Report of Public Comments

gTLD Marketplace Health Index Proposal: Call for Comments and Volunteers	
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Comment Period:		**Important Information Links**	
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		View Comments Submitted	

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Section I: General Overview and Next Steps

ICANN sought community input to facilitate the creation of a gTLD Marketplace Health Index. This Index will analyze the overall health and diversity of the global gTLD marketplace.

The gTLD Marketplace Health Index will be one piece of a broader, cross-organizational ICANN Key Performance Indicator (KPI) Dashboard, now in beta (https://www.icann.org/progress). In line with ICANN's values of accountability, transparency, and operational excellence, this KPI Dashboard will be a living management tool to track progress on ICANN's five strategic objectives and the related 16 goals.

The KPI Dashboard is intended to:

Provide clarity on how strategies will be achieved;

Focus on what's essential and requires attention; and

Enable improvements via monitoring progress toward targets.

The gTLD Marketplace Health Index will further ICANN's goal of supporting the evolution of the gTLD marketplace to be robust, stable, and trusted.

ICANN developed a set of candidate concepts for community discussion to inform its creation of the gTLD Marketplace Health Index. These concepts are set forth in detail below, and focus on (i) robust competition, (ii) consumer trust, and (iii) non-technical stability.

These proposed concepts are intended to facilitate community discussion about what it means for the global gTLD marketplace to be "healthy." This community discussion is expected to produce measurable factors to serve as key performance indicators for the gTLD marketplace.

ICANN also solicited expressions of interest from volunteers for a gTLD Marketplace Health Index Advisory Panel.

The public comment forum resulted in significant feedback from interested community members and volunteers. Fourteen public comments were submitted to ICANN, and 28 individuals volunteered for the Advisory Panel. ICANN thanks the community for its interest in and contribution to this project. ICANN is

analyzing the public comments and reviewing the proposal in light of the community input received.

ICANN will consult with the Advisory Panel over the next few months as it works to finalize the first data to be published gTLD Marketplace Health Index, and aims to publish the first Index no later than 30 June 2016.

Section II: Contributors

At the time this report was prepared, a total of fourteen (14) community submissions had been posted to the Forum. The contributors, both individuals and organizations/groups, are listed below in chronological order by posting date with initials noted. To the extent that quotations are used in the foregoing narrative (Section III), such citations will reference the contributor's initials.

Organizations and Groups:

Name	Submitted by	Initials
ALAC	ALAC	ALAC
AFNIC	Loic Damilaville	AFNIC
Brand Registry Group	Philip Sheppard	BRG
Registries Stakeholder Group	Stephane Van Gelder	RySG
Security and Stability Advisory Committee	Patrik Faltstrom	SSAC
Domain Name Association	Mason Cole, Adrian Kinderis	DNA
ICANN Intellectual Property Constituency	Greg Shatan	IPC
ICANN Business Constituency	Steve DelBianco	BC

Individuals:

Name	Affiliation (if provided)	Initials
Greg Aaron	Illumintel Inc.	GA
John Poole	DomanMondo.com	JP
Wael Nasr	TLDVIilla LLC	WN
Susan Payne	Valideus Ltd.	SP
Carlos Raul Gutierrez		CRG
Judy Song-Marshall	Neustar	JSM

Section III: Summary of Comments

General Disclaimer: This section is intended to broadly and comprehensively summarize the comments submitted to this Forum, but not to address every specific position stated by each contributor. Staff recommends that readers interested in specific aspects of any of the summarized comments, or the full context of others, refer directly to the specific contributions at the link referenced above (View Comments Submitted).

Scope and Process

"[A]ny results published by ICANN should separate out .brands and generic TLDs." (BRG)

"We believe that further clarification should be provided about the purpose and application of the indicators, and that follow-on processes should be put in place to ensure that such indicators remain relevant to their purpose." (RySG)

"The indicators proposed for measuring trust in the gTLD marketplace are very narrowly targeted such that it is unlikely that they would directly impact overall trust in the gTLD marketplace or even be perceptible to

average registrants and users. An alternative approach would be to rely on surveys and studies of registrants and users to identify what signals they rely upon when determining whether they trust a particular gTLD, registry operator, registrar or reseller, as well as directly poll their level of trust in the domain names supply chain as a whole[…]" (RySG)

"It may be necessary to exclude the legacy gTLDs from some of the KPIs, or to include a measure of the new gTLDs and legacy gTLDs separately." (SP

