

Probable answers on IDN ccTLD issues

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For ccNSO meeting discussion

Prepared by **ccNSO IDN Working Group**

1. General issues regarding IDN ccTLDs

Should an IDN ccTLD string be “meaningful”?

Given that a ccTLD string ‘represents’ the territory, is there an obligation to make the IDN ccTLD string 'meaningful' as a representation of the territory or is it sufficient for it to be in the character set and to accept that the 'meaning' will be learned? For example, whereas .uk is 'meaningful' because it is a commonly used abbreviation for United Kingdom, .au is not 'meaningful' because the commonly used abbreviations for Australia are Oz or Aus.

<Answer>

Any string can be an IDN ccTLD string if the ccTLD manager considers it to be relevant as a representation of the ccTLD.

<Reason>

"Meaningfulness" of a string cannot be defined or assessed in a comprehensive way. ccTLD manager, with necessary consultation with local community, should be able to decide whether such ccTLD string is "meaningful" for the use of their registrants and users.

How many IDN ccTLDs per character set?

Apart from some exceptions, there is one single ASCII ccTLD per territory. Should there similarly be a single or several IDN ccTLDs for a given character set for each territory? For example, should there be only one equivalent of .cn in chinese characters or .ru in cyrillic? Or could there be several IDN strings for China in a chinese character set?

<Answer>

Basically, there should be only one ccTLD IDN in a given character set. More investigation should be given whether two or more ccTLD IDN strings are allowed in case homographs are defined for the characters used in the IDN ccTLD string.

<Reason>

Simple solution is appropriate for smooth and safe launch.

Number of character sets per territory?

Should there be limitations on the number of IDN ccTLD strings a territory can have and should there be a requirement for some level of 'status' for a character set in the territory? In particular, can a territory apply for an IDN ccTLD string even if the character set is not used in a language with any official status in the territory? For example, if the Kanji character set is accepted under the IDNA protocol, can Australia apply for something representing Australia in that character set even though neither the character set nor any language deriving from it has any 'official' status in Australia?

<Answer>

In the launching phase, each of the current ASCII ccTLD managers can apply for only one IDN ccTLD string.

After the result of the launching phase is adequately assessed and more investigation is given, whether and how more character sets for IDN ccTLD strings may be introduced will be decided for further phases.

<Reason>

To safely and swiftly introduce IDN ccTLDs, it's adequate to limit the variety of the IDN ccTLDs. So, phased introduction, with a simple first (launching) phase, is recommended.

Number of characters in the string?

Currently, ccTLD strings are limited to 2 characters and gTLDs to 3 or more. The underlying nature of the Internationalized Domain Names makes the actual string inserted in the DNS always longer than two characters when expressed in Unicode : [xn--....]; however, it is how the string appears in its non-ASCII character set that is important. In that respect :

- a) Is there any reason to maintain the 2 character string restriction for IDN ccTLD strings?
- b) Is limiting .IDN ccTLD strings to 2 characters workable across all character sets?
- c) Does moving outside the current 2 character limitation create any security, stability or integrity issues?

<Answer>

The length of IDN ccTLD string should not be restricted as far as it satisfies technical requirements.

<Reason>

Limitation of the length may damage the comprehensibility of the IDN ccTLD, which is the main motivation of introducing IDN ccTLDs.

Are there any 'rights' attached to a given character set?

In purely technical terms, a character set is merely a collection of symbols. However, each of those collections of symbols when put together in particular ways produce the 'languages' of groups of people sometimes defined by borders, although very often not. Should these groups (or their governments) have special rights regarding those character sets? Examples of related questions include :

- a) Can anyone get acceptance of a character set under the IDNA protocol or are there restrictions? For example, can a gTLD registry get the Kanji character set accepted under the IDNA protocol? Does that need to be vetted/approved by Japan?
- b) Are there any 'ownership' rights over a character set? For example, once the Korean character set is accepted under the IDNA protocol, should Korea be entitled to restrict its use or be required to consent to its use by another ccTLD?
- c) Is it possible that two or more 'versions' of a character set with only minor differences could be accepted under the IDNA protocol and are there issues or concerns in that event?

