Comments on JAS Draft Report: Mitigating Risk of DNS Name Space Collisions

Business Constituency Submission

GNSO//CSG//BC
Background

This document is the response of the ICANN Business Constituency (BC). The BC’s comments arise from the perspective of Business users and registrants, as defined in our Charter:

The mission of the Business Constituency is to ensure that ICANN policy positions are consistent with the development of an Internet that:

1. promotes end-user confidence because it is a safe place to conduct business
2. is competitive in the supply of registry and registrar and related services
3. is technically stable, secure and reliable.

ICANN opened a public comment reply period on April 1 to solicit additional community input on recommendations in a study on namespace collisions in the global Internet DNS and a framework for risk mitigation.

BC Comments

The “Mitigating the Risk of DNS Namespace Collisions – The Name Collision Occurrence Management Framework” (“Phase One Report”) is not the complete deliverable defined in the JAS Global Advisors statement of work, due in part to a requirement to temporarily hold information related to an undefined DNS vulnerability that was discovered during its development.

Moreover, as noted by other commenters, the Phase One Report does not include the framework specified by the Board’s New gTLD Program Committee. Because the framework and data supporting the findings and recommendations of the report are still pending release, the BC asks ICANN to reserve final closure on collision-related recommendations and actions until the community has received the full report and has been given the opportunity to review and comment.

We agree with the concerns of a number of commenters that the controlled interruption mechanism proposed in the Phase One Report (the 127.0.53.53 query response) has some shortcomings. The BC

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1 Business Constituency Charter, at [http://www.bizconst.org/charter.htm](http://www.bizconst.org/charter.htm).

2 Section 3.1 of “New gTLD Collision Occurrence Management” proposal approved by NGPC in Oct-2013:

ICANN will commission a study to develop a name collision occurrence management framework. The framework will include appropriate parameters and processes to assess both probability and severity of impact resulting from name collision occurrences. Examples of the parameters include number of DNS requests, type of DNS requests, type of queries, diversity of query source and appearances in internal name certificates.

The framework will specify a set of name collision occurrence assessments and corresponding mitigation measures if any, that ICANN or TLD applicants may need to implement per second level domain name (SLD) seen in the DITL and other relevant dataset (e.g., information from Certificate Authorities regarding the issuance of internal name certificates). The proposed name collision management framework will be made available for public comment.
supports an approach that permits the community to understand the degree of risk arising from each of the new gTLDs and have mechanisms in place to remediate those concerns.

While the concept of “controlled interruption” is an appealing innovation, its use for all new gTLDs raises questions and concerns. More information is needed about the effectiveness of such a mechanism in notifying the originators of the failed queries, to mitigate the problems causing the queries both during and after the 120 day period, and to provide meaningful feedback about the interruptions that can be used to measure its effectiveness. We also note that resource discovery queries won’t necessarily get the attention of query generators when controlled interruption responses are provided.

A carefully designed “honey pot” approach, as suggested by some commenters, might be effective in identifying collisions and measuring effectiveness of mitigation. However, the BC would not support a honeypot approach that could cause release of sensitive information to the honeypot operator.

Regardless of the mechanism(s) selected, an effective process must begin as soon as possible as new gTLDs are coming online at a rapid pace.

We are also concerned about the suggestion in the Phase One Report and the statements of certain commenters that a large part of the responsibility for identifying, remediating, and contacting the originators of the colliding DNS queries should be passed to the business community and Internet service providers.

We have similar concerns about suggestions that ISPs should bear the burden of identifying the originating users of colliding queries and that they should supply query data to third parties for analysis.

We believe that ICANN and the registry operating the gTLD resulting in such collisions should be responsible to the larger Internet community, consistent with ICANN’s mission to preserve the security and stability of Internet functions.

As a final note, we share the concerns of many commenters regarding Recommendation 3 – that “clear and present danger to human life” is the only situation meriting the use of emergency response options. The BC notes that systemically significant dangers to the business and financial sectors of the global economy might also merit the use of emergency measures. And if any enterprise were to demonstrate how collisions would endanger their financial survival, that should also merit emergency response.

Jim Baskin led drafting of these comments, which were approved in accordance with the BC Charter.