"It will also be important to consider and take into account the impact of closed Brand registries qualifying for specification 13, and potentially also those registries which have been granted an exemption from the Registry Operator Code of Conduct, when applying these KPIs… For example, brand registries are only permitted to have three registrars, so number of registrars per TLD are not relevant." (SP)

"[T]he IPC questions the rationale for developing a Marketplace Health Index that focuses not on the health of the domain name system itself, but on the robustness of the market for domain names and registries the New gTLD program has created. While we recognize the efforts and effects of the New gTLD program to provide opportunities for new and innovative registries, the proposed Index appears to focus on the value of domain names and not the value of the New gTLD program to the end users." (IPC)

"IPC believes that the Community Questions, while useful in focusing the discussion, should be a guide for the Advisory Panel, rather than the proposed KPIs – which reflect an analytical bias to measure the quantity of commerce in the New gTLDs rather than the quality of new registries and the health of the domain name system overall. These issues should be explored fully, beginning with the principles underlying the program and the system itself, and moving to consider what "health" means in relation to the system." (IPC)

"We believe the Advisory Panel should seek to include consideration of the experiences of individuals, commercial entities, and organizations in regard to gTLDs, and not focus merely on the effects and opportunities of the domain name, registry, and investor communities." (IPC)

"The BC encourages ICANN staff and the advisory panel to consider factors that provide solid, objective conclusions as to trust, robustness, and stability, and to view the proposed KPIs with scrutiny against this standard. The proposed KPIs are insufficient at covering all of the gTLD space, as they were selected prior to community discussion. Recognizing that the request for comments to these KPIs is intended to facilitate community discussion, the BC encourages use of the best measures to reach stated conclusions. For example, are the best measures being used when "robust" is equated with "large," trust is based on fewest complaints, and stability is determined by a low rate of incident/breach reports? These points deserve community discussion and research." (BC)

"[T]he BC suggests that in addition to regular, dynamic reporting of fresh data, comparative reporting that includes multi-period trend lines also be developed." (BC)

"As far as the CCT work is concerned, the IAG has suggested in Appendix 2 of its report a matrix format, in which 7 categories of data (I. Technical metrics, II. Registration Data, III. Law enforcement/domain abuse, etc. etc.) would be examined on the axes of choice, competition and trust. I think it is worthwhile to use the same framework or similar approach for the health index so as to avoid double work or overlaps." (CRG)

"We would encourage ICANN and the Advisory Panel to ensure that in drafting the Key Performance

Indicators:
• all metrics will continue to be meaningful as the number of TLDs and domain names grow;
• all relative measures have a well-defined base; and
• that the metric represents the true risk to the reputation and trust of the TLD, rather than the propensity of the involved parties to raise issues.

Also we encourage ICANN and the Advisory Panel to consider a target setting mechanism for each metric to determine if they are above or below acceptable levels. Further we note that in the call for Advisory Panel Volunteers that ICANN states that 'Experience in the global domain name industry, economics, and data analytics will be particularly helpful to the Advisory Panel's work.' We would strongly suggest that the panel must have one or more experts in data analytics, and should the community volunteers not have such experience available, that a third party is engaged to provide such advice." (JSM)

"Regarding .COM, aside from it being a gTLD, its economic health is not in question. The economic health of hundreds of other TLDs is not so clear. The BC suggests that this should be considered whenever a metric's inclusion of .COM impacts the numbers greatly. Among other insights, these reports are intended to inform the community about the degree of trust in the marketplace. This is another place where .COM's marketplace experience may be vastly different than other gTLDs, and may obfuscate needed data on marketplace trust in them. For these reasons it may be prudent to develop additional reporting that explicitly excludes .COM. Weighting, filtering and/or other mechanisms may be appropriate for many KPIs to ensure .COM and larger TLDs don't obscure potential problems (e.g., segmentation by gTLD or geographic area, weighting of per-gTLD data by that gTLD's # of registrations, etc.)." (BC)

Proposed Additional Data Sources

"The SSAC warns that, at least for metrics related to security, including consumer trust, and stability of the marketplace, relevant KPIs will require access to data that is not currently being shared (or perhaps not even being collected) by registrars or registries." (SSAC)