<Answer>

No formal approval by language groups is needed, at least for a few years. However, some public review/challenge/objection process may be necessary.

<Reason>

Language communities may not be able to be formally defined (especially predefined) in many cases, at least in a reasonable timeframe.

2. Introduction of IDN ccTLDs

Should a list of IDN ccTLD strings be mandated?

In the ASCII case, ccTLD strings are mandated based on the ISO 3166 list. If the same methodology were applied for IDN ccTLDs, some authoritative body would, for each character set approved under the IDNA protocol, mandate a ccTLD string in that character set to represent each territory currently on the ISO list. This would mean that every territory would have a mandated ccTLD string to represent it in every character set and such string would, presumably remain reserved until delegated to the territory.

Examples of related questions include :

- a) Should such a list be mandated? (If no, see below)
- b) If yes, by whom? (NOTE that it is understood that ISO has been previously asked and declined such a role)
- c) Under what policy?
- d) If new policy is required, who is responsible for formulating that policy?

<Answer>

Each of current ASCII ccTLD registries can apply for the ccTLD string it likes. Each ccTLD may go through whatever consultation process with the government or Internet community to decide the string, if it considers it's appropriate. Public review/challenge/objection process may be necessary to find possible issues for the proposed ccTLD strings.

<Reason>

There may be several ways to create a mandated list including processes lead by ISO and BSI. ccTLD community could participate in such processes theoretically. But they may need several years or even impossible. Additionally, ccTLD manager must be aware of the demand of registrants and users more than any other organization does.

Who picks a string for a territory in the absence of a mandated list?

If IDN ccTLD strings are not going to come from a mandated list then, once a character set is accepted, how does an IDN ccTLD string become designated as the string for a particular territory?

Examples of related questions include :

- a) Who will formulate the policy for this process?
- b) Who can 'apply' for a string to be designated as a ccTLD for the territory (this is different to applying for the delegation or to be the manager). For example, does such an application have to come from the government of the territory? If so, which department of the government? What happens if there are competing 'claims'?
- c) Should the string applied for be “meaningful” (see above) with respect to the territory ? if so, how is it to be determined that it does?

<Answer>

same as the discussion so far

What coordination between the different actors?

Irrespective of the methodology employed, some coordination questions must be addressed, such as :

- a) What should be the balance between general common rules and autonomous responsibilities by the territory level?
- b) How to organize interaction between actors using a same character set?

<Answer>

In the launching phase, no formal coordination should be mandated globally. Locally, coordination can be defined at each territory's will. Instead, public review/challenge/objection process should be prepared.

Necessity of more formal cooperation will be investigated for further phases.

<Reason>

Formal coordination cannot help in a short term. Informal coordination through public review/challenge/objection may be appropriate for swift launch.

3. Delegation of IDN ccTLDs

Who can apply to have the IDN ccTLD delegated or to be the delegate for that ccTLD?

Who decides on the delegation?

In particular :

- a) Is consent/involvement/knowledge of government required?
- b) Is consent/involvement/knowledge of incumbent ccTLD manager required?
- c) Is there any presumptive right of the ASCII ccTLD manager over the IDN ccTLD?

<Answer>

In the launching phase, the current ccTLD manager is the one that manages the corresponding IDN ccTLD.

Necessity of more IDN ccTLDs and whether such IDN ccTLD manager can be a different entity from current ASCII manager or not will be investigated for further phases.

<reason>

Current ccTLD manager can be assumed to know the demand of registrants and users more than any other organization does.

Who will formulate the policy for these processes?

Should there be a mandated policy/process for dealing with multiple applications, objections to applications or disputes?

<Answer>

Someone, possibly ICANN Board, should be the authority to decide that an applied IDN ccTLD string is inserted to the root.

<Reason>

Strings from multiple applications may collide or be confusingly similar. Some other entities may challenge/object the application. Mechanism to solve these problems must exist.

4. Operation of IDN ccTLDs

Is the operation and management of an IDN ccTLD different to that of an existing ccTLD such that there be specific global technical requirements related to running the IDN ccTLD?

<Answer>

?????