
8.1 Program Processes, Systems, Resources

8.1.1 Introduction

Program processes, systems and resources are elements that supported the implementation of the New gTLD Program. Processes and procedures provided predictability to applicants, service providers, and ICANN. Systems supported communications with applicants. Resources performed the work. This section of the Program Implementation Review report discusses the following topics:

- Program processes and procedures
- Applicant-facing systems
- ICANN’s internal resources to support Program implementation

8.1.2 Relevant Guidance

The following guidance is relevant to the topic of Program Processes, Systems, Resources and will be discussed in further detail in Sections 8.1.3 and 8.1.4 of this report:

- Applicant Guidebook, Module 1: Introduction to the gTLD Application Process³⁶⁹

8.1.3 Background

On 8 August 2007, the GNSO published its Final Report for the “Introduction of New Generic Top-Level Domains.” The community and ICANN subsequently undertook the effort to draft the AGB, which would serve as a roadmap for the implementation of the policies set forth in the GNSO’s Final Report. On 24 October 2008, ICANN published the first version of the AGB for comments and input from the community.³⁷⁰ Over the next three years, the community and ICANN continued to work on the development of the AGB.³⁷¹ On 11 January 2012, the current and ninth version of the AGB was published. This version served as the final roadmap for the implementation of the first round of new gTLDs.

In accordance with GNSO Recommendation 1, the AGB was developed to provide criteria and requirements that applicants must meet in order to successfully complete the evaluation process. The AGB defined the overall process flow for applications, the criteria they would be considered against, and the rules for various processes each application may be subject to; however, the AGB

³⁶⁹ 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>

³⁷⁰ ICANN. (24 October 2008) New gTLD Program: Draft Applicant Guidebook (Draft RFP). Retrieved from <http://newgtlds.icann.org/en/about/historical-documentation/matrix-agb-v1>

³⁷¹ ICANN. Historical Documents. Retrieved from <http://newgtlds.icann.org/en/about/historical-documentation>

typically (and intentionally) did not contain the detailed step-by-step process descriptions necessary for the operational implementation of the New gTLD Program. The task of defining the operational processes and procedures, systems and tools, and resources required for the implementation of the New gTLD Program was ICANN's responsibility.

Although GNSO Recommendation 1 stated, “no subsequent additional selection criteria should be used in the selection process,” new requirements did come up during the implementation of the New gTLD Program (e.g., GAC Category 1 and 2 Advice, name collision, designation of .Brand TLDs). These new requirements required additional work by the community and ICANN to develop a roadmap for the implementation of these new requirements. Once the roadmap for the implementation of these new requirements was developed, ICANN defined the operational processes and procedures to support the implementation.

8.1.4 Assessment

8.1.4.1 PROGRAM PROCESSES AND PROCEDURES

Consistency and Quality

The operational implementation of the New gTLD Program was guided by the principles of consistency and quality. To achieve consistency, standardized processes and procedures were defined for all areas of the Program. An example of a standardized process and procedure was the application change request process (see Section 1.3: Application Change Requests of this report). Section 1.2.7 of the AGB stated the following: “If at any time during the evaluation process information previously submitted by an applicant becomes untrue or inaccurate, the applicant must promptly notify ICANN via submission of the appropriate forms.” However, the AGB did not define the forms that the applicant could use to notify ICANN of changes to the application or the criteria and process by which ICANN had to process the notification. In order to put in place a standardized and repeatable process that could be applied consistently for all applicants, ICANN:

- Defined seven criteria that were used to assess each application change request.
- Defined a form for applicants to notify ICANN of changes to application materials.
- Defined a process for applicants to submit application change requests.
- Defined a process to review application change requests.³⁷²

Generally, defining standardized processes and procedures allowed ICANN to provide predictability to applicants and to execute the process in a repeatable manner with consistent results. Each of the previous chapters of this report describes how ICANN defined operational implementation processes and procedures for each specific area.

³⁷² ICANN. New gTLD Application Change Request Process and Criteria. Retrieved from <http://newgtlds.icann.org/en/applicants/customer-service/change-requests>

Quality is the other principle that was crucial to ICANN in the implementation of the New gTLD Program. In addition to achieving quality through standardized processes that yielded consistent results, ICANN implemented quality control steps in all Program processes, including a formal Quality Control program³⁷³ that was implemented in Initial Evaluation (see Section 2.1: Initial and Extended Evaluation of this report), and a quality control step that was inserted prior to the publication of any applicant report to ensure that the reports are consistent among themselves and with the AGB requirements.

