

# GNSO Comments in Response to the ccNSO-GAC Issues Report on IDN Issues

## Working Group Final Draft – Revised 28 October 2007

### Introduction

Reference Documents:

1. ccNSO-GAC Issues Report on IDN Issues:  
<http://www.icann.org/topics/idn/ccnso-gac-issues-report-on-idn-09jul07.pdf>
2. Adopted Board Resolutions - San Juan, Puerto Rico, 29 June 2007 -  
**Acknowledgement of Policy Progress on IDNs:**  
<http://www.icann.org/minutes/resolutions-29jun07.htm#m>
3. Outcomes Report of the GNSO IDN Working Group:  
<http://gns0.icann.org/drafts/idn-wg-fr-22mar07.htm>
4. GNSO Reserved Names Working Group Final Report:  
<http://gns0.icann.org/issues/new-gtlds/final-report-rn-wg-23may07.htm>

This document contains comments from the GNSO Council in response to the ccNSO-GAC Issues Report on IDN Issues (reference 1 above) as requested by the ICANN Board on 29 June 2007 (reference 2 above). It incorporates information from the Outcomes Report of the GNSO IDN Working Group (reference 3) and the GNSO Reserved Names Working Group Final Report (reference 4 above).

The comments are intended to provide the ICANN Board and the community as a whole with input that will facilitate timely implementation of IDN TLDs.

### Executive Summary

Section A of this document contains comments related to an interim and an overall approach to IDN ccTLDs associated with the ISO 3166-1 two-letter codes in the context of the introduction of IDN gTLDs. Section B provides input to the list of issues and questions identified by the ccNSO and the GAC that need to be addressed in order to move forward with IDN ccTLDs associated with the ISO 3166-1 two-letter codes in a manner that ensures the continued security and stability of the Internet.

Here are what we believe to be the most important points from the GNSO responses that are discussed in greater detail in Parts A and B below:

1. [IDN-labeled TLDs \(both cc and g\) should be introduced as soon as practicable after technical requirements and tests are successfully completed.](#)
2. [The introduction of IDN-labeled gTLDs or ccTLDs should not be delayed because of lack of readiness of one category, but if they are not introduced at the same time, steps should be taken to ensure neither category is disadvantaged because of a delayed implementation.](#)
3. [If IDN-labeled ccTLDs are not ready for introduction as early as IDN-labeled gTLDs are, procedures should be developed to avoid possible conflicts.](#)

4. If an interim solution whereby each territory designated in the ISO 3166-1 list would be granted one IDN label in the near term to accelerate the meeting of user needs, we support it.
5. The user experience is one of the fundamental motivations for deployment of IDNs and should therefore be a guiding principle in implementation decisions.
6. Any added IDN label for a territory designated in the ISO 3166-1 list should be for the sole purpose of benefiting the language community (or communities) designated by the new label.
7. IDN ccTLD strings should be meaningful to the local community and should represent, in scripts of the sovereign government's choice, a meaningful representation of the territory's name in the selected script.
8. If multiple scripts are in official use in a territory, the best user experience would be to provide, where feasible, IDN labels in all of those scripts.
9. Confusingly similar strings should be avoided.
10. Measures must be taken to limit confusion and collisions due to variants.
11. Consideration should be given to the risks for homoglyphic spoofing.
12. Variable string length is the appropriate approach for IDN labels for territories designated in the ISO 3166-1 list.
13. A suitable process for consultation, including with relevant language communities, is needed when considering new IDN labels for the top-level.
14. Where script mixing occurs or is necessary across multiple levels, registries must implement clear procedures to prevent spoofing and visual confusion for users.
15. Operators of top-level domain registries with IDN labels for territories designated by the ISO 3166-1 list should be required to follow the ICANN IDN Guidelines just like gTLD registries that offer IDNs.

