry system, all while meeting performance requirements;
- Detailed incident and problem management processes for rapid review, communications, and problem resolution, and;
- \bullet Yearly external audits by independent, industry-leading firms, as well as twice-yearly internal audits.
- * Security policies and protocols *

Afilias has included security in every element of its service, including facilities, hardware, equipment, connectivity/Internet services, systems, computer systems, organizational security, outage prevention, monitoring, disaster mitigation, and escrow/insurance, from the original design, through development, and finally as part of production deployment. Examples of threats and the confidential and proprietary mitigation procedures are detailed in our response to question #30(b).

There are several important aspects of the security policies and procedures to note:
• Afilias hosts domains in data centers around the world that meet or exceed global best practices.

- Afilias' DNS infrastructure is massively provisioned as part of its DDoS mitigation strategy, thus ensuring sufficient capacity and redundancy to support new gTLDs.
- Diversity is an integral part of all of our software and hardware stability and robustness plan, thus avoiding any single points of failure in our infrastructure.
- Access to any element of our service (applications, infrastructure and data) is only provided on an as-needed basis to employees and a limited set of others to fulfill their job functions. The principle of least privilege is applied.
- All registry components critical and non-critical are monitored 24x7 by staff at our NOCs, and the technical staff has detailed plans and procedures that have stood the test of time for addressing even the smallest anomaly. Well-documented incident management procedures are in place to quickly involve the on-call technical and management staff members to address any issues.

Afilias follows the guidelines from the ISO 27001 Information Security Standard (Reference: http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm? csnumber=42103) for the management and implementation of its Information Security

Management System. Afilias also utilizes the COBIT IT governance framework to facilitate policy development and enable controls for appropriate management of risk (Reference: http://www.isaca.org/cobit). Best practices defined in ISO 27002 are followed for defining the security controls within the organization. Afilias continually looks to improve the efficiency and effectiveness of our processes, and follows industry best practices as defined by the IT Infrastructure Library, or ITIL (Reference: http://www.itil-officialsite.com/).

The Afilias registry system is located within secure data centers that implement a multitude of security measures both to minimize any potential points of vulnerability and to limit any damage should there be a breach. The characteristics of these data centers are described fully in our response to question #30(b).

The Afilias registry system employs a number of multi-layered measures to prevent unauthorized access to its network and internal systems. Before reaching the registry network, all traffic is required to pass through a firewall system. Packets passing to and from the Internet are inspected, and unauthorized or unexpected attempts to connect to the registry servers are both logged and denied. Management processes are in place to ensure each request is tracked and documented, and regular firewall audits are performed to ensure proper operation. 24x7 monitoring is in place and, if potential malicious activity is detected, appropriate personnel are notified immediately.

Afilias employs a set of security procedures to ensure maximum security on each of its servers, including disabling all unnecessary services and processes and regular application of security-related patches to the operating system and critical system applications. Regular external vulnerability scans are performed to verify that only services intended to be available are accessible.

Regular detailed audits of the server configuration are performed to verify that the configurations comply with current best security practices. Passwords and other access means are changed on a regular schedule and are revoked whenever a staff member's employment is terminated.

* Access to registry system *

Access to all production systems and software is strictly limited to authorized operations staff members. Access to technical support and network operations teams where necessary are read only and limited only to components required to help troubleshoot customer issues and perform routine checks. Strict change control procedures are in place and are followed each time a change is required to the production hardware/application. User rights are kept to a minimum at all times. In the event of a staff member's employment termination, all access is removed immediately.

Afilias applications use encrypted network communications. Access to the registry server is controlled. Afilias allows access to an authorized registrar only if each of the authentication factors matches the specific requirements of the requested authorization. These mechanisms are also used to secure any web-based tools that allow authorized registrars to access the registry. Additionally, all write transactions in the registry (whether conducted by authorized registrars or the registry's own personnel) are logged.

