To: Avri Doria

Date: 5 June 2017

Re: Request No. 20170506-1

Thank you for your Request for documentary information, dated 6 May 2017 (Request), which was submitted through the Internet Corporation for Assigned Names and Numbers' (ICANN) Documentary Information Disclosure Policy (DIDP). For reference, a copy of your Request is attached to the email forwarding this Response.

Items Requested

Your Request seeks "all available materials related to the Board discussions and decision concerning SSAC 045 and all available materials related to the implementation of Board decisions related to this SSAC advice, including:

1. ICANN briefing materials on SSAC 045 for the 10 December 2010 meeting that informed Board resolution (2010.12.10.22), which included:

   "Develop a mechanism to alert potential applicants for new gTLDs about the issues raised in SAC045."

2. Transcripts, minutes, rationale statements, and/or notes of the Board discussion on SSAC 045, including any advice or explanation of advice given by the Liaison to the Board from SSAC.

3. ICANN implementation plans for or reports on the mechanism required by Board Resolution (2010.12.10.22).

4. ICANN Board briefing materials on reasons why the required warning for Board Resolution (2010.12.10.12) [*sic*] was not included in the AGB.

5. Any other available materials related to either Board resolution (2010.12.10.12) [*sic*], the implementation of mechanisms in response to that resolution or any decision made regarding inclusion of a warning in the AGB."

Response

The Security and Stability Advisory Committee (SSAC) advises the ICANN community and the ICANN Board on matters relating to the security and integrity of the Internet's naming and address allocation systems. This includes operational matters (e.g., matters pertaining to the correct and reliable operation of the root name system),

administrative matters (e.g., matters pertaining to address allocation and Internet number assignment), and registration matters (e.g., matters pertaining to registry and registrar services such as WHOIS). SSAC engages in ongoing threat assessment and risk analysis of the Internet naming and address allocation services to assess where the principal threats to stability and security lie, and advises the ICANN community accordingly.

On 15 November 2010, SSAC published SAC045: Invalid Top Level Domain Queries at the Root Level of the Domain Name System (SAC045), a report that called attention to the potential problems that may arise should a new TLD applicant use a string that has been seen with measurable (and meaningful) frequency in a query for resolution by the root system and the root system has previously generated a response." (*See* SAC045, Pg. 1, https://www.icann.org/en/system/files/files/sac-045-en.pdf.) SAC045 found that "[a]ny new TLD registry operator may experience unanticipated queries and some TLDs may experience a non-trivial load of unanticipated queries if the label it chooses corresponds to TLDs that have historically seen queries." (*Id.* at Pg. 5, https://www.icann.org/en/system/files/files/sac-045-en.pdf.)

SAC045 presented the following recommendations:

> **Recommendation(1):** The SSAC recommends that ICANN promote a general awareness of the potential problems that may occur when a query for a TLD string that has historically resulted in a negative response begins to resolve to a new TLD. Specifically, ICANN should:
>
> - Study invalid TLD query data at the root level of the DNS and contact hardware and software vendors to fix any programming errors that might have resulted in those invalid TLD queries. The SSAC is currently exploring one such problem as a case study, and the vendor is reviewing its software. Future efforts to contact hardware or software vendors, however, are outside SSAC's remit. ICANN should consider what if any organization is better suited to continue this activity.
>
> - Contact organizations that are associated with strings that are frequently queried at the root. Forewarn organizations who send many invalid queries for TLDs that are about to become valid, so they may mitigate or eliminate such queries before they induce referrals rather than NXDOMAIN responses from root servers.
>
> - Educate users so that, eventually, private networks and individual hosts do not attempt to resolve local names via the root system of the public DNS.
>
> **Recommendation (2):** The SSAC recommends that ICANN consider the following in the context of the new gTLD program.