## Responses to Issues Paper Questions

### **A. Interim and Overall Approach to IDN ccTLDs**

ICANN has been criticized heavily for taking too long to implement IDN TLDs. Those of us familiar with ICANN understand that such criticism is directed at all of us because ICANN is not the legal corporation nor the staff that supports that corporation but rather those that are a part of the bottom-up processes upon which ICANN the corporation is based. Recognizing this, we all need to assume responsibility for the long delays in implementing IDN TLDs and do everything in our power to expedite the process going forward. Regardless of how much rationalizing we can do to explain why it has taken so long, we are near the point where reasons for further delays are nearly gone. Therefore, the GNSO Council recommends the following:

1. IDN TLDs (ccTLDs and gTLDs) should be introduced as soon as practicable after technical requirements and tests are successfully completed. The final IDN .test Evaluation Plan can be found at <http://www.icann.org/topics/idn/idn-evaluation-plan-v2-9-2-14aug07.pdf>. Other details about the IDN Program Plan can be found at <http://www.icann.org/topics/idn/sj-idn-status-public-18jun07.htm>, including the latest versions of the IETF IDNA Protocol Review documents.

**Deleted:** <#>IDN TLDs (ccTLDs and gTLDs) should be introduced as soon as practicable after technical requirements and tests are successfully completed.¶  
 <#>Neither the introduction of IDN gTLDs or IDN ccTLDs should be delayed because of readiness of one category, but if they are not introduced at the same time, steps should be taken to ensure neither category is disadvantaged because of a delayed implementation.¶  
 <#>If ccTLDs are not ready to offer IDN ccTLDs as early as the GNSO is ready to offer IDN gTLDs, procedures could be developed to avoid possible conflicts.¶  
 <#>If any IDN ccTLDs are introduced that will function as de facto "IDN gTLDs", then the technical, financial, and operational requirements should be similar to those for an IDN gTLD to ensure that there is no unfair advantage.¶  
 <#>If an interim solution whereby each ccTLD would be granted one IDN ccTLD in the interim to get the process started faster results in meeting the user needs sooner, we support it.¶  
 <#>The user experience is one of the fundamental motivations for deployment of IDNs and should therefore be a guiding principle in implementation decisions.¶  
 <#>Any IDN ccTLDs added should be done for the sole purpose of benefiting the applicable local ccTLD language community (or language communities as applicable).¶  
 <#>IDN ccTLD strings should be meaningful to the local community and should represent, in scripts of the sovereign government's choice, a meaningful representation of the territories' name in the selected script.¶  
 <#>If there are multiple official scripts used in a territory, the best user experience would be to provide IDN TLDs in all of those scripts where feasible.¶  
 <#>Confusingly similar strings should be avoided.¶  
 <#>Measures must be taken to limit confusion and collisions due to variants.¶  
 <#>Consideration should be given to whether or not adding an IDN ccTLD increases the possibilities of 1) homoglyphic spoofing, 2) creating TLDs with little demand except for defensive registrations and 3) adding a risk of TLDs being misused for political ends.¶  
 <#>Variable string length would seem like the right approach for IDN ccTLDs.¶  
 <#>A suitable process for consultation, including with relevant language communities, is needed when considering new IDN gTLD strings.¶  
 <#>Where script mixing occurs or is necessary across multiple levels, registries must implement clear procedures to prevent spoofing and visual confusion for users.¶  
 <#>It would seem prudent and ser... [1]

2. The GNSO should be primarily responsible for IDN gTLD policies under the new gTLD policy framework and for developing any other needed policies and procedures including coordination with other ICANN supporting organizations and advisory committees as well as with any relevant language communities external to ICANN.
3. The ccNSO should be primarily responsible for IDN ccTLD policies including development of any needed policies and procedures and including coordination with other ICANN supporting organizations and advisory committees as well as with any relevant language communities external to ICANN.
4. Assuming that concerns regarding security, stability and interoperability are sufficiently addressed, neither the introduction of IDN gTLDs or IDN ccTLDs should be delayed because of readiness of one category, but if they are not introduced at the same time, steps should be taken to ensure neither category is disadvantaged because of a delayed implementation.
5. If the assumption is that IDN ccTLDs will have the opportunity to become de facto “IDN gTLDs”, as has happened with some ASCII ccTLDs historically, then the selection/deployment criteria (e.g., technical, financial, operational, etc. for IDN gTLD policies) for an IDN ccTLD should be similar to those for an IDN gTLD to ensure that there is no unfair advantage.

