January 24th, 2018

RE: New gTLD Subsequent Procedures PDP WG: Request for Input Related to the Maximum Delegation Rate for New gTLDs

Jeff Neuman and Cheryl Langdon-Orr
Co-Chairs, PDP on New gTLD Subsequent Procedures Working Group

Dear Jeff and Cheryl,

Thank you for your letter dated 14 September 2017 seeking ICANN org’s input on the maximum rate of delegation for new gTLDs.

The letter sought input from RSSAC, SSAC, and ICANN’s Office of the Chief Technology Officer and Global Domains Division on “whether the limitations on delegations per annum could be revisited given the results of the CDAR study and if so, what guidance can be provided to maintain the security and stability of the root.” The letter further asked for input on “the total number of TLDs that could be delegated without negative impact to root server performance.”

In considering delegation-rate, delegation change-rate limit, or maximum root zone size, it should be noted that the 2012 round of gTLDs did not reach the 1,000 maximum delegations per year limit even though there were 1,930 applications. Based on information in the Program Implementation Review Report, Initial Evaluation of 1,930 applications alone took eleven months to complete, indicating that human processing capacity was a limiting factor in the rate of delegations. Two areas of processing constraints might be considered: (1) Capacity of ICANN org for application processing prior to approval to delegate; (2) Capacity of PTI and Verisign as the Root Zone Maintainer to process requests for delegation.

The assessment of these processing constraints can be performed by ICANN org, and would be most meaningful if it is informed by outcomes of the PDP Working Group’s discussions. Any proposed changes that would materially alter the way applications are to be received, evaluated and processed, as well as how root zone changes are to be received, evaluated and implemented would influence estimate of future processing capacity. For example, resource staffing models (internal and external third-party experts) may differ depending on whether applications are received in rounds, or on a first-come-first-served basis. Requirements for bundling of applications for certain evaluations and methodology for release of evaluation results (i.e., by priority number, or other method) would also impact staffing as well as timing of application evaluation and processing. We understand that the PDP Working Group is in various stages of discussion on these and other topics and look forward to continuing to support the Working Group in these important discussions.
In addition to ICANN org’s operational processing capacity, other input from the community might also be helpful to the PDP Working Group in understanding the potential throughput, such as what is the community’s capacity for community processes (i.e., objection filing, application comment, and GAC early warning) and applicants’ capacity for applicant processes (i.e., dispute resolution, responding to clarifying questions, contracting). These community and applicant processes impact the overall timeline and thus throughput.

There are also technical limits placed on capacity by the systems that handle root zone provisioning (operated by PTI as IANA Functions Operator and Verisign as Root Zone Maintainer) and root query responses, e.g., the root server system of authoritative name servers and supporting infrastructure (operated by the root operators) or the increasing use of RFC 7706-style replication of the root zone into resolvers. Determining a specific delegation-rate capacity or delegation change-rate limit and maximum root zone size will require significant consultation with PTI as well as outside the ICANN org with Verisign, the root operators via RSSAC, and the larger DNS technical community. While these values could be determined given sufficient time and effort, the limits based on human processing capacity described above would likely be reached before any technical limitations would become an issue.

We thank you for the opportunity to provide input, and look forward to continued engagement with the PDP Working Group.

Sincerely,

Akram Atallah
President, Global Domains Division

David Conrad
Chief Technology Officer, ICANN