2.8 Registry Services Evaluation

2.8.1 Introduction

The Registry Services evaluation was one of the seven evaluation streams defined in the Applicant Guidebook (AGB). It served to evaluate each application's proposed registry services for any possible adverse impact to the security and stability of the DNS.

2.8.2 Relevant Guidance

The following guidance is relevant to the topic of Registry Services evaluation and will be discussed in further detail in Sections 2.8.3 and 2.8.4 of this report:

- GNSO Principle D: "A set of technical criteria must be used for assessing a new gTLD registry applicant to minimise88 the risk of harming the operational stability, security and global interoperability of the Internet." 125
- GNSO Principle E: "A set of capability criteria for a new gTLD registry applicant must be used to provide an assurance that an applicant has the capability to meets its obligations under the terms of ICANN's registry agreement."
- GNSO Recommendation 1:

ICANN must implement a process that allows the introduction of new top-level domains. The evaluation and selection procedure for new gTLD registries should respect the principles of fairness, transparency and non-discrimination.

All applicants for a new gTLD registry should therefore be evaluated against transparent and predictable criteria, fully available to the applicants prior to the initiation of the process. Normally, therefore, no subsequent additional selection criteria should be used in the selection process.

- GNSO Recommendation 7: "Applicants must be able to demonstrate their technical capability to run a registry operation for the purpose that the applicant sets out."
- GNSO Recommendation 9: "There must be a clear and pre-published application process using objective and measurable criteria."
- GNSO Recommendation 18: "If an applicant offers an IDN service, then ICANNS IDN guidelines must be followed."
- Applicant Guidebook, Module 1: Introduction to the gTLD Application Process¹²⁶
- Applicant Guidebook, Section 2.2.3: Registry Services Review
- Applicant Guidebook, Section 2.3.3: Registry Services Extended Evaluation
- Applicant Guidebook, Section 2.4: Parties Involved in Evaluation

¹²⁵ ICANN. (8 August 2007) ICANN Generic Names Supporting Organization Final Report Introduction of New Generic Top-Level Domains, Part A. Retrieved from http://gnso.icann.org/en/issues/new-gtlds/pdp-dec05-fr-parta-08aug07.htm
¹²⁶ ICANN. (4 June 2012) gTLD Applicant Guidebook Version 2012-06-04. Retrieved from http://newgtlds.icann.org/en/applicants/agb/guidebook-full-04jun12-en.pdf

- Applicant Guidebook, Attachment to Module 2: Evaluation Questions and Criteria
- ICANN Board New gTLD Program Committee Resolution 2013.08.13.NG02 (13 August 2013): : Dotless Domains¹²⁷

2.8.3 Background

The AGB anticipated that Initial Evaluation (IE) (see Section 2.1: Initial and Extended Evaluation of this report) would take five months to complete, all IE results would be published at the conclusion of IE, and the Contracting process would commence at the end of IE. This would allow applicants that passed IE to move expeditiously toward signing an RA if there were no other issues that the application must resolve (i.e., contention resolution, dispute resolution).

The Registry Services evaluation was one of seven evaluation streams defined in the AGB. Its purpose was to evaluate each application's proposed registry services "for any possible adverse impact on security or stability." The Registry Services evaluation was part of Initial Evaluation (IE) and eligible for Extended Evaluation (EE). The overall evaluation process was described in Module 2 of the AGB. The implementation of the evaluation process was performed in alignment with the AGB-defined processes, and has been described in further detail in Section 2.1: Initial and Extended Evaluation of this report.

As with all of the evaluation streams, independent third-party providers performed the review and evaluated each application against the criteria defined in the AGB. ICANN engaged Interisle Consulting Group as the Registry Services evaluation panel. (For more information, see Section 8.2: Service Provider Coordination of this report.) The Registry Services evaluation panel reviewed the five critical registry functions¹²⁹ and any services relating to these for each TLD for potential concerns to security or stability of the DNS.

The implementation of the evaluation process was performed in alignment with the processes defined in Module 2 of the AGB and the panel's published process documentation. ¹³⁰ In cases where the panel required additional clarification from the applicant, clarifying questions (CQs) were issued. Nine-hundred-seventy-five of 1,930 (51%) of applications received a CQ from the Registry Services Evaluation Panel during IE.

After the responses to CQs had been reviewed, in cases where the response was incomplete, ICANN performed Applicant Outreach to ensure that applicants had the opportunity to provide complete responses for the panel's consideration. The panel presented its results to ICANN, and ICANN

¹²⁷ ICANN. (13 August 2013) Approved Resolutions | Meeting of the New gTLD Program Committee. Retrieved from https://www.icann.org/resources/board-material/resolutions-new-gtld-2013-08-13-en#1.a

¹²⁸ICANN. (4 June 2012) gTLD Applicant Guidebook Version 2012-06-04, Section 2.2.3: Registry Services Review. Retrieved from http://newgtlds.icann.org/en/applicants/agb/guidebook-full-04jun12-en.pdf

¹²⁹ The five critical registry functions are 1) DNS resolution for registered domain names, 2) Operation of Shared Registration System, 3) Operation of Registration Data Directory Services (Whois), 4) Registry data escrow deposits, and 5) Maintenance of a properly signed zone in accordance with DNSSEC requirements.