The GNSO Council is aware of a proposal for an introduction of IDN ccTLDs presented by the Asia Pacific Top Level Domain (APTLD) association whereby each ccTLD would be granted one IDN ccTLD in the interim to get the process started faster. If this results in meeting more user needs sooner, we support it. But we would also support a broader implementation that meets more users’ needs sooner if that is possible.

The GNSO is committed to working with the ccNSO however possible to expedite the introduction of IDN TLDs for both ccTLDs and gTLDs but we will not support any preferential treatment for ccTLDs.

## **B. Comments regarding issues and questions in the ccNSO/GAC report**

For ease of correlating the GNSO comments with the ccNSO-GAC Issues Report, issues and questions contained in that report are presented in *italic font* followed by GNSO comments in normal font.

### ***1. General issues regarding IDN ccTLDs***

#### ***Which ‘territories’ are eligible for an IDN ccTLD?***

*The existence of IDNs as ccTLDs assumes a direct relationship between an IDN TLD string and a ‘territory’ as in ASCII ccTLDs.*

*a) Should this relationship be maintained?*

Proposed GNSO response: This appears to be a question that should be primarily answered by the ccNSO, the GAC and those governments that currently are involved in the ASCII ccTLDs. A consideration that seems important to keep in mind is that the user experience is one of the fundamental motivations for deployment of IDNs. To the extent that existing ASCII ccTLDs offer IDNs at the second and/or third level, it seems reasonable to expect that users of such IDN names would expect to be able to extend their IDN names with an IDN ccTLD label to get a full IDN name. Maintaining a relationship between the IDN ccTLD and the ASCII ccTLD could make it easier to have a good user experience and minimize confusion.

It is also noted that a number of ‘territory’-based ASCII ccTLDs are not operated as territory-based ccTLDs. Some of these are not even operated in agreement with the governments concerned. They tend to serve not just the local ‘territory’ but also target a wider market, competing with gTLDs. While continued maintenance of the existing and historical in-principle relationship between territoriality and ccTLDs for such cases is a matter for the ccNSO and GAC to decide, extending this relationship to the newly introduced IDN ccTLDs operated as non-territory linked *de facto* IDN gTLDs should best be avoided to pre-empt more unnecessary controversy regarding the blurred interface between gTLDs and ccTLDs. If such restriction is not possible, then the issue of ‘unfair competition’ must be addressed to ensure that the technical, financial and operational criteria required for IDN ccTLDs is the same as for new IDN gTLDs.

*b) If so, should the ‘territories’ which are potentially eligible for IDN ccTLDs be exactly the same as the ‘territories’ that are listed in the ISO-3166-1 list?*

Proposed GNSO response: This question should be answered by the ccNSO and the GAC and the related governments that currently are involved in the ASCII ccTLDs.

*c) If not, should another list be used or should another mechanism be developed?*

Proposed GNSO response: This question should be answered by the ccNSO and the GAC and the related governments that currently are involved in the ASCII ccTLDs.

*d) Should anything be done about ccTLDs already being used as gTLDs?*

Proposed GNSO response: This seems to be an issue of primary concern for the governments associated with individual ccTLDs. If it is agreed that the associated governments should have sovereign control over their ccTLDs, then it seems to follow that they should be the ones to decide how to use their ccTLDs. In that regard though, it seems appropriate that any IDN ccTLDs added should be done for the sole purpose of benefiting the applicable local ccTLD language community (or language communities as applicable). For example, for a

fictitious ASCII ccTLD .xi serving a territory called Island X, an IDN ccTLD for .xi should only be added using a specific script that is used by an Island X language community and the purpose of that ccTLD should be to serve members of that particular language community on Island X including any that may be located elsewhere in the world; an IDN ccTLD for .xi should not be added to serve a generic global purpose, i.e., making it a de facto gTLD.