"For metrics related to economics and marketplace health, an ICANN-commissioned economics analysis in 2010 of the then-proposed new generic Top Level Domain (gTLD) program concluded that: '…*in order to derive the greatest informational benefits from the next round of gTLD introductions, ICANN should adopt practices that will facilitate the assessment of the net benefits from the initial rollout of additional gTLDs. Specifically, ICANN should require registries, registrars, and domain names registrants to provide information sufficient to allow the estimation of the costs and benefits of new gTLDs.'* The SSAC's recent investigation that led to the publication of SAC074: SSAC Advisory on Registrant Protection – Best Practices for Preserving Security and Stability in the Credential Management Lifecycle provided additional evidence for this conclusion. In that study, the SSAC found that the lack of consistently available information about data breaches at registrars and registries, and the nature and impact of attacks that may use credential management vulnerabilities as a vector, leaves the SSAC without some useful data that would help it analyze those problems, and which is related to the objectives of the Marketplace Health Index." (SSAC)

"The SSAC notes that to develop and maintain effective metrics of security and stability of the gTLD ecosystem, ICANN will have to undertake auditing activity, including mandating future disclosure of aspects of registry and registrar operations and behavior, in a form that emphasizes consumer protection over industry norms." (SSAC)

"One data source is shown as <u>ICANN Competition, Consumer Trust, and Consumer Choice (CCT) metrics project</u>. The ALAC believes that other concepts should also consider recommendations from this group regarding sources of data. Nielsen reports are one such source but there are plenty of others that provide data that is readily usable." (ALAC)

"I would suggest you start by collecting and publishing domain name registration data for every TLD in the Root Zone daily—New, Removed, Transferred, Net, Totals." (JP)

"Obtain data from reputable security firms such as IID and Blue Coat as to which TLDs are the 'shadiest' and being blocked by security firms and network administrators." (JP)

"There are a number of potential additional data sources (all of which should be in the public domain or available directly to ICANN staff without additional reporting) which would be relevant to this piece of work: statistics on registry/registrar families, registrations per TLD, relative numbers of domains which are parked, registries terminating or not renewing their RA, registry transfers/assignments." (BRG)

Comments on Proposed KPIs

Robust and Competitive gTLD Marketplace

Proposed KPI	Comment(s)
a) Number of countries with at least one ICANN-accredited registrar	"[T]he ALAC's suggestion is to have an index related to population, for instance, 'number of registrars per 100,000 inhabitants, or similar. This index could reflect the levels of DNS market penetration, consumer choice, and consumer support in a country/location." (ALAC) "A more meaningful approach would be to measure domain registration volumes across different countries and then to cross-segment this data by registrar and by registry and study the distribution. This would better capture overall global market penetration, whether providers were competing effectively in these marketplaces, and whether registrants were offered widespread choice in service provider regardless of where they reside." (RySG) "[T]he first proposed KPI…could be as important as the number of registrants from each particular country that choose a (new) gTLD instead of a ccTLD. This information should be readily available from whois without compromising the identity of the registrant (City and Country)." (CRG)
b) Average number of registrars offering each gTLD	"Agree. Also, this should be paired with a transaction metric – proposed below – that captures uptake in addition to what is on offer [explained in detail below in "Proposed New KPIs section of this report]. We should also account for closed and otherwise restricted models. We should also take into account for what purpose the domains are actually used for, as part of the 'uptake' metric." (BC) "This assumption is flawed, because many gTLDs are not intended for wide accessibility. An example are the .BRAND TLDs, many of which are deliberately accessible via one registrar only. The KPI does not take into account the diversity of the

	market and the incentives of the varied registries and registrars." (GA)
	"[T]he figure should be adjusted to exclude gTLDs that have qualified for Specification 13 (Brand TLDs) or for an exemption to the Registry Operator Code of Conduct… Geo and Community TLDs, while open in nature to their constituents, both require more technical integration work and appeal to smaller audiences, resulting in less interest from registrars than the purely generic strings. Such comparisons should probably be avoided or at least be done both globally and by category, in order to allow for meaningful analyses." (RySG)
	"We suggest that traditional measures used by retailers in all sorts of industries be used instead. There are two main measures. The first is called Numeric Distribution. Applied to the gTLD marketplace, this would be defined as the percentage of registrars offering a given gTLD within the set of registrars offering at least one gTLD. Because the registrar market is concentrated, with the top 10 representing more than three quarters of all SLD registrations, this item should be brought together with the other common indicator used to measure consumer markets: Weighed Distribution. This measures how much registrars selling one gTLD contribute to the total number of registrations." (RySG)
	"Key Performance Indicator 'I.b' for instance will be skewed by the number of .brand Registry Operators." (JSM)
c) Number of registrars offering IDN registrations	"KPIs reflecting at least the number of IDN domain names registered are key…Other KPIs reflecting the number of live IDN domains and the progress of IDN Universal Acceptance should add value, too." (WN)
	"We believe that a better measure would be to look at the overall volume of registration for IDN domains, and then to cross-segment this volume by registrar and registry… Figures could be further broken out by script for an even more detailed picture of competition as it affects specific non-English user categories." (RySG)
d) Ratio of registrars to registrar "families"	"A better approach would be to consolidate registry and registrar families when looking at the other competition indicators." (RySG)
	"We believe that several of the proposed KPIs – in particular those comparing the number of individual registrars and registries to "families" of the same – are not necessarily indicative of the health of the marketplace or the system, unless they are coupled with qualitative analysis." (IPC)
	"We should also review market share broken out across families." (BC)
e) Ratio of registries to registry "families"	"A better approach would be to consolidate registry and registrar families when looking at the other competition indicators." (RySG)
	"'I.e', fails to take into account the emergence of registry service providers as a result of the New gTLD Program; from the 'Draft - Program Implementation Review':

