

Registries Stakeholder Group Statement

Issue: **Internationalized Domain Name (IDN) Implementation Guidelines.**

Date statement submitted: **2 May, 2017**

Reference URL: <https://www.icann.org/public-comments/idn-guidelines-2017-03-03-en>

Background

- Guidelines for IDN registrations on the second level.
- The IDN Implementation Guidelines aim to minimize the risk of cybersquatting and consumer confusion.
- The GNSO asked ICANN to review the [current guidelines](#), which were last updated in 2011.
- The IDN Guidelines are applicable to all TLD registries that offer IDN registrations under their Registry Agreement and intend to serve as best current practice examples for ccTLD registries and registrars offering IDNs.

RySG Comment:

The gTLDs Registries Stakeholder Group (RySG) welcomes the opportunity to comment on the Draft Guidelines for the Implementation of Internationalized Domain Names (IDNs) on the second level.

The RySG wishes to make the following comments:

Normative Language

The draft Guidelines introduce normative language based on [RFC 2119](#), which clearly defines the keywords “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY” and “OPTIONAL”. The RySG welcomes any attempt to create clarity and avoid confusion on used terminology.

RFC 2119 limits the use of this imperative language and defines that *‘they MUST only be used where it is actually required for interoperation or to limit behaviour which has potential for causing harm’* and for example *‘must not be used to try to impose a particular method on implementors where the method is not required for interoperability’*. In addition, RFC 2119 asks document authors to *‘elaborate the security implications of not following recommendations or requirements’*.

The RySG is concerned that the Draft Guidelines introduce requirements that are not strictly necessary for interoperability or to limit potential harm. The RySG further notes that the Draft

Guidelines do not elaborate on the security implications of not following recommendations or requirements.

The RySG asks the authors to review the Draft Guidelines and use the imperative language ‘with care and sparingly’ and ‘elaborate the security implications of not following recommendations’ in accordance with RFC 2119, point 6 and 7.

Transition

Draft guideline 1:

TLD Registries supporting Internationalized Domain Names (IDNs) must do so in strict compliance with the requirements of the IETF protocol for Internationalized Domain Names in Applications, as defined in standards track RFCs 5890, 5891, 5892 and 5893.

We recommend adding “and their successors” at the end of the text to account for future versions of the standard tracks RFCs: “ (...) *as defined in standards track RFCs 5890, 5891, 5892 and 5893 and their successors*”.

Draft guideline 4:

No label containing hyphens in the third and fourth positions must be registered unless it is a valid A-label, with reservation for transnational action. Hyphens in these positions are explicitly reserved to indicate encoding schemes, of which IDNA is only one instantiation. These guidelines are not intended to assist with any other instantiations.

We recommend adding the word ‘both’ for emphasis and clarity: “No label containing hyphens in **both** the third and fourth positions (...).

Draft guideline 5:

TLD registries with pre-existing domain names that do not conform to these guidelines should take the following actions to reduce disruption to registrants and Internet consumers:

- a. *Make clear in their registration policy whether registered domain names or currently activated labels, which do not conform to the guidelines, will continue to be published in the TLD zone file.*
- b. *In cases where non-conforming registered domain names will continue to be published in the zone file, make clear any additional restrictions placed on usage.*
 - i. *Include restrictions that may influence the lifecycle of the domain name, such as restrictions on renewals, transfers and change of registrant*
 - ii. *Include restrictions on the activation or usage of variants.*
 - iii. *Clearly state whether the continuing publication in the zone file of non-conforming labels will cease after a period of time.*
 1. *If publication of non-conforming labels into the zone file will cease, then clearly state the date at which the labels will be removed from the zone file.*
- c. *Publish relevant changes to the TLD's registration policy at a publicly accessible location on the TLD registry's website.*
- d. *Encourage registrars to notify registrants of non-conforming registered domain names of the change of policy and of all relevant dates and conditions which may apply to such domain names.*

It is our opinion that the current text of draft guideline 5 is overly prescriptive and should be shortened. Registry operators are in a better position to design a communication plan to address any policy update that affects the life cycle of domain names under its TLDs.

In addition, we recommend that the proposed guideline clarifies that pre-existing domain names are not mandated to comply with these guidelines: *"TLD registries with IDNs that were registered prior to the implementation of these guidelines and which do not conform to these guidelines are not required to comply with the guidelines, but should take the following actions for these pre-existing domain names to reduce disruption to registrants and Internet consumers."*

Format of IDN Tables

Draft guideline 7:

IDN tables must be placed in the IANA Repository for IDN Practices. Further, (a) Except as applicable in 7(b) below, registries must use Label Generation Ruleset (RFC 7940) format to represent an IDN table; (b) Registries with existing legacy IDN tables already present within the IANA Repository for IDN Practices at the time these guidelines are published are encouraged to transition to the LGR format; (c) The IDN table must include the complete repertoire of code points, any variant code points and any applicable whole-label evaluation rules to determine if a label is acceptable for registration.

