

June 3, 2013

Mr. Akram Atallah  
Chief Operating Officer  
Internet Corporation for Assigned Names and Numbers  
12025 Waterfront Drive, Suite 300  
Los Angeles, CA 90094-2536  
USA

Dear Akram,

The Registries Stakeholder Group (RySG) respectfully submits this letter as a continuation of our ongoing exchange on Pre-Delegation Testing (PDT) issues and in response to your letter of April 7, 2013. Following direct experience with the PDT Pilot and Beta, and in anticipation of the PDT for live new gTLD application, we must raise the following urgent questions and concerns. This letter represents the views of the RySG, including those providing back-end registry services to hundreds of new gTLD applicants.

This letter outlines our concerns in substantial detail. We strongly urge a RySG/NTAG teleconference with ICANN staff and its PDT contract provider to engage quickly and directly on these issues. We hope you find these comments constructive.

Our concerns and recommendations are as follows.

#### **1. PDT Pilot -- Testing Interaction**

There was insufficient communication and dialogue between the PDT Pilot tester and registry operators.

This has been problematic for both the PDT tester itself and for registry operators, where misunderstandings or inferences of current test cases, security controls, or other anomalies have resulted in failures that would have been quickly remedied if an actual dialogue took place rather than the inefficient asynchronous model employed during the pilot.

#### ***RECOMMENDATIONS:***

- A. *Establish a single point of contact (POC) at the PDT testing provider as individual interface for Registry Operators participating in the beta. Encourage this POC to provide*

*real-time feedback and communication throughout the testing process. This communication should not be 'cleared' through ICANN communication channels but instead should resemble how testing between technology partners should work -- with technical experts communicating directly with each other to resolve issues.*

- B. *Keep the window for submitting information to the PDT provider open throughout the entire beta period. It is in everyone's best interest to resolve any outstanding issues or concerns during the beta period. By enabling applicants or Registry Operators to continue to submit and resubmit information, both the PDT tester and the Registry will more readily be able to identify, resolve and iterate on solutions.*

## **2. PDT Pilot -- Insufficient Feedback on Results**

During the PDT Pilot, the participants believe that more feedback on the testing should have been provided to the participants. The objectives and results of the various tests were not provided with sufficient detail.

### *RECOMMENDATIONS:*

- A. *A clear and binary indication of pass/fail/untested for each sub-section, with the associated failure logs and timestamps should be provided to each Beta participant in order to enable the participant to enable debugging and to support failure cause analysis and problem resolution*
- B. *Testers and applicants should be provided detailed guidelines from ICANN as to what constitutes a pass/fail for each sub-section. This will ensure a more efficient PDT Beta procedure for all involved, and should also answer many of the same questions concerning the actual production PDT phase of the program.*

## **3. PDT Technical Implementation and Timelines**

We are concerned that ICANN continues to add additional testing criteria and other elements to the PDT at this late date. For example, within the last few weeks, data escrow testing criteria were published associated with the PDT beta. While we recognize the significance of dependencies between all the systems that are required to make a new gTLD operational, continuing to make substantive changes in specific functional and element testing effects our ability to have meaningful testing since we have to operationally add code and development cycles, conduct internal testing, etc..

*RECOMMENDATION:*

*With the exception of the recommendations in this letter, ICANN should declare the PDT testing criteria final with no additional substantive changes introduced other than to fix existing bugs or other forms of error correction.*

**4. Query-By-Proxy Not Adequate**

We do not believe that query-by-proxy is sufficient to accomplish what we \*infer\* are the stated objectives of such testing. A subset of registry operators restated our concerns related to the insufficiencies of the current PDT methodologies during a call with ICANN Staff on May 13, and have since been advised that we should expect some update in the coming weeks, while time for preparations is running short. We reiterate our concerns here as these insufficiencies have been a long-outstanding issue and urge that they be cataloged, published, and duly considered. We also urge ICANN to accommodate our recommendations based on both the technical merits and stated objectives of such testing.

*RECOMMENDATION:*

*Remove the requirement in the PDT to test unicast addresses (associated with anycasted servers), either directly or by proxy. A test of the public facing anycast service is not only sufficient but appropriate to test the preparedness of the DNS.*

**5. Disclosure of Sensitive Data & Security Controls**

Regarding the disclosure of sensitive data to ICANN, either back-end unicast addresses, capacity, interconnect, and peering information, or other sensitive data, we remain concerned that to our knowledge neither ICANN nor its PDT tester has a full set of externally audited and continuously monitored controls in place to protect this information on their networks and systems. It also remains unclear that mechanisms to securely purge this information once testing is complete are in place.

*RECOMMENDATION:*

*We request a clear description and/or indication how this information is to be protected within a measured standards-based regulatory compliance framework, recognizing that NDAs do not themselves protect information.*

## 6. IDN Testing

Applicants are still waiting for the IDN testing table to be published.

*RECOMMENDATION:*

*ICANN post the IDN testing table by no later than June 4<sup>th</sup> to enable appropriate testing during the PDT Beta Period.*

## 7. Self-Certification Against Production Systems

We continue to be concerned by the requirement that self-certification tests be performed against production systems.

Based on conversations with the PDT provider in Beijing, we now understand the requirement to use production systems to allow the use of production hardware and software that is not currently in the live query path, and to extrapolate results of a subset of the total serving infrastructure across the entire system.

We request that ICANN confirms this understanding and updates the documentation to make it clear so that those who were not present at the live discussions in Beijing are also aware of this, as we had previously been concerned about the requirement to load test live systems to the point of service degradation.

*RECOMMENDATION:*

*Specify that these tests can and should be conducted in test environments as is consistent with best practices for secure and stable infrastructure services.*

## 8. Standardized Testing Schema

The PDT Provider is currently requiring registries and applicants to validate against non-matching requirements as outlined in the EPP RFC schemas. Several "OPTIONAL" elements that some applicants have elected to not use in accordance with proposed policies are still required for testing.

For example, the Period declaration for Domain Create or Transfer are being tested and validated as a REQUIREMENT. As such, there is a disconnect between the proposed EPP

functionality implemented by a registry and the "identified" requirements by the PDT Provider in terms of what they think is a requirement for EPP.

Simply put, registries and applicants are being forced to implement functionality that goes against the registry proposed policies which are derived directly from the standardised EPP RFCs. This leads to registries having to implement functionality that they will never use, resulting in "false-positive" tests to satisfy the PDT Provider rather than pass tests that satisfy the implementation of EPP in accordance to a registry's policies.

The PDT testing provider should not be able to arbitrarily modify requirements to meet RFC or Guidebook specifications. Optional must remain Optional, specs that are listed as 'May' or 'Should' cannot be changed to 'Must', etc.

*RECOMMENDATION:*

*ICANN should instruct the PDT Provider to only test elements that, according to the EPP RFC schemas and specification in the Applicant Guidebook, are required and those optional elements that each applicant has elected to implement. They should not require testing of OPTIONAL elements that are not part of an applicant's policies or plans.*

We look forward to discussing these critical issues with you in the very near future, at your earliest convenience. Please contact me with proposed dates/times for a meeting or teleconference.

On this letter, the RySG voted 10 in favor, 3 no-votes and 1 abstention.

Sincerely,

Keith Drazek  
RySG Chair

Cc: ICANN Board New gTLD Program Committee