- Prohibit the delegation of certain TLD strings. RFC 2606, "Reserved Top Level Domain Names," currently prohibits a list of strings, including test, example, invalid, and localhost. [internal citation omitted] ICANN should coordinate with the community to identify a more complete set of principles than the amount of traffic observed at the root as invalid queries as the basis for prohibiting the delegation of additional strings to those already identified in RFC 2606.

- Alert the applicant during the string evaluation process about the pre-existence of invalid TLD queries to the applicant's string. ICANN should coordinate with the community to identify a threshold of traffic observed at the root as the basis for such notification.

- Define circumstances where a previously delegated string may be re-used, or prohibit the practice.

(*Id.* at Pgs. 8-9, § 6.)

On 10 December 2010, during the ICANN 39 Public Meeting, the ICANN Board considered SAC045 and adopted Resolution 2010.12.10.22, which directed the CEO to:

1. Analyze and amend the DNS Stability Review described in the Applicant Guidebook to allow the option to prohibit the delegation of problematic strings, as appropriate, to address the potential technical and stability issues discussed in SAC045; and,

2. Develop a mechanism to alert potential applicants for new gTLDs about the issues raised in SAC045.

(Resolution 2010.12.10.22, https://www.icann.org/resources/board-material/resolutions-2010-12-10-en#3.)

Pursuant to Board's directive in Resolution 2010.12.10.22, ICANN developed a mechanism in the form of an advisory notice to be incorporated in the New gTLD Applicant Guidebook (Guidebook) warning potential applicants about the issues raised in SAC045. On 15 April 2011, ICANN published version 6 of the draft Applicant Guidebook, which included the following updated language to Module 2, Section 2.2.1.3 regarding DNS Stability Review.

Note: All applicants should recognize issues surrounding invalid TLD queries at the root level of the DNS.

Any new TLD registry operator may experience unanticipated queries, and some TLDs may experience a non-trivial load of unanticipated queries. For more information, see the Security and Stability Advisory Committee (SSAC)'s report on this topic at

http://www.icann.org/en/committees/security/sac045.pdf. Some publicly available statistics are also available at http://stats.l.root-servers.org/.

ICANN will take steps to alert applicants of the issues raised in SAC045, and encourage the applicant to prepare to minimize the possibility of operational difficulties that would pose a stability or availability problem for its registrants and users. However, this notice is merely an advisory to applicants and is not part of the evaluation, unless the string raises significant security or stability issues as described in the following section.

(https://archive.icann.org/en/topics/new-gtlds/draft-evaluation-procedures-redline-15apr11-en.pdf, Pg. 2-9 – 2-10.)

The April 2011 Discussion Draft of the New gTLD Applicant Guidebook was open for public comment from 15 April 2011 to 15 May 2011. (https://www.icann.org/news/announcement-2-2011-04-15-en.) One hundred and seven comments were received. (https://archive.icann.org/en/topics/new-gtlds/comments-6-en.htm) None of the comments addressed the addition of the advisory notice to Section 2.2.1.3 of Module 2 or mentioned deficiencies in the warning to the issues raised in SAC045. (https://archive.icann.org/en/topics/new-gtlds/summary-analysis-agv6-30may11-en.pdf.) As a result, the foregoing warning was incorporated into the final version of the Guidebook, which was adopted on 4 June 2012. (https://www.icann.org/resources/board-material/resolutions-2011-06-20-en; https://newgtlds.icann.org/en/applicants/agb)

Items 1 and 2

Items 1 and 2 of your Request seek the disclosure of all briefing materials on SAC045 for the 10 December 2010 meeting that informed Board Resolution 2010.12.10.22 as well as "all transcripts, minutes, rationale statements, and/or notes of the Board discussion on SSAC 045, including any advice or explanation of advice given by the liaison to the Board from SSAC." The materials responsive to these items have been published. The briefing materials are available at https://www.icann.org/en/system/files/bm/briefing-materials-1-10dec10-en.pdf and https://www.icann.org/en/system/files/bm/briefing-materials-2-10dec10-en.pdf. The full transcript of the public Board meeting where Resolution 2010.12.10.22 was approved is published at http://archive.icann.org/en/meetings/cartagena2010/bitcache/Transcript_%20Board%20Meeting-vid=16323&disposition=attachment&op=download.txt. The Minutes of the 10 December 2012 ICANN Regular Board Meeting is published at https://www.icann.org/resources/board-material/minutes-2010-12-10-en. The Rationale in support of Resolution 2010.12.10.22 is published at https://www.icann.org/resources/board-material/resolutions-2010-12-10-en.