***Should an IDN ccTLD string be “meaningful”?***

*An ASCII ccTLD string ‘represents’ the name of a ‘territory’ based on its entry into the ISO 3166-1 list.*

*a) Is there an obligation to make the IDN ccTLD string ‘meaningful’ in its representation of the name of a ‘territory’? 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.*

Proposed GNSO response: The IDN ccTLD string should be meaningful to the local community and should represent, in scripts of the sovereign government’s choice, a meaningful representation of the territories’ name in the selected script. Input is strongly encouraged from the local language community, local government and local Internet users and other communities.

*b) If so, how is “meaningful” determined and by whom?*

Proposed GNSO response: The government associated with a ccTLD would seem to be responsible for determining what is meaningful. We would propose that it should mean a “meaningful representation of the territories’ name in the selected script”.

***How many IDN ccTLDs per script per ‘territory’?***

*Apart from some exceptions, there is one single ASCII ccTLD per listed ‘territory’.*

*a) Should there similarly be only a single IDN ccTLD for a given script for each ‘territory’ or can there be multiple IDN ccTLD strings? For example, should there be only one equivalent of .cn in Chinese script for China or .ru in Cyrillic for Russia?*

Proposed GNSO response: If there are multiple official scripts used in a territory, the best user experience would be to provide IDN TLDs in all of those scripts where feasible. However, means should be foreseen to mitigate any excesses, for example, if a government applies for a multitude of IDN ccTLD strings that might conceivably denote its country in a wide variety of scripts/languages.

Such behavior could, inter alia, force brand owners to make costly defensive registrations in all such TLDs to prevent domain name squatting, phishing or other abuse. One way to address such concerns could be that every government wishing to implement an IDN ccTLD should adopt a mechanism for taking into account views from its own local language communities as well as from relevant language communities outside its country/territory. Another approach could be to implement an objection process whereby governments and other entities could voice their concerns prior to adoption of any IDN ccTLD.

The goal of IDNs is to meet user needs. For many years we have recognized that a large majority of the world does not use English as a primary language and therefore we have worked to solve that problem. If we really want to meet user needs, why would we create restrictions that would prevent us from doing that in certain circumstances unless of course there are technical reasons relating to security, stability and interoperability? With this in mind, the GNSO IDN Working Group (WG) agreed that “measures must be taken to limit confusion and collisions due to variants” (4.1.5 in reference 3 above).

*b) Could there be several IDN strings for a ‘territory’ in a script? If so, who would determine the number and what are the criteria?*

Proposed GNSO response: If multiple scripts are used in a territory and if it is judged that those scripts will add value to the user experience, then the sovereign government should make the choice of which scripts and what number of scripts will be in use for IDN ccTLDs.

*c) If an IDN ccTLD string is not applied for, for whatever reason, should an IDN ccTLD string that could be associated with a particular ‘territory’ be reserved or protected in some way?*

Proposed GNSO response: The GNSO formed a special working group to deal with the topic of reserved names and that group recommended that a reserved names category for geographic names should not be created but rather that any disputes regarding such names should be handled through a complaint procedure (see recommendations 20 – 22 and associated supporting information in reference 4 above). One of the key reasons for this approach was that gTLDs are inherently global in nature and laws regarding the use of geographic identifiers vary from country to country so it is difficult to establish one rule that would apply across all jurisdictions. But ccTLDs are distinctly different from gTLDs. One of the key differences is that ccTLDs clearly come under the laws of one specific jurisdiction so it might be much easier to establish reserved names categories or provide other means of protection for given ccTLDs.

***How many scripts per ‘territory’?***

a) Can a 'territory' apply for more than one IDN ccTLD string in different scripts if more than one script is used to represent languages spoken in that location? For example in Japan more than one script is used to represent the Japanese language. In other words, should there be a limit on the number of scripts each territory can apply for?