	"Although 1,930 applications were submitted, most shared one of a relatively small number of technical infrastructures (less than 50). In fact, 90% of applications shared one of 13 technical infrastructures…" Thus Key Performance Indicator 'I.e' while indicating diversity amongst technical providers does not take into account the operational reality of the marketplace, where Registry Operators seek technical providers to deliver services for them; nor is the concept of "family" defined." (JSM)
f) Innovation and introduction of new services	"RSEP data is not indicative of innovation or new services. The overwhelming number of RSEP request are for non-innovative and old services, like release of two-character domains, standard IDN sets, and country & territory names." (GA) "We recommend that this metric be eliminated as it is overly vague and, unlike the other indicators proposed, is difficult to measure and track in a meaningful way." (RySG) "Unlike the other metrics proposed, which are objectively measureable, this one can only be measured subjectively unless "innovation" is more specifically defined." (BC)
g) gTLD renewal rates	"Agree – this metric should explicitly capture renewal and deletion rates and be paired with an additional metric that captures new registrations…[I]f possible clarify what the "new registrations" are being used for (if at all)." (BC) "The proposed assumption is that 'A greater ratio of renewals to deletions of second-level gTLDs might reflect greater actual use or intent to use domains and a greater perception of those domains' intrinsic value by registrants.' Actual use is different from intent to use. Neither is demonstrated by renewal rate, and intent to use cannot be gauged reliably. Actual usage can be measured by more accurate and objective means, including spidering sites to see if they have non-parking content on them." (GA) "It is not relevant to track this for .brands and it would not be reasonable to request that .brands respond to surveys requesting this information." (BRG) "This indicator would be more useful if measured alongside gTLD registration volumes. Looking solely at renewal rates would fail to fully capture the actual demand for a particular gTLD." (RySG) "The Renewal Rate should also take into account the age of a domain name registration." (RySG) "Further to the issue of registrations, it would be preferable to focus on new registrations in various TLDs, and not specifically registrations in legacy gTLDs and renewal of 'old' registrations." (RySG)
General comments	"[The] market shall be 'robust,' that is to say, it shall not depend on a limited number of players… 'Competitive' means that competition is open to new players and 'fair'

among existing players." (AFNIC)

Trusted gTLD Marketplace

Proposed KPI	Comment(s)
a) Decisions against registry operators arising from Registry Restrictions Dispute Resolutions Procedure (RRDRP)	"Agree – it is important that this metric not inappropriately impact the implementation of RRDRP." (BC)
b) Relative incidence of UDRP and URS decisions against registrants	"Agree – however, correctly decided decisions against registrants can increase trust in the gTLD RPMs, so it is important that this metric not inappropriately impact the implementation of UDRP and URS. The KPI should measure not just the total number of decisions in which a registrant is found to be infringing, but should track the total number of decisions as a percentage of total annual domain registrations subject to these RPMs, to better indicate whether infringement is proportionately increasing or declining as total domain registrations increase." (BC) "Additionally UDRP and URS decisions comparing .brands to generics would be helpful. We assume it is the intention to assess the incidence relative to overall numbers of domain registrations in the TLD." (BRG) "[M]etrics relating to the outcomes of dispute resolution procedures or of compliance complaints may not be meaningful without an evaluation of the efficacy of those procedures." (IPC) "Key Performance Indicator 'II.b', 'II.c' and 'II.d' speak to "relative incidence" without definition of what the measure is relative to." (JSM)
c) Relative incidence of ICANN breach notices issued to registries and registrars.	"Agree – it is important that his metric not inappropriately influence breach reporting." (BC) "This KPI needs to be re-thought for the following reasons: One the Compliance Department decides when to send breach notices. So ICANN controls this KPI and the metrics. Two, the number of breach notices does not tell us anything about how many registries or registrars are actually out of compliance." (GA)

