GUIDELINES FOR THE IMPLEMENTATION OF INTERNATIONALIZED DOMAIN NAMES

~~Discussion draft~~

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Introduction

This ~~discussion~~ draft ~~version of~~modifies the ~~IDN~~current Version 2.2 of these Guidelines ~~is released~~ to ~~facilitate an interactive IDN session on~~
reflect the ~~subject~~IDNABIS revision ("IDNA2008") of ~~IDNA Protocol implementation and transition during~~ the ~~ICANN meeting in Cartagena,~~
~~Colombia, December 2010.~~

~~This discussion draft is based on the latest version of the IDN Guidelines, version 2.2.~~

~~This discussion draft is established on the revised version of the~~ initial IDNA protocol ~~and~~
("IDNA2003"). It was prepared by members of the IDN Guidelines Revision ~~WG (a working group~~
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The IDN Guidelines
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1. Top-level domain ("TLD") registries supporting Internationalized Domain Names ("IDNs") will do so in strict
 compliance with the requirements of the IETF protocol for Internationalized Domain Names in Applications.
 The initial version of this protocol ~~("IDNA" aka IDNA2003) is~~was defined in RFCs 3454, 3490, 3491, and 3492. A
 revised version ~~("IDNABIS" aka IDNA2008)~~ is defined in RFCs 5890, 5891, 5892, 5893, and 5894. ~~Differences~~
 ~~between them are discussed separately~~ They are referred to here as IDNA2003 and IDNA2008, respectively. Both will be in parallel use in ~~Appendix A.~~

~~This is extended in Appendix B with suggested practices~~applications for ~~accommodating~~an indeterminate transitional ~~issues.~~
 period but registries will conform fully with IDNA2008 in the shortest possible order.

2. No code point permitted in ~~IDNA~~IDNA2003 but disallowed in ~~IDNABIS~~IDNA2008 will be accepted for registration regardless of
 the extent to which such code points appear in names registered prior to the protocol revision. The registrant of a domain that is no longer supported by ~~IDNABIS~~IDNA2008 should be notified that there may be unanticipated
 consequences for a user attempting to reach it, and such names should be replaced or deleted at registry initiative.

3. A registry will publish one or several lists of Unicode code points that are permitted for registration and
 will not accept the registration of any name containing an unlisted code point. Each such list will

indicate the
 script or language(s) it is intended to support. If registry policy treats any code point in a list as a variant of
 any other code point, the nature of that variance and the policies attached to it will be clearly articulated.

4. All code point listings will be placed in the IANA Repository for IDN TLD Practices in tabular format together
 with any rules applied to the registration of names containing those code points, before any such registration
 may be accepted.

5. Any material fundamental to the understanding of a registry's IDN policies that is not published by the
 IANA will be made readily available online directly by the registry, which should also ensure that its registrars
 call the attention of prospective registrants of IDN names to it. This documentation will include references to
 the linguistic and orthographic sources used in establishing policies and code point repertoires. If material is
 provided both via the IANA and other channels the registry must ensure that its substance is concordant
 across all platforms.

6. When a pre-existing name requires a registry to make transitional exception to any of these Guidelines, the
 terms of that action will also be made readily available online, including the timeline for the resolution of
 such transitional matters. At the end of this period, code points that are prohibited by ~~the IDNABIS standard~~
 IDNA2008 will not be permitted even by exception.

7. No label containing hyphens in the third and fourth positions will be registered unless it is a valid
A--label~~,~~
 ~~with reservation for transitional action in accordance with the preceding Guideline.~~. Hyphens in these
 positions are explicitly reserved to indicate encoding schemes, of which IDNA~~/IDNABIS~~ is only one
 instantiation.

8. TLD registries will collaborate on issues of shared interest, for example, by forming a consortium to
 coordinate contact with external communities, elicit the assistance of support groups, and establish global
 fora.