Proposed GNSO response: If there are multiple scripts used in a territory, the best user experience would be to provide IDN TLDs in all of those scripts where feasible. Repeating the comments stated earlier: The goal of IDNs is to meet user needs. For many years we have recognized that a large majority of the world does not use English as a primary language and therefore we have worked to solve that problem. If we really want to meet user needs, why would we create restrictions that would prevent us from doing that in certain circumstances unless of course there are technical reasons relating to security, stability and interoperability? With this in mind, the GNSO IDN Working Group (WG) agreed that "measures must be taken to limit confusion and collisions due to variants" (4.1.5 in reference 3 above).

b) In what circumstances would it be appropriate to seek to introduce a limit on the number of scripts a 'territory' may choose to introduce for a ccTLD or any TLD with a national connection?

Proposed GNSO response: The most obvious reasons for limiting the number of scripts would be technical to ensure security, stability and interoperability, but we are not aware of any such reasons at this time. It may be that user confusion could be another reason. There also could be a policy issue here that should be dealt with by the associated national government. In that regard, could it be that one language is more official than others and that, with the introduction of multiple scripts, there might be confusion about the location of "official" governmental information (e.g., under the Cyrillic variant of .ru but not under the ASCII version of .ru)?

c) Can a 'territory' apply for an IDN ccTLD string even if the script is not used in a language with any 'official status' in that 'territory'? For example, if the Kanji script is accepted under the IDNA protocol, can Australia apply for a representation of Australia in that script even though neither the script nor any language deriving from it has any 'official' status in Australia?

Proposed GNSO response: As stated twice already, if the goal is provide the best user experience possible, why impose restrictions that may limit fulfillment of that goal. In our very diverse world today, most nations have people from other countries who speak non-official languages. A key goal should be to try to meet the user needs as best as possible. That said, consideration should be given to whether or not adding an IDN ccTLD increases the possibilities of homoglyphic spoofing.

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Deleted: , 2) creating TLDs with little demand except for defensive registrations and 3) adding a risk of TLDs being misused for political ends (e.g., warring groups that have little need for each other's language and therefore may attempt to abuse each other's language)

d) If 'official status' is required who will define it and who will determine it in each case?

Proposed GNSO response: This question should be answered by the ccNSO and the GAC and the related governments that currently are involved in the ccTLDs.

***Number of characters in the string?***

*Currently, ccTLD strings are limited to 2 US-ASCII characters and gTLDs to 3 or more. It is understood that abbreviations can be problematic for internationalized TLDs as abbreviations used in US-ASCII are not used on a global basis in all scripts. The underlying nature of IDN makes the actual string inserted in the DNS always longer than two characters when expressed in Unicode (due to the IDNA requirement to prefix internationalized labels with 'xn—'). However, it is how the string appears in its non US-ASCII character set that is important. In this context:*

*a) Should all IDN ccTLD strings be of a fixed length, for example by retaining the two-character limitation that applies to ASCII ccTLD labels, or can they be of variable length? If a variable string length is introduced for IDN ccTLDs, should it also be introduced for ASCII ccTLDs?*

Proposed GNSO response: The GNSO Reserved Names Working Group (RN-WG) did considerable work related to single and two-character IDN names and recommended the following: "Single and two-character U-labels on the top level . . . should not be restricted in general. At the top level, requested strings should be analyzed on a case by case basis in the new gTLD process depending on the script and language used in order to determine whether the string should be granted for allocation in the DNS. . . ." (See recommendation 5 and supporting information in reference 4 above.) One of the lessons learned in talking with IDN experts was that defining characters in ASCII is much easier than defining characters in IDNs. It was also learned that reserving single and two-character IDN strings would eliminate large quantities of meaningful names in some scripts. While recognizing that the GNSO RN-WG was focusing specifically on one and two-character IDN names, the lessons learned still seem to apply to any efforts to attempt to fix string length for IDN ccTLDs. Therefore, variable string length would seem like the right approach for IDN ccTLDs. The GNSO is not aware of any technical reason not to use variable string length for IDN ccTLDs. Nor is the GNSO aware of policy issues that would argue against the use of any length of string for IDN ccTLDs. Finally, the GNSO understands that a single character in a non-ASCII script of a sovereign nation's choice will be represented by more than one character in the DNS itself. The last question regarding variable string length for ASCII ccTLDs is one best dealt with by the ccNSO and the GAC; that being said though, it is important to recognize that the issues of string length for IDN TLDs is very different than those for ASCII TLDs so it does not necessarily follow that there should be variable length ASCII ccTLDs if variable length IDN ccTLDs are allowed.