Service providers, discussed in Section 8.2: Service Provider Coordination of this report, were partners to ICANN in the implementation of the New gTLD Program and shared the same principles of consistency and quality in their approach. Each documented their approach and process, which were posted on the New gTLD microsite for transparency.

Alignment to Relevant Guidance

In defining operational processes and procedures, ICANN adhered to the requirements of the AGB. In cases where the AGB did not provide the level of detail required for operational implementation, ICANN relied on the expertise of the service providers engaged, as in the case of String Similarity evaluation (see Section 2.3: String Similarity Evaluation of this report), or consulted with service providers and the community, as in the case of auction rules (see Section 4.2: Auctions of this report).

Process Improvement

As the Program progressed, some processes evolved to gain operational efficiency and to better meet the needs of applicants. Examples of processes that evolved included the application change request process, which was updated on 1 October 2014 to not require certain types of change requests to be subject to a 30-day window.³⁷⁴ This update was made to improve the efficiency of the process, after the observation was made that only 25 comments were submitted on the 496 approved change requests from January 2014 through September 2014. This update allowed applicants to more expeditiously move forward in the Program (see Section 1.4: Application Change Requests of this report). Another example is the implementation of the weekly Contracting operational cycle, which was implemented in October 2013, three months after ICANN commenced the Contracting process.³⁷⁵ The move to the weekly Contracting operational cycle allowed ICANN to gain efficiency and provide more predictability of the process to applicants (see Section 5.1: Contracting of this report).

³⁷³ JAS Global Advisors. (6 August 2014) gTLD Application Processing: Initial Evaluation Quality Program Report. Retrieved from <http://newgtlds.icann.org/en/program-status/application-results/ie-quality-program-26aug14-en.pdf>

³⁷⁴ ICANN. Change Requests That Do Not Require A 30-day Comment Window. Retrieved from <http://newgtlds.icann.org/en/applicants/customer-service/change-requests#change-requests-comment>

³⁷⁵ ICANN. Contracting Overview. Retrieved from <http://newgtlds.icann.org/en/applicants/agb/base-agreement-contracting#overview>

8.1.4.2 APPLICANT-FACING SYSTEMS

Applicant-facing systems refer to systems that facilitated communications between ICANN and the applicant. In this round, the TLD Application System (TAS) allowed applicants to submit applications for new gTLDs, and for ICANN to deliver Financial Capability, Technical/Operational Capability, and Registry Services CQs and IE results to applicants. The Customer Portal allowed applicants to submit questions and requests regarding Program requirements and their applications to ICANN, and it allowed ICANN to provide responses. This system was also used by ICANN to deliver Background Screening CQs, Geographic Names CQs, and EE results to applicants. The remaining applicant-facing system, the Application Comments Forum, is discussed in Section 1.3: Application Comments of this report.

TLD Application System (TAS)

There were challenges in the development of TAS. While ICANN began defining preliminary requirements for the application system in 2009, the AGB was not finalized until June 2011. ICANN had seven months between the finalization of the AGB and the opening of the application window to finalize the system requirements, complete system development, integrate the system, and perform testing. A longer period between the finalization of the requirements and the launch of the application window would have provided additional time for aspects of the development process such as system integration, user acceptance testing, security testing, and user beta testing. The limited development period may have contributed to some of the challenges identified by applicants.

In terms of usability, there were some areas that were challenging to users of the system. To access TAS, applicants had to first log into a virtual application that provided a browser-agnostic environment for applicants. Although the browser-agnostic environment might have eliminated some problems with user experience across various browsers, the virtual environment created issues for users as reported in the feedback and inquiries received by the Customer Service Center. Many applicants had issues with downloading and uploading files due to how files are handled within the virtual environment. The Customer Service Center received 108 inquiries during the application window regarding working with files within the virtual environment. To assist applicants, ICANN provided a user guide to educate applicants on how to work within the virtual environment.^{376,377} Although the user guide was helpful, it did not solve the challenge of working with files within this environment.

