

I. Executive Summary

The Affirmation of Commitments (AoC) called for a regular review of the degree to which the New Generic Top-Level Domain (gTLD) Program promoted consumer trust and choice and increased competition in the Domain Name System (DNS) market. This review is called the Competition, Consumer Trust and Consumer Choice Review (CCT review).¹ The AoC further called on the CCT reviews to evaluate the effectiveness of the application and evaluation process and the safeguards put in place to mitigate the risks associated with the expansion of the generic top-level domains. These reviews are important because they provide ICANN with an assessment of how the new gTLD round performed in these areas and guidance on key issues (including competition, consumer protection, security, malicious abuse and rights protection issues) as it contemplates further increases in the number of top-level domains (TLDs). The CCT Review Team (CCTRT) was asked to weigh the advantages and disadvantages of the New gTLD Program in these key areas and assess whether the program resulted in net benefits to the users of the DNS.

The Review Team endeavored to be as objective as possible and, where possible, to base its findings on available data. The more objective the findings, the more likely the impact of implemented recommendations can be measured. The idea of using metrics to evaluate the performance of the DNS began six years ago with an ICANN Board resolution² that called on the community to identify quantitative targets for consumer trust and choice as well as competition. Although the particular metrics developed at that time ultimately did not form the basis for the analysis, undertaken by the Review Team, in keeping with the approach that was developed then, the Team did strive to employ quantitative analysis wherever possible.

The CCTRT found that while the New gTLD Program is quite new and the data are incomplete, on balance, the expansion of the DNS marketplace has demonstrated increased competition and consumer choice and has been somewhat successful in mitigating its impact on consumer trust and rights (particularly trademark) protection. That said, the Review Team concluded that the New gTLD Program should be regarded only as a “good start” and that a number of policy issues should be addressed before any further expansion of gTLDs.

¹On 30 September 2009, ICANN and the United States Department of Commerce signed the AoC, which—among other things—committed ICANN to periodically organize community-led review teams to assess the impact of the New gTLD Program on the domain name marketplace. In January 2017, the AoC expired following the IANA transition in October 2016. However, many of the provisions contained in the AoC—including community-led reviews of competition, choice, and trust in the domain name marketplace—have been incorporated into ICANN’s revised bylaws (see ICANN, “Bylaws for Internet Corporation for Assigned Names and Numbers: Section 4.6: Specific Reviews,” amended 1 October 2016, <https://www.icann.org/resources/pages/governance/bylaws-en/#article4>).

²ICANN Board Resolution 2010.12.10.30, “Consumer Choice, Competition and Innovation,” (2010), accessed 20 January 2017, <https://www.icann.org/resources/board-material/resolutions-2010-12-10-en#6>.

In particular, the CCTRT found that critical data were in short supply for the analysis of competition and the effectiveness of safeguards and for the promotion of consumer trust and geographic representation of applicants. Even the definition of the DNS market itself is problematic without additional data about whether consumers view new gTLDs as substitutes for other domain names, for example country code top-level domains (ccTLDs), or the degree to which alternative online identities such as Facebook and Yelp pages and third-level domains are substitutes. Consequently, the CCTRT recommends that ICANN enhance its capabilities to gather and analyze data, including that used by the ICANN Contractual Compliance department, prior to further expanding the gTLD program. We also identify certain policy issues that the community should resolve prior to the further expansion of the gTLD space. Finally, we recommend a number of specific research projects that should be completed prior to a future CCTRT, and in many cases, even sooner.

Background

Prior to the start of the CCTRT's work in January 2016, ICANN, together with the community, had begun preparatory work to identify metrics to inform the review. Data collection on these metrics began in 2014, and continued into 2016. In addition, ICANN commissioned two major research initiatives in 2015 (Wave 1³) in anticipation of the Review Team's work: a global consumer end-user and registrant survey and an economic study of the program's competitive effects. These surveys were repeated in 2016 (Wave 2⁴) to measure updates as more new gTLDs came into operation, and took into consideration, where applicable, additional questions and requirements raised by the CCTRT.

In conducting its analysis, the Review Team was mindful of the fact that the New gTLD Program had only been in effect for a short period of time, that new domain names are continuously entering the marketplace, and thus the full effects of the program may have not yet been ascertained. The team used data that had previously been collected, and commissioned new research where it felt that important data points were missing, to help inform their analysis. The team broke its evaluation into three subteams:

- o **Competition and Consumer Choice.** This subteam examined the effects of the entry of new gTLDs on price and non-price competition in the expanded domain name marketplace, as well as whether consumer choice in the marketplace was effectively enhanced with the introduction of new gTLDs.
- o **Consumer Trust and Safeguards.** This subteam focused on the extent to which the expansion of new gTLDs has promoted consumer trust and the impact of the safeguards that had been adopted to mitigate any problems that might have arisen as a result of the program.
- o **Application and Evaluation Process.** The Review Team explored issues related to the effectiveness of the application process, with a particular focus on the applicant experience, the paucity of applications from underserved regions, and the objection processes.