	"Key Performance Indicator 'II.c' may also be skewed by a registry service provider experiencing technical issues, which may affect multiple TLDs." (JSM) "Key Performance Indicator 'II.c' and 'II.d' refer to "breach notices issued", and "complaints regarding inaccurate, invalid, or suspect Whois records" without defining that in order to be considered a negative indicator of reputation or trust the notice or complaint must be upheld." (JSM)
d) Quantity and relative incidence of complaints regarding inaccurate, invalid, or suspect Whois records	"Agree, so long as the metric is adjusted to account for complaints that result in decisions against the registrant. This approach has the benefit of consistency with the treatment of URS and UDRP decisions set forth above." (BC) "Use of the term 'complaints' indicates that ICANN wishes to use the data from its Whois Inaccuracy Complaint Form. The number of inaccuracy complaints has no demonstrable correlation with the public's perception. Clearly there are many, many times more invalid Whois records than are reported to ICANN…. Indeed, statistics should be provided by the Whois Accuracy Reporting System (ARS) that ICANN has been building." (GA) "Additionally Whois accuracy complaints comparing .brands to generics would be helpful. We assume it is the intention to assess the incidence relative to overall numbers of domain registrations in the TLD." (BRG) "The metric involving WHOIS records and complaints assumes that a low number of complaints is an indication of greater reputation and trust, as opposed to the indication that people have given up on the ICANN WHOIS reporting process." (BC)
General comments	"[T]he 'trust' of the Marketplace shall be studied from the registrants' and users' point of view, and measured according to the risks they experience registering or using a given gTLD." (AFNIC)

Stable gTLD Marketplace

Proposed KPI	Comment(s)
a) Number of data security breach reports made to ICANN (as required by the 2013 RAA).	"[T]he SSAC supports ICANN's proposal to report the number of data security breaches reported by registrars, as required by the 2013 RAA. Such a proposal is in line with SSAC's recommendations in SAC074. However, the SSAC disagrees with the hypothesis (in section III.a) that 'A smaller number of security breach reports could correlate to a stronger perception of marketplace stability among consumers.' The number of reported breaches does not correlate to the perception of stability of the marketplace. Rather it reflects what is currently an ineffective and incentive-misaligned reporting mechanism." (SSAC)

	"'III.a' and 'III.b' do not take into account, the severity of the incident, nor the number of sites or registrars vulnerable to such attacks." (JSM)
b) Total number of unique phishing reports	"We suggest to move the 'Phishing KPI' from Stable gTLD Marketplace into this group of KPI [Trusted gTLD Marketplace]." (AFNIC) "The APWG's quarterly trends reports do not distinguish between phishing on gTLD domains versus ccTLD domains and therefore are not appropriate for the proposed use. The Global Phishing Survey Reports provide breakdowns by TLD, and so the stats can be separated into gTLD and ccTLD. More crucially, the Global Phishing Survey Reports distinguish between domain names registered by phishers and domains that were broken into on compromised servers. Domain names registered by phishers are more relevant to the trust issue." (GA) "There are additional categories of domain registrations that are reported for abusive, fraudulent, or malicious purposes. Some of these include spam and malware campaigns, as well as domains used in botnet control operations. These present greater security problems for Internet users, are obtained via registration systems, and affect user perceptions of Internet security and usability. ICANN should collect and disseminate information about known categories of how domain registrations are used for abusive and fraudulent purposes." (SSAC, see additional recommended metrics under proposed additional KPIs, below).
c) Number of registry service-level compliance issues per TLD detected per calendar month	[No comments were submitted on this proposed KPI].
General comments	"The BRG suggests that in this context 'stability' refers to factors related to the marketplace such as renewal rates for domain names, failure rates for registries, and so on, and not to matters related to the security and stability of the root zone." (BRG)

Proposed Additional KPIs

Domain Name Status/Activity
"From the perspective of FINAL USERS, one of the basic Indicators of health of the DNS should be if the domain name is not only secure, but also alive and ACTIVE. One of the basic metrics should track:
-How many domain names are just parked and/or for resale,
-How many domain names are live in a server, but not actually used (no WWW nor MX records),
-How many domain names have an active webpage and what level of traffic do they generate, and
-How many domain names just redirect to a domain name in a legacy TLD.
This data is readily available from various third-party analytical companies, such as Nielsen Reports." (ALAC)