The other issue that the virtual environment created was with regards to logins. Although the virtual environment provided an additional level of security by creating a second set of passwords, it also created complexity and difficulties for users. Applicants frequently forgot which password was for which system and had to reset passwords frequently. The ICANN Customer Service Center recorded 1,802 inquiries about TAS and the virtual environment passwords during the application window.

³⁷⁶ ICANN. TAS: TLD Application System. Retrieved from <http://newgtlds.icann.org/en/applicants/tas>

³⁷⁷ ICANN. Accessing TAS and the CSC Portal. Retrieved from <http://newgtlds.icann.org/en/applicants/tas/access-21nov12-en.pdf>

On 12 April 2012, hours before the scheduled close of the application window (see Section 1.1: Application Submission of this report), ICANN identified a technical issue with TAS software. ICANN took the most conservative approach possible to protect all applicants and allow time to resolve the issue by taking TAS offline. ICANN informed applicants that the application window would be extended to 20 April 2012 to allow applicants sufficient time to complete their applications in TAS.³⁷⁸ The technical issue with the TAS software allowed a limited number of users to view some other users' filenames and usernames in certain scenarios. The issue was first reported by a system user on 19 March 2012, and although ICANN believed that the reported issue had been addressed, on 12 April 2012, ICANN confirmed that there was a continuing unresolved issue and took the system offline.³⁷⁹ At the time the system was taken offline, there were 1,268 registered users and approximately 95,000 file attachments in the system.³⁸⁰ ICANN's review showed that 105 users might have had filenames and usernames viewed by another user, and 50 users might have viewed filenames and usernames from one or more other users. On 7 May 2012, ICANN issued an announcement that in recognition of the inconvenience caused by the TAS system being temporarily taken offline, if applicants withdrew their applications before Reveal Day, ICANN would provide a full refund of the USD 185,000 evaluation fee.³⁸¹ Previously, the USD 5,000 registration fee was non-refundable to reduce risk of frivolous access to TAS. TAS was brought back online on 21 May 2012, after users were notified whether they were affected or not, and after the system had been fixed and the overall system performance had been improved.³⁸² During the period from 12 April 2012 through 21 May 2012, ICANN provided frequent updates to both the applicants and the community via announcements.³⁸³

Customer Portal

The Customer Portal served its intended purpose of allowing applicants to submit questions regarding the Program requirements and their applications to ICANN and for ICANN to provide responses, and to facilitate the Clarifying Question process during Initial Evaluation and Extended Evaluation (see Section 2.1: Initial and Extended Evaluation of this report). Improvements to the Customer Portal were made over time to enhance usability, such as the addition of sorting capability for the knowledge base and the migration of application data into the Customer Portal to provide applicants with a central location to manage their applications and engage with ICANN.

On 1 March 2015, ICANN announced that the Customer Portal and GDD Portal were taken offline on 27 February 2015 to investigate a reported security issue where under certain circumstances an

³⁷⁸ ICANN. (12 April 2012) Announcement: TAS Temporarily Offline. Retrieved from

<http://newgtlds.icann.org/en/announcements-and-media/announcement-12apr12-en>

³⁷⁹ ICANN. (14 April 2012) Announcement: TAS Interruption – Update (14 April 2012 06:50 UTC). Retrieved from

<http://newgtlds.icann.org/en/announcements-and-media/announcement-14apr12-en>

³⁸⁰ ICANN. (2 May 2012) Announcement: TAS Interruption – Update (2 May 2012). Retrieved from

<http://newgtlds.icann.org/en/announcements-and-media/announcement-02may12-en>

³⁸¹ ICANN. (7 May 2012) Announcement: TAS Interruption – Update (7 May 2012). Retrieved from

<http://newgtlds.icann.org/en/announcements-and-media/announcement-07may12-en>

³⁸² ICANN. (21 May 2012) Announcement: TAS Interruption – Update (21 May 2012). Retrieved from