As the 10 December 2010 meeting was publicly held, the full transcript of the meeting has been published. To the extent there were any discussions on Resolution

2010.12.10.22, such discussions would have been captured in the transcript. A review of the transcript (http://archive.icann.org/en/meetings/cartagena2010/bitcache/Transcript_%20Board%20Meeting-vid=16323&disposition=attachment&op=download.txt) shows that no such discussions took place during the meeting.

With respect to the request for any notes of the Board discussion on SAC045 including any advice or explanation provided by the SSAC Board Liaison, ICANN notes that SAC045 was discussed during the SSAC's session with the ICANN Board on 10 December 2010. The materials for this session is published at http://archive.icann.org/en/meetings/cartagena2010/bitcache/SSAC%20Chair%20Report-vid=16239&disposition=attachment&op=download.pdf. The transcript of the session is published at http://archive.icann.org/en/meetings/cartagena2010/bitcache/Transcript_%20SO_AC%20Chair%20Reports-vid=16305&disposition=attachment&op=download.txt and the audio recording is published at http://audio.icann.org/meetings/cartagena2010/soac-chair-reports-10dec10-en.mp3 and http://icann.adobeconnect.com/p10037363/.

Item 3
Item 3 seeks "ICANN implementation plans for or reports on the mechanism required by Board Resolution (2010.12.10.22)." As noted above, the advisory notice that ICANN developed to warn potential applicants about the issues raised in SAC045 was incorporated in version of Module 2, Section 2.1.1.3 of the draft Guidebook that was published for public comment from 15 April 2011 to 15 May 2011. This version is available at https://archive.icann.org/en/topics/new-gtlds/draft-evaluation-procedures-redline-15apr11-en.pdf. ICANN is not aware of the existence of any reports related to the development of a mechanism to alert potential applicants for new gTLDs about the issues raised in SAC045, and therefore, ICANN is not aware of any responsive documents related to this item.

To the extent that there are any other materials that may be responsive to this request, these materials are subject to the following DIDP Defined Conditions of Nondisclosure and are therefore not appropriate for public disclosure:

- Internal information that, if disclosed, would or would be likely to compromise the integrity of ICANN's deliberative and decision-making process by inhibiting the candid exchange of ideas and communications, including internal documents, memoranda, and other similar communications to or from ICANN Directors, ICANN Directors' Advisors, ICANN staff, ICANN consultants, ICANN contractors, and ICANN agents.

- Information subject to attorney-client, attorney work product privilege, or any other applicable privilege, or disclosure of which might prejudice any internal, governmental, or legal investigation.

- Drafts of all correspondence, reports, documents, agreements, contracts, emails, or any other forms of communication.

- Information that relates in any way to the security and stability of the Internet, including the operation of the L Root or any changes, modifications, or additions to the root zone.

Notwithstanding the applicable Defined Conditions of Nondisclosure identified in this Response, ICANN evaluated the documents subject to these conditions to determine if the public interest in disclosing them outweighs the harm that may be caused by such disclosure. ICANN has determined that there are no circumstances for which the public interest in disclosing the information outweighs the harm that may be caused by the requested disclosure.