³Nielsen, *Consumer Research* (May 2015); Nielsen, *Registrant Survey* (September 2015)

⁴Nielsen, *Consumer Research Wave 2* (June 2016); Nielsen, *Registrant Survey Wave 2* (August 2016)

Competition and Choice

While it is too early to fully evaluate the competitive effects of the introduction of 733 delegated new gTLDs as of February 2017 (excluding those that are considered .brands)⁵, some preliminary findings suggest that the potential for effective competition exists and some important indicators are consistent with increased competition. Of particular note, more than half of new registrations of gTLDs have been in new gTLD strings. If ccTLDs are included, registrations are divided roughly into thirds among new gTLDs, legacy gTLDs and ccTLDs. Although the overall growth in registrations is insufficient for these developments to have resulted in dramatic shifts in market shares, the CCTRT nonetheless found that new gTLDs currently account for about 9% of registrations in all gTLDs, which suggests that registrants are making use of a broader range of gTLDs.

It is also interesting to note that in 92% of the cases in which a second-level domain was available in .com, the registrant nonetheless chose a second-level string in a new gTLD. For example, even if bigshotphotography.com was available, registrants often chose bigshots.photography instead, and in many cases were willing to spend more money to do so.

The structure of the domain name industry itself provides a partial explanation for the potential for sustained competition. In particular, the availability of independent back-end service providers and retailers (registrars) decreases barriers to entry because new registries do not need to invest in supplying their own in-house back-end infrastructure or developing their own sales channels. Consequently, smaller niche registries have a higher likelihood of achieving minimum viable scale.

Early indications are that the new rights protection mechanisms have succeeded in minimizing the level of defensive registration (i.e. registering a domain simply to prevent others from doing so) by most trademark holders without a significant increase in the number of trademark complaints lodged in the form of either Uniform Domain-Name Dispute-Resolution Procedure (UDRP) or Uniform Rapid Suspension (URS) filings. Further analysis of the distribution of defensive costs (including blocking – agreement with the registry not to sell a domain), direct communication (such as cease and desist correspondence and URS) is currently underway, but preliminary indications are that increases in defensive investment by trademark holders have been less than feared by some prior to the launch of the program.

One caveat to this analysis is the abundance of “parked” domains (those domains that have been registered but are not yet being used) among the new gTLDs. While not dispositive, disparate rates of parking may suggest that competition from new gTLDs is not as significant as indicated by the data reported above.

⁵gTLDs considered .brands for the purpose of this review are those which include Specification 13 in their registry agreements, or are exempt from the Registry Operator Code of Conduct.

The Review Team intends to address this issue in its final report. We need to mention that complete analysis of parking was hindered by unavailability of parking data for the legacy gTLDs which could have been useful for comparison purposes. We hope that such data will be collected in future reviews.

Consumer Trust and Safeguards

An international survey commissioned by the CCTRT indicates the domain industry is one of the most trusted in the tech sector and that the dramatic expansion of the DNS has done little thus far to undermine that trust.⁶ A key component of this trust appears to be grounded in familiarity, with legacy gTLDs still more trusted than new gTLDs, and strings with recognized terms more trusted than strings with less familiar terms. In addition, there are indications of a desire among end users for a more semantic web where the domain name is a rational indicator of content.

Similarly, consumers reported that restrictions on who could purchase certain gTLDs would engender greater trust, particularly if the domain name itself suggests that the registrant might need to possess a certain license or credentials. These tendencies represent both an opportunity and a danger if the connection between names and content proves to be less direct.

Given the difficulty of measuring trust as an abstraction, the team explored the notion of “trustworthiness” as a proxy for consumer trust. For example, the CCTRT has fielded a study on DNS abuse – that as of this writing is not yet complete – to determine if rates of abuse are higher or lower among the new gTLDs. If abuse rates for new gTLDs are higher, one could reasonably be concerned about the erosion of consumer trust as familiarity with these bad practices becomes more widespread.

Other notable findings on the impact of the new gTLD safeguards include the following:

- 99% of registries have implemented safeguards regarding the prevention of abusive activities in their gTLDs as required in their registry-registrar agreements; however, the downstream impact is unclear
- ICANN reports that abuse complaint volumes are typically higher for registrars than registries, but it is difficult to determine if safeguards are affecting rates of abuse.
- WHOIS accuracy complaints remain the largest category of complaints to ICANN Contractual Compliance.
- ICANN Contractual Compliance has reported that 96% of registries are performing the analysis that is required to determine if they are being used to perpetrate security threats.
- The Review Team examined the rates of UDRP and URS case filings, and found an overall decrease in the number of cases filed since 2012, although URS cases in new gTLDs have driven an approximately 10% increase in disputes since the recent low point in cases filed in 2013. We are awaiting more information on costs related to trademark enforcement before coming to more specific conclusions in this area.