<http://newgtlds.icann.org/en/announcements-and-media/announcement-21may12-en>

³⁸³ ICANN. 2012 New gTLD Announcements. Retrieved from <http://newgtlds.icann.org/en/announcements-and-media/2012>

authenticated portal user could potentially view data of, or related to, other users.³⁸⁴ The reported security issue was addressed and the Customer and GDD portals were brought back online on 2 March 2015.³⁸⁵ On 30 April 2015, ICANN published an announcement regarding the results of the first phase of its investigation into the reported security issue.³⁸⁶ The investigation involved two consulting firms reviewing and analyzing historical log data going back to the activation of the Customer Portal on 17 April 2013 and of the GDD portal on 17 March 2014. The results of the investigation showed that the unauthorized access resulted from advanced searches conducted using the login credentials of 19 users, which exposed 330 advanced search result records, pertaining to 96 applicants and 21 registry operators. These records may have included attachment(s). These advanced searches occurred during 36 user sessions out of a total of nearly 595,000 user sessions since April 2013. On 27 May 2015, ICANN announced that it had notified users whose credentials were used to access information that did not appear to belong to them and requested that these users: (1) provide an explanation of their activity; (2) certify that they would delete or destroy all information obtained; (3) certify that they had not used and would not use the information or convey it to any third party. In addition, ICANN provided the affected parties with the name(s) of the user(s) whose credentials were used to view their information without their authorization, or of the individuals that were not officially designated by their organization to access certain data.³⁸⁷ On 9 June 2015, ICANN's Chief Information and Innovation Officer posted a blog to share that ICANN had engaged the services of an expert-knowledge firm to review ICANN's implementation of Salesforce.com, the software platform for the Customer and GDD portals.³⁸⁸ The review highlighted several areas where ICANN could harden its platform. As of 31 July 2015, ICANN has since released multiple software patches to address several potential vulnerabilities that were identified, and expects that all work will be completed by the end of calendar year 2015. Several other efforts to harden ICANN's IT and digital services are also underway.

8.1.4.3 ICANN'S INTERNAL RESOURCES TO SUPPORT PROGRAM IMPLEMENTATION

Program staff was a critical component of the effective and efficient implementation of the New gTLD Program. These resources had a wide span of expertise including vendor management, system requirements gathering, business process analysis and development, operations management, technical customer service support, financial management, and program management. In addition to these skills, Program staff was also required to have a broad understanding of ICANN, the AGB, and the diverse set of technical and policy issues that affected the Program.

³⁸⁴ ICANN. (1 March 2015) Announcement: New gTLD Applicant and GDD Portal Update. Retrieved from <https://www.icann.org/news/announcement-2015-03-01-en>

³⁸⁵ ICANN. (2 March 2015) Announcement: Update – New gTLD Applicant and GDD Portal Back Online. Retrieved from <https://www.icann.org/news/announcement-3-2015-03-02-en>

³⁸⁶ ICANN. (30 April 2015) Announcement: New gTLD Applicant and GDD Portal Update. Retrieved from <https://www.icann.org/news/announcement-2015-04-30-en>

³⁸⁷ ICANN. (27 May 2015) Announcement: New gTLD Applicant and GDD Portals Update. Retrieved from <https://www.icann.org/news/announcement-2015-05-27-en>

³⁸⁸ A. Rangan, ICANN. (9 June 2015). Hardening ICANN's IT and Digital Services. Retrieved from <https://www.icann.org/news/blog/hardening-icann-s-it-and-digital-services>

As the Program progressed, Program staff was required to quickly learn new content (e.g., understanding the Registry Agreement (RA) and the contracting process while still executing Initial Evaluation) and to take on the additional tasks of defining new processes and procedures while continuing to operate the previous phases of the Program. The existence of defined processes and procedures allowed for cross-training of resources to meet varying level of Program demands. Over time, Program staff built expertise and gained operational efficiency.

8.1.5 Conclusion

Overall, Program processes, systems, and resources were critical components in supporting the execution of the Program. Program processes and procedures were designed to ensure alignment to GNSO policy and the AGB, and to honor the principles of consistency and quality. Applicant-facing systems served their intended purpose of facilitating communications between ICANN and applicants. ICANN resources flexed to accommodate the demand and evolving needs of the Program. That said, there are additional considerations from this round that can be used to inform the next round.

In particular, the system development process may have benefited from leveraging industry standard best practices for product development. In this round, there was a limited time available between the finalization of system requirements and the launch of the TLD Application System. In future application rounds, the Program timeline should provide additional time for system development, including the definition of robust system requirements and appropriate testing.

In summary:

8.1.a In developing timelines for future application rounds, provide an appropriate amount of time to allow for the use of best practices in system development

8.1.b Explore beta testing programs for systems to allow for lessons learned, to increase effectiveness of such systems, and to provide further transparency, clarity, and opportunity for preparation to applicants