Frequently Asked Questions: Draft JAS Phase One Report on Mitigating the Risks of DNS Namespace Collisions

1. **What is the purpose of the JAS report?**

   A secure, stable and resilient Internet is ICANN's number one priority. Although namespace collisions are not new, this report aligns with ICANN's commitment to the Internet community to mitigate and manage collision occurrences that may occur as new domain names are introduced to the DNS.

2. **Did the report identify a new level of namespace-related collision risks in the new gTLD program?**

   The draft JAS report states the following:

   "We do not find that the addition of new Top Level Domains (TLDs) fundamentally or significantly increases or changes the risks associated with DNS namespace collisions. The modalities, risks, and etiologies of the inevitable DNS namespace collisions in new TLD namespaces will resemble the collisions that already occur in the other parts of the DNS. The addition of multiple new TLDs over the past decade (generic and country code) has not suggested that new failure modalities might exist; rather, the indication is that the failure modalities are similar in all parts of the DNS namespace."

3. **Can you provide a recap of the recommendations in the JAS draft report?**

   The recommendations include:

   - The Top Level Domains .corp, .home and .mail should be permanently reserved.

   - ICANN should require new TLD registries to publish a controlled interruption zone immediately upon delegation in the root zone.

   - ICANN should have emergency response processes in place on 24x7x365 basis that include the abilities to analyze and act upon reported problems that present "clear and present danger to human life".

   - ICANN and others in the community should continue to collect and analyze data relating to the root servers and to the controlled interruption.

4. **What happens after the public comment period on the draft report closes?**

    Based on the public comments and discussions in Singapore and other fora, JAS is expected to revise and publish a final report. The ICANN Board is expected to consider the revised report for adoption. Additional components of the report including analytical techniques and datasets will be published following ICANN's Coordinated Vulnerability Disclosure Process.

5. **Why are portions of the draft JAS report being withheld?**

    Over the course of their study, JAS uncovered a vulnerability not directly related to ICANN's New gTLD Program nor to new TLDs in general. Pursuant to ICANN's Coordinated Vulnerability Disclosure Process and out of an abundance of caution, JAS has recommended against publication of the complete draft report at this time.

    In order to continue the dialogue and work towards definitive mitigation measures to the name collision risk on new gTLDs, relevant portions of the complete draft report are open for public comment. Additional components of the complete report will be published as soon as it is prudent.

6. **When will the remainder of the draft JAS report be published?**

    JAS is actively working with the impacted vendors. Additional components of the complete report will be published following ICANN's Coordinated Vulnerability Disclosure Process.

    <u>**QUESTIONS RELATED TO RECOMMENDATIONS IN THE DRAFT JAS REPORT**</u>

7. **Can a Registry make the strings on their Second-level Domain (SLD) Block List available for registration?**

    A Registry that is delegated and has elected the Alternate Path to Delegation may not activate strings appearing on their SLD Block List. However, a Registry can allow registration of these strings, subject to the Registry's usual policies and other Registry Agreement requirements, providing the names are not activated in the DNS. The draft JAS report recommends that Registries in this situation implement the 120-day Controlled Interruption period for each string appearing on their SLD Block List. After the 120-day period, there would be no further collision-related restrictions.

The draft JAS report recommends that a Registry that is not yet delegated implement Controlled Interruption for the 120-days immediately following delegation via a wildcard record. After the 120-day period, there would be no further collision-related restrictions or a requirement to block the names in the SLD list.

8. **What about the 25 proposed TLDs that were not eligible for the Alternate Path to Delegation?**

The draft JAS report recommends that all applied-for TLDs with the exception of *.corp*, *.home*, and .mail be subject to the 120-day Controlled Interruption period. If the JAS recommendations are accepted, the rest of the 25 proposed TLDs that were previously found non-eligible for the Alternate Path to Delegation would be allowed to proceed to delegation while implementing the Controlled Interruption measure recommended in the draft JAS report.

9. **What will happen to the applications for *.corp*, *.home*, and *.mail*?**

If ICANN accepts the recommendations in the final JAS report, ICANN will defer delegation of these TLDs indefinitely.

10. **Will the rate of contracting/delegation be impacted by the adoption of the proposals in the draft JAS report?**

The rate of contracting/delegation will not be impacted.

11. **How does the recommended 120-day Controlled Interruption period fit into the overall timeline?**

The draft JAS report recommends that new gTLD Registries implement Controlled Interruption during the 120-days immediately following delegation. The Controlled Interruption period may overlap with the 120-day CA Revocation Period that commences at the time of contracting.

New gTLDs already delegated would implement the Controlled Interruption measure only for the names in their SLD block list.

12. **What happens after the 120-day Controlled Interruption period?**

The draft JAS report recommends that after the 120-day period there would be no further name collision-related restrictions. The draft JAS report recommends that ICANN maintain a comprehensive emergency response capability indefinitely.

Similarly, for all cases and at all times, ICANN will maintain the name collision report measure that allows an affected party to report demonstrably severe harm as a consequence of name collision.

13. **The JAS report recommends the use of wildcard DNS records.   Aren't wildcards prohibited?**

DNS wildcard Resource Records are prohibited by the new gTLD registry agreement. The reasoning for the prohibition along with references to technical reports that triggered the prohibition are described in the report "Harms Caused by NXDOMAIN Substitution in Top-level and Other Registry-class Domain Names" available at http://archive.icann.org/en/topics/new-gtlds/nxdomain-substitution-harms-24nov09-en.pdf. The report describes the potential harms caused by wildcards and similar technologies when implemented in "registry-class domain names", i.e., domain names (e.g., a TLD) under which registration of names in the DNS is offered.

The draft JAS report is proposing to insert wildcards only for TLDs that are not already offering registration in the DNS and for a limited period of time. The use of wildcard records in this type of situation is considered safe. And in case it is discovered that the wildcards are causing unintended harm, the name collision reporting mechanism http://www.icann.org/en/help/name-collision/report-problems will be available to third parties to report such cases to ICANN, which in turn will coordinate with the registry for the appropriate action.

For Registries that are not yet in production, the draft JAS report recommends that Controlled Interruption be implemented by inserting a wildcard record into the TLD zone. As a wildcard record matches all queries for non-existent names, a Controlled Interruption response will be returned for all queried and inactive SLDs, including SLDs that do not appear on the SLD Block List. The draft JAS report recommends that the prohibition on wildcard records be temporarily suspended during the Controlled Interruption period, which occurs before General Availability. Once the 120-day Controlled Interruption period has lapsed, the prohibition on wildcard records would be re-instated.

14. **How is Controlled Interruption related to SLD Block Lists (or: How does this impact the "alternative path to delegation")?**

Per the new gTLD Collision Occurrence Management Plan http://www.icann.org/en/groups/board/documents/resolutions-new-gtld-annex-1-07oct13-en.pdf, a registry operator may elect to proceed to delegation prior to finalization of the Collision Management Framework by implementing a conservative collision mitigation measure based on SLD Block Lists generated from 2006-2013 DITL and DNSSEC rollout datasets. This draft is the first step toward the final Collision Management Framework.

The SLD Block List approach renders many strings ineligible for activation. Controlled Interruption provides a mechanism to "buffer" potential unintended

or legacy usage of a TLD from the new usage. In this way it is similar to the Certificate Authority (CA) Revocation Period.

Because wildcard DNS records should not be used in production zones, JAS recommends making use of the SLD Block Lists to implement Controlled Interruption for registries that are in production in order to clear those strings.