"A case for analysis the demand side is particularly relevant if the new registration is just the same person or company moving from an old one, or even more important from the economic perspective, is moving from a ccTLD. Furthermore chances are high that this new registry is being done by the same registrant that is

keeping the two old ones (gTLD and ccTLD). While your metrics would look at the number of new domain names, we have no way to check if the same registrant is registering more names without making full new webpages. Since the privacy of the registrants is still an open issue, I suggest that statical samples have to be analysed on a regular basis to check for the level of activity of the domain names (either parked with an email address or redirection to an active website, versus active websites)." (CRG)

"Furthermore it is necessary to clearly understand how [gTLDs are] being used and their level of activity over specific time periods. In that way we can understand how many [registrations are] for defensive purposes only, as opposed to real activity. For general statistical publications it should be enough, after the total number of gTLDs, to report the relative level of activity over a specific period of time, as opposed to pure parking of names:
• # of names registered under each gTLD
• % of names with active addresses only under each gTLD
• % of names with active address and webpages under each gTLD." (CRG)

"How can this be best achieved? Through regular statistical analysis of representative random samples of gTLDs provided by the Registries, keeping the privacy of the individual registrants as well as numbers per Registrar, but reporting their geographic distribution (country of origin of the registrants) ICANN could efficiently collect the data required to measure these additional concepts. In that way the sample analysis at the beginning and end of the period by ICANN staff, could also help ccTLDs with a point of reference to compare numbers and level of activity of gTLD versus their own ccTLD market. It should be left to each ccTLD to volunteer with a similar sample of their database for purposes of ICANNs reporting." (CRG)

Malicious Registrations
"ICANN could also look at malicious registrations identified in a particular gTLD or sponsored by a particular registrar. Malicious registrations would be more likely to adversely affect users than other factors proposed (e.g. RRDRP, UDRP, or URS decisions; breach notices; or WHOIS complaints) and therefore more likely to affect user trust; some of the factors like UDRP and URS are also outside of what registries and registrars can do to mitigate malicious conduct, since they can't deny registrations of trademarks outside Sunrise periods." (RySG)

Market Player Activity
The idea behind this criteria is that a TLD with 100 accredited registrars, but with no registrar registering any single domain name, can be considered as a dead one even if 'served' by a huge number of registrars… We may define three statuses: Registered, Operational (has at least one name registered), and Active. (AFNIC)

Players In/Players Out
"Players in/players out. ICANN should consider the number of new players in the market and the number of players leaving it. For this measure, it seems more relevant to take into account only the 'groups' of players belonging to a same holding or 'family.'" (AFNIC)

Market Concentration
"A concentration index measures the market power of the leading players of a market. It can be calculated for the X-th first players. The best known Concentration Index is the Herfindahl Index known as 'HH1.' A very high HHI Index shows that the market is dominated by a limited group of players (a monopoly has a HH1 of 100%). On the other hand, a low HH1 Index reflects an atomized market where no player is in a position of domination to the others." (AFNIC)

Ratio of Registries Families Market Share
Data source—ICANN data
Review market share broken out across families. (BC)

New Registration Velocity
Data source—registry surveys and monthly reports
The monthly net new registrations across all gTLDs/IDNs would yield good insight into the perceived market demand. (BC)

Growth in .Brands
"A growth in .brands indicates a move to a more trusted marketplace as brands are in full control of all aspects of the domain." (BRG)

"A growth in .brands indicates a move to a more stable marketplace as brands are in full control of all aspects of the domain, improving security and reducing opportunities for phishing, the sale of counterfeits, and other forms of fraud." (BRG)

The source of this data could be granted Spec. 13 applications or .brands in active use. (BRG)

Prices
"Determine the registration prices being charged for each TLD, high, low, average, and publish this data regular[ly]." (JP)

"We also suggest including analysis of the fairness of pricing models introduced in the new registries and their effect on both commerce and trust." (IPC)

Average pricing data could be collected from registry surveys and monthly reports. "Price movement up or down is a well-recognized indicator of the degree of competitiveness in a market. This metric would report average pricing and the pricing spread of actual sales transactions. It will also require well-formed definitions of each registration phase – Sunrise, limited registration, general availability - in order to be useful. The BC suggests that this metric would measure average or relative number of sales per price point. Little price diversity can indicate lack of competition. Additionally, mass giveaways of names should be accounted for in this metric." (BC)