EPP connections are encrypted using TLS/SSL, and mutually authenticated using both certificate checks and login/password combinations. Web connections are encrypted using TLS/SSL for an encrypted tunnel to the browser, and authenticated to the EPP server using login/password combinations.

All systems are monitored for security breaches from within the data center and without, using both system-based and network-based testing tools. Operations staff also monitor systems for security-related performance anomalies. Triple-redundant

continual monitoring ensures multiple detection paths for any potential incident or problem. Details are provided in our response to questions #30(b) and #42. Network Operations and Security Operations teams perform regular audits in search of any potential vulnerability.

To ensure that registrar hosts configured erroneously or maliciously cannot deny service to other registrars, Afilias uses traffic shaping technologies to prevent attacks from any single registrar account, IP address, or subnet. This additional layer of security reduces the likelihood of performance degradation for all registrars, even in the case of a security compromise at a subset of registrars.

There is a clear accountability policy that defines what behaviors are acceptable and unacceptable on the part of non-staff users, staff users, and management. Periodic audits of policies and procedures are performed to ensure that any weaknesses are discovered and addressed. Aggressive escalation procedures and well-defined Incident Response management procedures ensure that decision makers are involved at early stages of any event.

In short, security is a consideration in every aspect of business at Afilias, and this is evidenced in a track record of a decade of secure, stable and reliable service.

* Independent assessment *

Supporting operational excellence as an example of security practices, Afilias performs a number of internal and external security audits each year of the existing policies, procedures and practices for:

- Access control;
- Security policies;
- Production change control;
- · Backups and restores;
- Batch monitoring;
- Intrusion detection, and
- · Physical security.

Afilias has an annual Type 2 SSAE 16 audit performed by PricewaterhouseCoopers (PwC). Further, PwC performs testing of the general information technology controls in support of the financial statement audit. A Type 2 report opinion under SSAE 16 covers whether the controls were properly designed, were in place, and operating effectively during the audit period (calendar year). This SSAE 16 audit includes testing of internal controls relevant to Afilias' domain registry system and processes. The report includes testing of key controls related to the following control objectives:

- Controls provide reasonable assurance that registrar account balances and changes to the registrar account balances are authorized, complete, accurate and timely.
- Controls provide reasonable assurance that billable transactions are recorded in the Shared Registry System (SRS) in a complete, accurate and timely manner.
- Controls provide reasonable assurance that revenue is systemically calculated by the Deferred Revenue System (DRS) in a complete, accurate and timely manner.
- Controls provide reasonable assurance that the summary and detail reports, invoices, statements, registrar and registry billing data files, and ICANN transactional reports provided to registry operator(s) are complete, accurate and timely.
- Controls provide reasonable assurance that new applications and changes to existing applications are authorized, tested, approved, properly implemented and documented.
- Controls provide reasonable assurance that changes to existing system software and implementation of new system software are authorized, tested, approved, properly implemented and documented.
- Controls provide reasonable assurance that physical access to data centers is restricted to properly authorized individuals.

- Controls provide reasonable assurance that logical access to system resources is restricted to properly authorized individuals.
- Controls provide reasonable assurance that processing and backups are appropriately authorized and scheduled and that deviations from scheduled processing and backups are identified and resolved.

The last Type 2 report issued was for the year 2010, and it was unqualified, i.e., all systems were evaluated with no material problems found.

During each year, Afilias monitors the key controls related to the SSAE controls. Changes or additions to the control objectives or activities can result due to deployment of new services, software enhancements, infrastructure changes or process enhancements. These are noted and after internal review and approval, adjustments are made for the next review.

In addition to the PricewaterhouseCoopers engagement, Afilias performs internal security audits twice a year. These assessments are constantly being expanded based on risk assessments and changes in business or technology.

