GNSO gTLD Registry Stakeholder Group Statement

Issue:

Call for Public Comments: The Security, Stability and Resiliency of the DNS Review Team, 21 February 2010

Date: 6 April 2011

Issue Document URL:

Regarding the issue noted above, the following comments represent the views of the ICANN GNSO gTLD Registries Stakeholder Group (RySG) as indicated at the end of this document. Unless stated otherwise, the RySG comments were arrived at through a combination of RySG email list discussion and RySG meetings (including teleconference meetings).

The eleven questions posed by the Security, Stability & Resiliency of the DNS Review Team (http://www.icann.org/en/reviews/affirmation/ssr-rt-set-of-issues-21feb11-en.pdf) are wide-ranging, and each question involves policy, technical, and business issues of depth and nuance. The RySG therefore does not find it possible to comment on the eleven questions in detail in the time allotted for this round of public comment. What follows are high-level comments, and the RySG reserves the right to provide additional comments in the future.

1. **Existing analysis of the impact of ICANN’s responsibilities, as stated in the bylaws and related documents, on the Stability, Security, and Resilience of the DNS.**

The documents listed at https://community.icann.org/pages/viewpage.action?pageId=6488074 contain important material, but we are not aware of an existing, comprehensive analysis of ICANN’s security and stability responsibilities, synthesized from those various sources. We hope that the SSR Review Team will provide some summary and analysis of existing materials that the community can read and react to.

2. **Opinions on the limitations of the scope of ICANN’s responsibilities, as stated in the bylaws and related documents, on the Stability, Security, and Resilience of the DNS.**

Perhaps the most important statements are ICANN’s Mission Statement and Core Values, as stated in ICANN’s Bylaws. All ICANN activities must flow from and be measured against that mission statement and set of values. The mission is specific and limited.

Terms such as “the DNS” and “abuse of the DNS” are used differently by different parties. Some parties use them in a narrow and technical sense, while others use them in an expansive way to encompass everything that is facilitated by or flows through Internet names and numbers. The lack of common understandings and terms are a significant problem in the ICANN community and beyond. The SSR team would do well to define its terms in its report.
It is sometimes necessary to make distinctions, such as between:

- the global Internet's systems of unique identifiers, which ICANN coordinates at the overall level only.
- The DNS root server system.
- The levels of the domain name system below the root. ICANN has some say over the security and stability of gTLDs. In contrast, ICANN generally has no say about ccTLD policies or operations. ICANN has limited say over levels of the DNS below the gTLD level.
- DNS technical protocols that are the responsibility of the IETF.
- Software implementations of DNS protocols. (For example, BIND.)
- The many and various uses of domain names and numbers.
- The Internet

While there are significant security problems on the Internet, ICANN cannot concern itself with the things that happen on the Internet or via the DNS that are beyond ICANN’s narrow technical coordination role. ICANN cannot be a substitute for the roles of law enforcement and governments. As a fundamental principle, ICANN has never had the mandate to examine or regulate content or speech, nor can ICANN regulate the social or technical uses of the DNS and the Internet unless they are proven to threaten the very stability and security of the DNS system itself. As per its bylaws, ICANN should always be “respecting the creativity, innovation, and flow of information made possible by the Internet by limiting ICANN's activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination.”

The GNSO’s Registration Abuse Policy Working Group (RAPWG) recently performed important analysis of the limits of ICANN policy-making about security and stability -- especially the difference between domain registration and domain use. With input from the ICANN General Counsel’s Office, the report discusses how making policy to mitigate criminal uses of domain names is not reasonably and appropriately related to ICANN’s technical coordination function.

3. Recent opinion on the DNS CERT proposal and on the need to coordinate/support detection and management of attacks/incidents to DNS.

The mission of establishing a DNS-CERT was clearly outside of ICANN’s limited role of technical coordination. The need for and the potential responsibilities of a DNS-CERT remain unclear. The Review Team is invited to read the RySG’s public comments on the DNS-CERT proposal, at: http://forum.icann.org/lists/dns-cert-proposal/msg00014.html

4. Experiences, difficulties, unexpected advantages, and lessons learned in the implementation of DNSSEC.

Implementation of DNSSEC is complicated, and operational problems are still being discovered as gTLDs and ccTLDs implement DNSSEC.

Knowledge of DNSSEC remains low among registrants, and a very limited number of registrars offer user-friendly signing functionality to their registrants. We assume that the marketplace will work to fill registrant needs.
6. Original solutions proposed to increase the Stability, Security, and Resilience of the DNS at the protocol level, including the design of the Root Server system.

The DNS protocols are the responsibility of the IETF. The design of the root server system is in some ways separate from the protocols.

8. Analysis of the relationships of ICANN with “contracted parties” (registries and registrars) as well as others (ccTLDs not bound contractually to ICANN, Root Server Operators, etc.).