Spread pricing data could be collected from registry surveys and monthly reports and additional sources. "This metric would report the pricing spread of actual sales transactions. It will also require well-formed definitions of each registration phase – Sunrise, limited registration, general availability - in order to be useful. The BC suggests that this metric would measure the spread of prices. Little price diversity can indicate lack of competition." (BC)

"It is my PROPOSAL that in the segment "Robust and Competitive gTLD Marketplace" is necessary to have a pretty exact idea of the STRUCTURE AND PRICES prevalent in the DNS market, by reporting the overall (new, old and cc) number of gTLDs that have been registered, not only to follow up overall growth in the numbers of gTLDs over the years, but also because they represent the economic basis for budgeting the income side of ICANNs (as well as financial basis of the income side for Registries and Registrars)." (CRG)

Resellers

"Since we are not trying to analyze each player's performance, we can stay at a global level when studying the resellers. The main factors would be (a) the % of domain names in stock sold through resellers; (b) the % of new domain names sold through resellers in a given period of time, (c) the geographic repartition of the resellers, by country when possibly and by ICANN region at least, and (d) the number of TLDs proposed by the resellers (this may be provided as a repartition without naming the resellers, for instance 7 resellers are proposing 20 gTLDs, 15 are proposing 19 gTLDs, etc)." (AFNIC)

"ALAC believes that Resellers are key component parts of the domain name sales channel… The ALAC notes that customers purchasing domain names mostly do not know the difference between a Registrar and a Reseller, hence the categorical need for Reseller performance tracking that is identical to Registrar performance tracking. In light of the fact that ICANN does not have direct contracts with resellers, one way of obtaining this information would be to ask Registrars to collect this data since they hold the contracts with their resellers." (ALAC)

"We do believe that resellers and speculators have an impact on the gTLD marketplace and on the system and should be measured – both in their behavior, their requirements, and their effects." (IPC)

"Resellers are an important channel for economic activity. However, the net effect of resellers in the marketplace should be properly captured through the proposed registry/registrar and transaction velocity and pricing metrics, so additional tracking for the proposed index is not necessary." (BC)

Geography
"One may suggest to add a geographical axis to the Index, since the Marketplace is both global (according to the gTLDs policies) and local (according to the registrars' channels and languages spoken by the registrants and users)." (AFNIC)

"Segmentation by country could be valuable for many KPIs and the BC suggests that segmentation be applied broadly. (If this is not done, the BC also has specifically recommended a new metric "j" to track new registration geography by country)." (BC)

New registration geography by county. This data can be collected from registration records. "We suggest looking at the volume of registrations across a country, and then cross-segmenting that data by registry/registrar country to see whether there is competition/choice in that particular market" (BC)

Strategic Map
"A 'Strategic Map' may be built from two Key Performance Indicators[.] The CREATE rate measures the commercial dynamic of a TLD, registry, or registrar. The RETENTION RATE measures the percentage of domain names in stock at the end of a given period, that were already in stock at the beginning of this period. When crossing the two KPIs in a matrix, it is possible to know the strengths and weaknesses of a player from a performance point of view." (AFNIC)

Additional Stability-Related KPIs
"Note that it is important to distinguish between domains that were actually registered for fraudulent/abusive purposes versus domains compromised subsequent to registration via a hacking attack or account compromise. Such activities are partially reflected in the following metrics, which we suggest as additional KPIs that should be tracked in aggregate across the entire breadth of the gTLD marketplace as well as at the registry and registrar level as appropriate:

• Total number of abuse complaints involving malicious or abusive registrations (data will likely need to be normalized to account for repetitive and/or invalid complaints);
• Total number of unique domains that had complaints filed against them;
• Total number of domains suspended for abuse;
• Total number of domains suspended for fraudulent payment;
• Total number of domains suspended by registry due to inaction by registrars (domain suspension requests sent by registries to registrars);
• Total number of complaints against resellers; and
• Total number suspensions of reseller credentials.
To the extent that data to create these KPIs is not currently available because the relevant actors are not collecting or sharing it, ICANN should require the contractual disclosure of such data as soon as possible." (SSAC)