Additionally, Afilias engages an independent third-party security organization, PivotPoint Security, to perform external vulnerability assessments and penetration tests on the sites hosting and managing the Registry infrastructure. These assessments are performed with major infrastructure changes, release of new services or major software enhancements. These independent assessments are performed at least annually. A report from a recent assessment is attached with our response to question #30(b).

Afilias has engaged with security companies specializing in application and web security testing to ensure the security of web-based applications offered by Afilias, such as the Web Admin Tool (WAT) for registrars and registry operators.

Finally, Afilias has engaged IBM's Security services division to perform ISO 27002 gap assessment studies so as to review alignment of Afilias' procedures and policies with the ISO 27002 standard. Afilias has since made adjustments to its security procedures and policies based on the recommendations by IBM.

* Special TLD considerations *

Afilias' rigorous security practices are regularly reviewed; if there is a need to alter or augment procedures for this TLD, they will be done so in a planned and deliberate manner.

* Commitments to registrant protection *

With over a decade of experience protecting domain registration data, Afilias understands registrant security concerns. Afilias supports a "thick" registry system in which data for all objects are stored in the registry database that is the centralized authoritative source of information. As an active member of IETF (Internet Engineering Task Force), ICANN'S SSAC (Security & Stability Advisory Committee), APWG (Anti-Phishing Working Group), MAAWG (Messaging Anti-Abuse Working Group), USENIX, and ISACA (Information Systems Audits and Controls Association), the Afilias team is highly attuned to the potential threats and leading tools and procedures for mitigating threats. As such, registrants should be confident that:

- Any confidential information stored within the registry will remain confidential;
- The interaction between their registrar and Afilias is secure;
- The Afilias DNS system will be reliable and accessible from any location;
- The registry system will abide by all polices, including those that address registrant data;
- Afilias will not introduce any features or implement technologies that compromise access to the registry system or that compromise registrant security.

Afilias has directly contributed to the development of the documents listed below and we have implemented them where appropriate. All of these have helped improve registrants' ability to protect their domains name(s) during the domain name lifecycle.

- [SAC049]: SSAC Report on DNS Zone Risk Assessment and Management (03 June 2011)
- [SAC044]: A Registrant's Guide to Protecting Domain Name Registration Accounts (05 November 2010)
- [SAC040]: Measures to Protect Domain Registration Services Against Exploitation or Misuse (19 August 2009)
- [SAC028]: SSAC Advisory on Registrar Impersonation Phishing Attacks (26 May 2008)
- [SAC024]: Report on Domain Name Front Running (February 2008)
- [SAC022]: Domain Name Front Running (SAC022, SAC024) (20 October 2007)
- [SAC011]: Problems caused by the non-renewal of a domain name associated with a DNS Name Server (7 July 2006)
- [SAC010]: Renewal Considerations for Domain Name Registrants (29 June 2006)
- [SAC007]: Domain Name Hijacking Report (SAC007) (12 July 2005)

To protect any unauthorized modification of registrant data, Afilias mandates TLS/SSL transport (per RFC 5246) and authentication methodologies for access to the registry applications. Authorized registrars are required to supply a list of specific individuals (five to ten people) who are authorized to contact the registry. Each such individual is assigned a pass phrase. Any support requests made by an authorized registrar to registry customer service are authenticated by registry customer service. All failed authentications are logged and reviewed regularly for potential malicious activity. This prevents unauthorized changes or access to registrant data by individuals posing to be registrars or their authorized contacts.

These items reflect an understanding of the importance of balancing data privacy and access for registrants, both individually and as a collective, worldwide user base.

The Afilias 24-7 Customer Service Center consists of highly trained staff who collectively are proficient in 15 languages, and who are capable of responding to queries from registrants whose domain name security has been compromised — for example, a victim of domain name hijacking. Afilias provides specialized registrant assistance guides, including specific hand-holding and follow-through in these kinds of commonly occurring circumstances, which can be highly distressing to registrants

* Security resourcing plans *

Please refer to our response to question #30b for security resourcing plans.

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