The SSR Review team can reference the existing contracts; the scope of GNSO policy-making is well-defined.

9. Involvement, present or possible, of non-ICANN entities in the design, implementation, operation, and evolution of the DNS, in its potential impact on the Stability, Security, and Resilience of the DNS.

ICANN’s formal structure (http://www.icann.org/en/structure/) already accommodates participation by a relevant set of stakeholders, including the Internet engineering community, governments, the root server operators, registries, private companies, etc. ICANN has undertaken reviews of its Supporting Organizations and Advisory Committees.

10. Solutions/Proposals on Root Server Governance, including transparency, accountability, security/performance measurements, policies, accessibility and the opportunity to have more RS operators.

In its recent correspondences with the GAC, the ICANN Board said: “Root zone monitoring systems are currently in place. ICANN will work with root zone operators to identify relevant reporting metrics and establish a process to report such metrics to the GAC and the Internet community.” (See 3.1.1, http://www.icann.org/en/correspondence/dengate-thrush-to-dryden-05mar11-en.pdf)

The more root server operators there are, the greater the possibility for errors and omissions, which would make the root less reliable and consistent. Having new, additional root operators could therefore create additional risk. The existing root server operators have proven their long-term ability and willingness to cooperate with ICANN, IANA, and each other. Those long-standing trust relationships make the current root system work.

Instead, adding more instances of root servers adds to the technical stability and resiliency of the root. Some root server operators have been adding additional instances around the world for years.

RySG Level of Support for These Comments

1. Level of Support of Active Members: Supermajority
   1.1. # of Members in Favor: 11
   1.2. # of Members Opposed: 0
1.3. # of Members that Abstained: 0
1.4. # of Members that did not vote: 2

2. Minority Position(s): N/A

3. General impact on the RySG: If a group of gTLD registries decides to apply as a new constituency of the RySG, then the RySG will be required to follow whatever process is ultimately approved by the Board for recognition of new GNSO Constituencies.

4. Financial impact on the RySG: Because the RySG operates mostly with volunteers, there would probably not be any direct costs but there could be some indirect costs. The RySG pays the salary and expenses of a Secretariat. To the extent that the Secretariat workload would increase as a result of the RySG involvement in the process for recognition of a new constituency and/or as a result of increased workload in the future because of the addition of a new constituency in the RySG, the RySG secretariat costs could increase.

5. Analysis of the period of time that would likely be necessary to implement the policy: It is estimated that the RySG would need about three months to modify its charter to accommodate the new process.

General RySG Information

- Total # of eligible RySG Members\(^1\): 15
- Total # of RySG Members: 13
- Total # of Active RySG Members\(^2\): 13
- Minimum requirement for supermajority of Active Members: 9
- Minimum requirement for majority of Active Members: 7
- # of Members that participated in this process: 13
- Names of Members that participated in this process:
  1. Afilias (.info & .mobi)
  2. DotAsia Organisation (.asia)
  3. DotCooperation (.coop)
  4. Employ Media (.jobs)
  5. Fundació puntCAT (.cat)
  6. Museum Domain Management Association – MuseDoma (.museum)
  7. NeuStar (.biz)

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\(^1\) All top-level domain sponsors or registry operators that have agreements with ICANN to provide Registry Services in support of one or more gTLDs are eligible for membership upon the “effective date” set forth in the operator’s or sponsor’s agreement (RySG Articles of Operation, Article III, Membership, ¶ 1). The RySG Articles of Operation can be found at <http://gnso.icann.org/files/gnso/en/improvements/registries-sg-proposed-charter-30jul09-en.pdf>. The Universal Postal Union and ICM, Inc. have concluded registry agreements with ICANN, but as of this writing have not applied for RySG membership.

\(^2\) Per the RySG Articles of Operation, Article III, Membership, ¶ 6: Members shall be classified as “Active” or “Inactive”. A member shall be classified as “Active” unless it is classified as “Inactive” pursuant to the provisions of this paragraph. Members become Inactive by failing to participate in a RySG meeting or voting process for a total of three consecutive meetings or voting processes or both. An Inactive member shall have all rights and duties of membership other than being counted as present or absent in the determination of a quorum. An Inactive member may resume Active status at any time by participating in a RySG meeting or by voting.
8. Public Interest Registry - PIR (.org)
9. RegistryPro (.pro)
10. Societe Internationale de Telecommunication Aeronautiques – SITA (.aero)
11. Telnic (.tel)
12. Tralliance Registry Management Company (TRMC) (.travel)
13. VeriSign (.com, .name, & .net)

- Names & email addresses for points of contact
  - Chair: David Maher, dmaher@pir.org
  - Alternate Chair: Keith Drazek, kdrazek@verisign.com
  - Secretariat: Cherie Stubbs, Cherstubbs@aol.com
  - RySG representative for this statement: Greg Aaron, gaaron@afilias.info