"The SSAC also emphasizes that measuring perceptions of stability, or consumer trust, is different from measuring the actual stability and the actual security of the Domain Name System (DNS) infrastructure. ICANN should first focus on metrics that will objectively measure actual security and stability, informing consumers as to what they should trust in the first place. KPIs that include the type of breach, the number of similar breaches reported, and the number of affected users, are more reflective of actual security, which may also be reflected in consumer perceptions once consumers have access to such KPIs. The SSAC suggests these KPIs be incorporated into Section II, Trusted gTLD Marketplace. This section should also include a measurement of the number of registrars accepting Delegation Signer (DS) records. ICANN should consider integrating external sources of information on DNSSEC in new gTLDs, showing signed domains per TLD, and by registrar, to illustrate adoption and availability of DNS Security Extensions (DNSSEC)." (SSAC)

"Other stability concerns that merit metrics include the frequency and impact of TLD registries and/or registrars going out of business or merging with other businesses. Of further concern are impacts from a TLD being withdrawn completely if the registry of last resort process does not complete with a new registry operator for an abandoned TLD. ICANN should prepare metrics and tie them to KPIs to reflect the impact of market dynamics on DNS stability." (SSAC)

"ICANN should develop metrics that would identify which TLDs are hosting domains engaged in abusive behavior." (SSAC)

IP and Privacy Protections
"We believe the health of the global gTLD includes consideration of whether the mechanisms developed to protect intellectual property, privacy, and other rights are sufficient and sufficiently enforced to ensure the safety and stability of the Internet and civil and commercial rights." (IPC)

IDNs
"The BC asks if IDNs are treated separately (uptake), is there a reason why they should not be treated separately elsewhere? Or, as in the case of a ccTLD like ".de," experience results-skewing measures of adoption? Are there other separations/distinctions that should be made among gTLDs, such as with closed or restricted registry models?" (BC)

Breach-Related Activity That Does Not Involve ICANN Compliance
This KPI should be added to take into account all of the related actions that do not involve ICANN compliance. (BC)

Whois Complaints Not Involving ICANN Compliance

This KPI should be added to take into account all of the related actions that do not involve ICANN compliance. (BC)

Cybercrime Incidence
This data could be obtained from ICANN, third party SIRT data, and additional sources. "This proposed metric expands on (b) to encompass not just phishing, but other kinds of cybercrime as well. The metric would track the relative incidence of new gTLDs being used for illegal activities such as botnet control, phishing attacks, spam, etc. The metric to be developed by the SSAC would leverage the existing reporting and tracking by the leading cybersecurity tracking organizations. The designated cybersecurity entity needs to be clearly defined and agreed to by the community. This is an extremely challenging proposed metric, and may need to be multiple metrics, averaged across multiple respected data sources for each type of cybercrime." (BC)

ccTLDs
"Why exclude ccTLDs?" (JP)

Other Suggestions
Number of Attacks (DDoS or social) Against Each Player (AFNIC)
Total Number of Registrars (GA)
Number of Registrars Accredited (GA)
Number of Registrars De-Accredited (GA)
Number of Registry Failures (GA)
Number of Registry Agreements to Change Hands (GA)
Number of Registries Sent to Emergency Transition (GA)
Percentage of Domains Associated With a Website (RySG)
Dispersion of New Registrations (RySG)
Relationship Between gTLD Wholesale Price and Registration Volume (RySG)
Dispersion Across Backend Registry Providers (RySG)
Dispersion Across Retail Price (RySG)

Section IV: Analysis of Comments

> *General Disclaimer: This section is intended to provide an analysis and evaluation of the comments received along with explanations regarding the basis for any recommendations provided within the analysis.*

Community members submitted broad and varied recommendations and feedback in response to the gTLD Marketplace Health Index's ("Index") call for comments. Several commenters proposed additional KPIs, many related to domain name pricing, marketplace stability, and geographic and language/script diversity.

In terms of the Index's overall process and scope, some commenters recommended that ICANN clearly define the terms "robust," "stable," and "trusted." Commenters also said that the Index, or at least some of the KPIs, should separate out legacy TLDs, .brand TLDs, and/or community and geographic TLDs. Data surrounding legacy TLDs, chiefly .com, could skew the results, commenters said. Indicators such as the number of registrars per TLD may not be relevant for .brands. Commenters said that ICANN should regularly review the KPIs to ensure their relevance over time.

Commenters also said that it could be important to track how domain names are being used—whether they

are associated with an active website, redirecting traffic to a domain in a legacy TLD, or hosting parked advertising. In addition, the activity level of accredited registrars and registries and whether the accreditation is actually being used, is a relevant factor to consider.

ICANN continues to analyze these public comments and will incorporate feedback as appropriate in finalizing the first Index for publication.