The draft Guidelines require Registries to adhere to the LGR standard for the publication of IDN tables and encourage the transition of existing IDN tables to the LGR format. The RySG acknowledges the benefits of a widespread use of the LGR RFC format as it allows a better adoption and easier comparison and supports this as a long-term strategy. However, registry operators should not be required to use a new format (i.e. RFC 7940) to publish IDN Tables. The proposed XML LGR format requirement has no effect in minimizing the risk of cybersquatting or consumer confusion, two of the stated goals of these IDN guidelines (<https://www.icann.org/news/announcement-2015-07-20-en>). Moreover, it is not required for interoperability. To this end, each registry operator should assess at its discretion whether to adopt RFC 7940.

The RySG wants to underscore that a transition to a general use of the LGR format would require a long enough transition period for Registries to create new code tables, distribute them, and put them into effect, and that ICANN or IIS should provide validation tools to review these new tables before the policy becomes mandatory.

The RySG wants to flag that the new gTLD contract requires IDN Tables to be submitted to IANA for publication in the IANA Repository, but that not all submitted tables have been published.

For the reasons mentioned the RySG recommends amending draft guideline 7 as follows: "IDN tables **must be submitted to IANA for publication** in the IANA Repository for IDN Practices. Further, (a) Except as applicable in 7(b) below, registries **are encouraged to** use Label Generation Ruleset (RFC 7940) format to represent an IDN table; (b) Registries with existing legacy IDN tables already **submitted for inclusion in the** IANA Repository for IDN Practices at the time these guidelines are published are encouraged to transition to the LGR format (...)."

Consistency of IDN Tables and Practices

Draft Guideline 9:

TLD registries seeking to new IDN tables or to modify existing ones may use available Reference Second Level LGRs as is or as a reference. IDN tables may deviate from Reference Second Level LGRs. Notwithstanding the foregoing, Registry Operators seeking to implement IDN tables (i.e. new or modifications of existing ones) that pose any security² and/or stability³ issues must not be authorized to implement such LGRs.

We do not agree with the definition of stability in the context of these IDN Guidelines. It is too broad and too open for interpretation. The relevant standards by which stability is assessed should only be Standards-Track or Best Current Practice RFCs sponsored by the IETF.

IDN Variant Labels

Draft guideline 12:

IDN Variant Labels generated by an IDN table must be a) allocated to the same registrant, or b) blocked from registration.

The proposed guideline is missing a definition of "same registrant". We further recommend adding clarifying language to state that a registry operator must publish the variant activation policy in its public website.

Draft Guideline 13:

Only IDN Variant Labels with a disposition of "allocatable" may be included in the DNS. IDN Variant Labels must only be delegated into the DNS ("activated") as requested by the registrant (or corresponding registrar), except in cases where a registry-side approach is explicitly expressed in the IDN policies for a particular language/script.

*In cases of registry-side approach, the registry must carefully take into consideration the security and stability impacts: (i) as advised in the relevant documents from SSAC; (ii) different user experience perspectives as explained in the document *Examining the User Experience Implications of Active Variant TLDs*; (iii) the *IDN Variant Issues Project: Final Integrated Issues Report*; (iv) the IDN policies and LGRs adopted by the relevant respective language communities; as well as (v) the evidenced operational experiences from such communities, before implementing any IDN policy that includes registry-side activation of IDN Variant Labels.*

For example, the Chinese Domain Name Consortium, the related informational RFC on preferred variants relevant to the Han script (RFC3743) and the Report on Chinese Variants in Internationalized Top-Level Domains.

The first paragraph of the draft guideline is missing a definition of "Registry-side approach". We also recommend revising the language of this paragraph as the current wording is confusing and lacks clarity.

We believe that the second and third paragraph of the draft guideline 13 should be removed from the guideline. The information could be moved to a different section as an advisory for registry operator consideration (i.e. change the MUST to a SHOULD or MAY).

Similarity and Confusability of Labels

Draft Guideline 15:

TLD registries must ensure that all applicable same-script IDN tables with a variant policy have uniform variant rules that properly account for symmetry and transitivity properties of all variant sets. Exceptions to this guideline vis-à-vis symmetry and transitivity properties should be clearly documented in registries' public policy. At the same time, TLD registries shall re-evaluate potential variant relationships that may require to create new variant sets due to the introduction of additional IDN tables by the registry. Registries may use relevant work for the Root Zone LGR and other sources to determine the variant sets.

The first sentence of draft guideline 15 is confusing as it is not clear if the guideline refers to cross-TLD tables of the same Registry or to a single same TLD. The recommendation may not be workable as one Registry may have two or more TLDs in the same script but directed at different languages where variants must be handled differently. Likewise, two TLDs, one script-based and the other language-based, in the same script may have different variant tables. It seems that the only viable interpretation is that the draft guideline refers to one single TLD, in which case this should be clarified in the guideline.

Guidelines for registration data and EPP

The RySG supports the view that the IDN Guidelines are not the right place for recommendations on registration data and EPP. If anything, such guidelines should come from the RDS working group at I

Appendix B: Glossary of Relevant Terms – “Variant”

We suggest replacing ‘word’ by ‘label’ in the definition of “variant”: ‘The term “variant” is used generally to identify different types of linguistic situations where different **labels** are considered to be the same (i.e. variant) of another **label**. Because of the wide-ranging understanding of the term, to avoid confusion more specific terms such as “Variant Code Point” or “IDN Variant Label” should be used.’