¹³⁰ Interisle Consulting Group. (7 June 2013). ICANN New gTLD Program Registry Services Initial Evaluation Process. Retrieved from http://newgtlds.icann.org/en/program-status/evaluation-panels/registry-services-initial-process-07iun13-en.pdf

reviewed the results to ensure consistency and alignment with the AGB before sharing results with the applicant and publishing them.

Ultimately, 1,802 of 1,930 applications passed the Registry Services evaluation during IE. Some applications were withdrawn before IE results were published, but all but two applications with published IE results passed IE. Of the two applications that were eligible for EE, both applications passed.

In addition to its primary purpose as an evaluation, the Registry Services evaluation also served as a means to collect a list of the applicant's proposed registry services for inclusion in the Registry Agreement.

2.8.4 Assessment

Section 2.2.3 of the AGB stated, "ICANN will review the applicant's proposed registry services for any possible adverse impact on security or stability." In Question 23 of the application, applicants were required to identify and describe their proposed implementation of the five critical registry functions and any services relating to these in their response to Question 23 of the application.

In addition to its primary purpose as an evaluation, the Registry Services portion of the application acted as a mechanism to collect the list of proposed registry services for insertion into Exhibit A of the RA.¹³¹ The unstructured design of the application did not efficiently collect data for this purpose. As discussed in Section 1.1: Application Submission of this report, the application form was modeled after the AGB, and many of the questions did not have restrictions in the format beyond character limits and attachment size and file types. Question 23 solicited a textual description of the proposed TLD's registry services. In order to incorporate the response into Exhibit A of the RA, the language had to be converted into contractual language, which required a significant effort from ICANN. Further, applications often included descriptions of registry services in places other than the response to Question 23. The lack of consolidation within the application caused further inefficiencies in the evaluation of the proposed registry services, as well as in the process of incorporating them into Exhibit A of the RA. All applications were evaluated an on individual basis by priority number. While this design supported fairness, consistency, and predictability in process for applicants, it presented operational challenges.

The panel was required to accommodate prioritization numbers in the CQ process and IE results process, which created inefficiencies in defining the order to evaluate applications, redundancies for the panel when issuing CQs, redundancies for the applicants when responding to CQs, and limitations in the panel's ability to normalize results across an applicant's portfolio of applications before completing its evaluation. This is discussed in further detail in Section 1.2: Prioritization of this report.

¹³¹ICANN. Registry Agreement. Retrieved from http://newgtlds.icann.org/en/applicants/agb/agreement-approved-09ian14-en.pdf

Ninety percent of applications shared one of 13 technical infrastructures. The application process was designed for the panel to communicate with the applicant, not with the RSP. This observation brought to light that the existing evaluation process did not consider a provider's scalability across the group of applications with which it had engaged. Due to the application-by-application nature of evaluation, the RSP's services for a particular TLD were evaluated, but the RSP was not evaluated across the universe of applications. For future rounds, the community may wish to consider evaluation of the RSP. This has been discussed further in Section 2.6: Technical and Operational Capability Evaluation of this report.

For those applications that proposed to provide IDN services, there were some challenges that affected the panel's evaluation of the IDN tables. The TLD application system (TAS) did not format the IDN tables submitted by the applicants in a machine-readable format, which was required for the panel to automate the validation of the tables. While the panel reviewed the applicant's proposed IDN policies, the panel did not validate the IDN tables provided by the applicants, and the review of IDN tables was performed during Pre-Delegation Testing (PDT) (see Section 5.2: Pre-Delegation Testing and Transition to IANA of this report). In the next round, it is probable that there will be additional tools available for the evaluation of IDNs. These tools should be leveraged in the evaluation and validation of IDN tables.

2.8.5 Conclusion

The Registry Services Evaluation was performed in line with the AGB. However, inefficiencies were observed in terms of how the data was captured in the application form. A more standardized format would better support efficiency in the process of incorporating registry services into the Registry Agreement. Additionally, observations from the implementation experience suggest that greater efficiency and effectiveness may be achievable through the implementation of a program to accredit registry service providers. This topic is discussed further in Section 2.6: Technical and Operational Capability Evaluation of this report.

In summary:

- **2.8.a** Update the process for collection of registry services information to better support both evaluation and contracting activities
- **2.8.b** Consider whether an alternate approach to Technical and Operational Capability evaluation would be worthwhile, and if so, how the evaluation of Registry Services could be incorporated into the approach
- 2.8.c For future rounds, leverage the IDN tools currently under development