Appendix A

: Comparison of IDNA2003 with IDNA2008

A1. ~~IDNABIS~~IDNA2008 makes several changes to the initial ~~IDNA~~IDNA2003 specification that are of material consequence ~~for~~ to TLD
registries supporting IDN. The operator of any such registry should therefore be aware of key aspects of the
protocol revision and make special provision for the registration of names that are valid under ~~IDNA~~IDNA2003 but are
- treated differently under ~~IDNABIS~~.IDNA2008. The most directly relevant protocol details are described in separately numbered sections below.

A2. ~~IDNA~~IDNA2003 is locked to Unicode version 3.2. There have, however, been several subsequent additions to the
Unicode repertoire (now at version 6.0~~) that would immediately extend the benefit of IDNs if they were~~
~~permitted by the protocol. IDNABIS~~). IDNA2008 supports code points that appear in new versions of Unicode without
need for separate adjustment to the protocol.

A3. ~~IDNA~~IDNA2003 places greater restrictions on the use of scripts written from right to left than it does on scripts
written from left to right. ~~IDNABIS~~IDNA2008 reduces that imbalance and clarifies rules about the commingled use of
characters with both directional properties in a single label.

A4. ~~IDNABIS~~IDNA2008 prohibits graphic symbols and similar devices that have code points but are not used as basic
elements of any writing system. Previous Guidelines explicitly prohibiting these symbols are now redundant
and have been removed.

A5. ~~IDNA~~IDNA2003 remaps a number of code points to other code points while preparing the ASCII-encoded sequence
that is actually entered into the DNS. It is therefore possible for a single A--label to be generated from a
number of different U--labels. The A--label ~~will~~, however, only ~~decode~~decodes to one of those U--labels. ~~IDNABIS~~
IDNA2008 removes all such remapping from the protocol, ensures a unique equivalence between any A--label and a
corresponding U--label, and eliminates any confusion about the label that has actually been registered.

Appendix B
: Additional transitional issues

[This is a seed list of recommended practices ~~and will~~ to be modified and extended in the ongoing revision of
 these Guidelines.]
. and moved into the main body of the text as appropriate.

B1. Whenever an IDN registry adds support for a new code point there is need for dealing with the registrants
 of names that would likely have included that code point if it had been possible at the time of initial
 registration. These registrants need special accommodation before the ~~modified~~ new form is made available for
 registration by anyone else and it is assumed that the registry either has preexisting policies for dealing with
 such situations or recognizes situations where they are needed. The concepts normally applied to such
 policies include sunrise, bundling, and blocking, but no general recommendations are currently being put
 forth in these Guidelines. The following two points do, however, describe situations that lack counterpart in
 previous practice and therefore require special consideration.

B2. Two specific consequences of the elimination of remapping require particular attention. The U+03C2
 GREEK SMALL LETTER FINAL SIGMA (ς), and the U+00DF LATIN SMALL LETTER SHARP S (ß) are accepted
 elements of Greek and German orthographies, respectively. The ~~IDNA~~IDNA2003 remapping bars their inclusion in
 registered names but does allow them to appear in queries directed to the DNS. ~~IDNABIS~~IDNA2008 makes them
 available for actual registration and this change may initially result in unexpected behavior on the query side.
 As discussed in the preceding point, a registry supporting the two new characters will need to deal with
 preexisting names that registrants may wish to modify or complement, prior to making the newly introduced
 form available for autonomous registration.

B3. ~~IDNABIS~~IDNA2008 makes certain code points available under the explicit condition that a registry supporting them
 imposes clearly-stated contextual rules on their use. This is of particular importance to the use of non-spacing
 Unicode control characters ("join controls"), which ~~IDNABIS~~IDNA2008 permits to extend support for the correct display
 of characters in complex scripts that take various forms depending on their position in a label, and on the

characters to which they are adjacent.

[This text is online at http://idn-guidelines-discussion-draft-15nov10-en.pdf.][Posted for public commentary on 27 July 2011.]