Item 4

Item 4 seeks the disclosure of "ICANN board briefing materials on reasons why the required warning for Board Resolution (2010.12.10.12) was not included in the AGB." Given the subject matter of the Request, it appears that you intended to reference Board Resolution 2010.12.10.22, not Resolution 2010.12.10.12 which is a Resolution thanking the departing ccNSO Council Volunteers. (https://www.icann.org/resources/board-material/resolutions-2010-12-10-en.) As discussed above, ICANN did develop a mechanism in the form of an advisory notice that was incorporated in Module 2, Section 2.2.1.3 of the Applicant Guidebook. (https://newgtlds.icann.org/en/applicants/agb/evaluation-procedures-04jun12-en.pdf.) Accordingly, there are no documents responsive to this item.

Item 5

Item 5 seeks the disclosure of "any other available materials related to either Board resolution (2010.12.10.12), the implementation of mechanisms in response to that resolution or any decision made regarding inclusion of a warning in the AGB." As noted above, given the subject matter of the Request, it appears that you intended to reference Board Resolution 2010.12.10.22, not Resolution 2010.12.10.12 which is a Resolution thanking the departing ccNSO Council Volunteers. (https://www.icann.org/resources/board-material/resolutions-2010-12-10-en.) This item overlaps with the information requested in Items 1 through 4. The materials responsive to this item have been identified in the foregoing response to Items 1 through 4. ICANN notes that there was a public SSAC meeting on 7 December 2010 during ICANN 39, in which SAC045 was discussed. The agenda for that meeting is published at http://archive.icann.org/en/meetings/cartagena2010/node/15307.html. The materials for the SSAC public meeting is published at http://archive.icann.org/en/meetings/cartagena2010/bitcache/Public%20Meeting%20of%20the%20Security%20&%20Stability%20Advisory%20Committee%20-%20Part%20One-vid=15997&disposition=attachment&op=download.pdf and http://archive.icann.org/en/meetings/cartagena2010/bitcache/Public%20Meeting%20of%20the%20Security%20&%20Stability%20Advisory%20Committee%20-

%20Part%20Two-vid=15999&disposition=attachment&op=download.pdf. The audio recording of that meeting is published at http://audio.icann.org/meetings/cartagena2010/ssac-public-07dec10-en.mp3 and http://icann.adobeconnect.com/p67438415/.

To the extent that there are any other materials that may be responsive to this request, these materials are subject to the following DIDP Defined Conditions of Nondisclosure and are therefore not appropriate for public disclosure:

- Internal information that, if disclosed, would or would be likely to compromise the integrity of ICANN's deliberative and decision-making process by inhibiting the candid exchange of ideas and communications, including internal documents, memoranda, and other similar communications to or from ICANN Directors, ICANN Directors' Advisors, ICANN staff, ICANN consultants, ICANN contractors, and ICANN agents.

- Information subject to attorney-client, attorney work product privilege, or any other applicable privilege, or disclosure of which might prejudice any internal, governmental, or legal investigation.

- Drafts of all correspondence, reports, documents, agreements, contracts, emails, or any other forms of communication.

- Information that relates in any way to the security and stability of the Internet, including the operation of the L Root or any changes, modifications, or additions to the root zone.

Notwithstanding the applicable Defined Conditions of Nondisclosure identified in this Response, ICANN evaluated the documents subject to these conditions to determine if the public interest in disclosing them outweighs the harm that may be caused by such disclosure. ICANN has determined that there are no circumstances for which the public interest in disclosing the information outweighs the harm that may be caused by the requested disclosure.

About DIDP

ICANN's DIDP is limited to requests for documentary information already in existence within ICANN that is not publicly available. In addition, the DIDP sets forth Defined Conditions of Nondisclosure. To review a copy of the DIDP, please see http://www.icann.org/en/about/transparency/didp. ICANN makes every effort to be as responsive as possible to the entirety of your Request. As part of its accountability and transparency commitments, ICANN continually strives to provide as much information to the community as is reasonable. We encourage you to sign up for an account at ICANN.org, through which you can receive daily updates regarding postings to the

portions of ICANN's website that are of interest. We hope this information is helpful. If you have any further inquiries, please forward them to didp@icann.org.