⁶Nielsen, *Consumer Research Wave 2* (2016), 63-69

We also identified several challenges to our assessment of the extent to which safeguards mitigated risks involved in the expansion of the New gTLD Program.

As previously mentioned, one challenge to evaluating the impact of safeguards on trustworthiness is the lack of granularity in ICANN Contractual Compliance data. It is unclear what the impact of safeguards imposed on sensitive, regulated and highly regulated strings has been since complaints to registrants are difficult to track, as is the lack of detail publicly reported by ICANN Contractual Compliance regarding complaints that it receives. Moreover, provisions related to inherent government functions and cyberbullying that were incorporated into the registry agreements were difficult to measure as there were no consequences identified for a failure to comply with these provisions. Finally, the Public Interest Commitments (PICs) incorporated into registry agreements were particularly challenging to assess because they varied greatly. It remains unclear how effective enforcement has been.

Application and Evaluation

Here, the CCTRT chose to focus less on the complexity and any inefficiencies of the application and evaluation process and more on the potential inequities of the program as implemented. Of particular concern to the Review Team was the relatively low application rate from entities in the Global South.

The CCTRT commissioned two focus group efforts to explore applicant experiences, and barriers to entry for those who did not apply. Although more than half of the applicants to the New gTLD Program indicated they would go through the process again, even with no changes, a large majority indicated the program was overly complex and bureaucratic and that the assistance of outside consultants was necessary. Therefore, it should come as no surprise that a focus group of applicant cohorts (similar entities to those who applied) in the Global South indicated not only a lack of awareness of the program as a whole but concerns over the complexity of the application process and a lack of available assistance in applying. Although not the most frequently expressed concern, nearly every cohort expressed concerns about the return on investment from operating a new gTLD. Programs that were put in place to facilitate and encourage applications from the Global South were thought to be both poorly monitored and largely ineffective. The ICANN community needs to make a decision about the importance of applications from the Global South (and by extension, from other underrepresented regions) and, if appropriate, to take further steps to encourage those applications. It is clear that if the community wants more applications from underrepresented regions, more needs to be done.

Further analysis of the application process revealed that implementation of policies around issues such as string confusion was inconsistent and unpredictable. More clarity is needed in the applicant guidebook to reduce this inconsistency going forward.

Finally, the CCTRT found that GAC participation in the application and evaluation process was largely beneficial and led directly to modifications of applications and applicants more successfully navigating the process.

Recommendations

While two large research projects – study of DNS abuse and survey of trademark owners – are still underway, the CCTRT has reached some preliminary recommendations. These recommendations fall into three main categories:

- Requests for more and better data collection
- Policy issues to be addressed by the community
- Suggested reforms relating to transparency and data collection within ICANN Contractual Compliance

The recommendations have been assigned a priority by the CCTRT, reflecting the timeframe in which each should be implemented and the extent to which any particular recommendation should be a prerequisite to further expansion of the DNS.

Data Gathering

In general, the CCTRT work was hampered by insufficient data on pricing of domain names, including wholesale, retail and secondary market prices. In addition, collection of data about a country at a regional level would make it possible to assess competition in narrower geographic areas. Furthermore, the lack of data regarding DNS abuse and lack of more granular information about the subject matter of complaints received by ICANN Contractual Compliance also created obstacles to assessing the effectiveness of the safeguards and the trustworthiness of the new gTLDs. Some of this additional data collection will require changes to registry and registrar contracts, which will take some time, but the Review Team believes that it is necessary for proper evaluation of programmatic reforms in ICANN. Other data are collected by third parties, and also could be used by ICANN. To the extent possible, relevant data should be made available in nondisruptive and nonconfidential form to researchers both within and outside the ICANN community. The CCTRT recommends that data gathering become a priority inside ICANN with an emphasis on data-driven analysis and programmatic success measurement.

ICANN Contractual Compliance

The CCTRT finds that current data available from ICANN Contractual Compliance are insufficient to measure the enforcement of various contract provisions and the success of safeguards in mitigating downstream consequences to DNS expansion. Part of the problem is transparency, and part of that issue appears to be in the lack of granularity of the data that are being collected. The CCTRT make several recommendations for practical reform within ICANN Contractual Compliance.

Conclusion

Initial indications are that the New gTLD Program has led to a dramatic increase in consumer choice, a modest increase in competition and minimal impact on consumer trust. Nonetheless, the Review Team believes that there is a substantial need for more and better data on both competition and pricing and on the impact of safeguards on consumer protection.