Comment on ICANN Recommendations for Managing IDN Variant Top-Level Domains

Business Constituency Submission

GNSO//CSG//BC
Background

This document is the response of the ICANN Business Constituency (BC), 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.

Comment on the Recommendations for Managing IDN Variants

In our Dec-2017 comment on IDN Implementation Guidelines, the BC stated that increased use of IDNs will facilitate the creation of customized and relevant localized content for consumers in various countries and regions across the world, especially in developing nations with predominantly non-English-speaking populations. This practice will benefit businesses and consumers alike by fueling economic development in regions which currently have limited choice with respect to linguistically and culturally tailored domain names and content.

Alongside this enthusiasm we recognize the continuing challenges to ensuring that the attributes of IDNs are not used in a manner that diminishes the security, stability, and resiliency of the DNS, whether maliciously or inadvertently. In that spirit we welcome the output of the IDN Variant task force and share our appreciation for the comprehensive effort which was required to generate the 6-part proposal we have been asked to comment upon.

Specific feedback was sought on the following questions:

1. The rationale for the RZ-LGR requires strictly adhering to the IDN variant label sets defined by the community through the RZ-LGR. Is this a reasonable pre-requisite for implementing IDN Variant TLDs?

2. Do the proposed recommendations appropriately address the management and implementation of the IDN Variant TLDs?
   a. Do any suggested recommendations need to be changed? Why?
   b. Are any additional recommendations needed?

3. Does the analysis suitably cover the impact of the recommendations on existing procedures for IDN ccTLDs and IDN gTLDs? Is there alternate analysis for certain cases? Are there any additional impacts on the procedures not identified?

4. Which (if any) of the recommendations require policy consideration by GNSO and ccNSO, whereas the remaining would only have an impact on procedures?

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5. To prevent the permutation issue which can be introduced by using variant labels, as identified by SSAC, how may the allocated IDN Variant TLD labels be limited? Are the mechanisms suggested in Appendix C appropriate? What other factors may also be relevant?

6. Are the risks and their mitigation measures sufficiently comprehensive? Are there any additional risks? Should there be different or additional mitigation measures?

Our responses are below. Note that we do not have sufficient expertise to respond to #3.

1. The rationale for the RZ-LGR requires strictly adhering to the IDN variant label sets defined by the community through the RZ-LGR. Is this a reasonable pre-requisite for implementing IDN Variant TLDs?

   This is not just a reasonable prerequisite, it is absolutely essential. We see no reason to ever consider the definition of IDN Variant TLDs outside of the aegis of RZ-LGR, and the non-existence of a LGR panel within a script community would ideally prevent the creation of variant labels within that script even at the second level.

2. Do the proposed recommendations appropriately address the management and implementation of the IDN Variant TLDs?

   The full set of 10 recommendations, rather than just the primary 3, should be implemented.

   In particular, Recommendation #4 (“Second-level variant labels under IDN variant registered to the same entity”) will be required if variants labels at the second level are to generate acceptable user experiences. Users will reasonably expect that variants result in the same experiences for all use cases and it will be impractical to meet that expectation if variants are not managed by the same entity.

4. Which (if any) of the recommendations require policy consideration by GNSO and ccNSO, whereas the remaining would only have an impact on procedures?

   Certain of the risks discussed in IDN Variant TLD Implementation: Risks and Mitigation are greatly complicated by split policy and procedures between ccNSO and GNSO. We specifically call out three:

   - Risk 2: Same Entity Constraint Not Implemented by the Community
   - Risk 6: “Same Entity” Requirement Will Not Have Consistent Implementation
   - Risk 8: IDN Tables and Variant Labels at the Second Level Not Managed by the Community

   If there is not alignment between ccNSO and GNSO regarding the mitigation of these risks, users will encounter unpredictable behavior between variants at both the TLD and second level.

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5. To prevent the permutation issue which can be introduced by using variant labels, as identified by SSAC, how may the allocated IDN Variant TLD labels be limited? Are the mechanisms suggested in Appendix C appropriate? What other factors may also be relevant?

The mechanisms in Appendix C are quite extensive and seem promising. However, the recognition that “there are limitations” to mechanic approval of variants and the reliance on ongoing LGR involvement points to a fundamental risk that no list of heuristics can entirely resolve. This should be better recognized in the Risks and Mitigations document.

On the principle that we should start with a conservative process of label approval, potentially liberalizing as risks are mitigated, it makes sense to initially disallow any variants in the second level under a variant TLD, except where ceiling values are already in place.

6. Are the risks and their mitigation measures sufficiently comprehensive? Are there any additional risks? Should there be different or additional mitigation measures?

The list of Risks and Mitigations is thorough but not complete. Here are two additional risks.

**Existence and Quality of LGR Panels will vary over time**

Because the IDN variant management process cannot be entirely determined algorithmically, the stability and security of the namespace will be dependent on the diligence and expertise of each LGR panel. Panels are communities of people and their composition will wax and wane over time as experts come and go and as hard problems are declared to have been solved. It is possible that the efficacy of a panel will atrophy or even that a panel will dissolve and never reform. If either of these occur, other risks will be exacerbated.

**Lack of Infrastructure and Tooling**

Aspects of this risk occur throughout the materials we reviewed, but the topic isn’t explicitly called out as a separate issue. The risk is most apparent wherever “Same Entity” constraints are mentioned, but it is more fundamental than that. Variants are defined as “considered the same by [script] community” and are also assumed to be the same by end users. But to ensure they are the same, we need tooling to ensure that variants are:

- easily deployed as clones (discussed below);
- easily transferred to new owners and operators en bloc; and
- easily verifiable to be the same by a policy auditor.

We note that even though variant registrations at the second level have been available for many years, there are still no commonly used tools to create common DNS records for variant zones, nor to configure web, mail, or other application servers to provide consistent responses for variant names. Often variant names are unconfigured or misconfigured, creating poor or misleading user experiences. Such tools are not hard to create, so we question the advisability
of providing yet more variant names until the tools to provide good user experience are available.

Absent these tooling improvements, any policy which mandates sameness will be at risk.

The investigations into EPP and ROIDs are a good start; they also point to the gaps between parties and NSOs which must be addressed.

Conclusion
The recommendations by the IDN Variant TLD task force are excellent and comprehensive. We recognize that significant risks remain and agree that the Board should not lift the ban on IDN TLD Variants until these risks are mitigated. We encourage further work to address the risks in the expectations that they will be successfully addressed by collaboration of ccNSO and GNSO.

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This comment was drafted by Mark Svancarek with edits by Steve DelBianco.

It was approved in accord with our charter.