*b) Does moving outside the current 2 symbol limitation create any security, stability or integrity issues?*

Proposed GNSO response: This question seems best answered by IDN technical experts.

*c) Who determines the appropriate label used to represent a new IDN ccTLD string, and how are the set of characters used to represent this label selected?*

Proposed GNSO response: The GNSO IDN WG reached agreement in the following areas that might be useful for ccTLDs (see reference 3 above):

**4.1.3. Language Community Input for Evaluation of new IDN gTLD strings: Agreement** that a suitable process for consultation, including with relevant language communities, is needed when considering new IDN gTLD strings.

**4.1.5. Limit Variant Confusion and Collision: Agreement** that measures must be taken to limit confusion and collisions due to variants (i.e. substitutable characters/symbols within a script/language) while reviewing and awarding new IDN gTLDs.

**4.1.6. Limit Confusingly Similar Strings: Agreement** that measures be taken to ensure that an IDN gTLD string with variants (see 4.1.4 and 4.1.5 above) be treated in analogy with current practice for IDN SLD labels, i.e. strings that only differ from an IDN gTLD string by variants (see above) are not available for registration by others.

**4.1.9. Single Script Adherence:**

**4.1.9a. Agreement** to not require single script adherence across all levels in an IDN gTLD. Single script adherence across all levels in an IDN gTLD is not a technical requirement, only a potential policy requirement, especially since it would be difficult to enforce uniformly beyond the second level. Note: Single script adherence across levels is not a requirement in existing gTLDs. Second-level IDNs have been introduced in those gTLDs in accordance with ICANN Guidelines.

**4.1.9b. Agreement** that there should be single script adherence within a label at the levels where registries maintain control. Where script mixing occurs or is necessary across multiple levels, registries must implement clear procedures to prevent spoofing and visual confusion for users. New gTLD registries must conform to the ICANN IDN Guidelines, and must publish their language tables in the IANA Registry. Registries should be required to limit the number of scripts across labels.

**4.1.9c. Agreement** that new gTLDs should observe the following guidelines:

1. Mix-in of ASCII characters in other scripts should be allowed as a special case, when justified.

2. Where the accepted orthographic practice for a language requires script mixing, such mixing must be allowed.

Note: Only scripts that have Unicode support are available for gTLDs.

**4.1.9d. Agreement** that other considerations in limiting scripts are:

1. Official/significant languages in a country exist.
2. An IDN gTLD registry should limit the degree of script mixing and have a limit for the number of scripts allowed for its domain names. Such limits, with justifications, should be proposed by the IDN gTLD applicant and be evaluated for reasonableness.
3. In all IDN gTLD applications, the applicant should adequately document its consultations with local language authorities and/or communities. See also 4.1.3.
4. The way to define language communities is not in the purview of the IDN-WG, but CNDC and INFITT (representing Chinese and Tamil language communities, respectively) are some models to consider.
5. ICANN should consult with the relevant language communities if in doubt whether an IDN gTLD string is in compliance with relevant tables.

***Are there any 'rights' attached to a given script?***

*In purely technical terms, a script is 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. These groups are often referred to as language communities.*

*a) Should such groups (or their governments) have special rights regarding those scripts? For example, should the Korean language community be entitled to restrict the use of the Hangeul script? If special rights exist what is the procedure to exert these rights and resolve conflicts?*

Proposed GNSO response: The GNSO Introduction of New gTLDs Policy Development Process Committee developed recommendations that are intended to accommodate both ASCII and IDN gTLDs. The recommendations made by the committee attempt to rely on principles of international law for making decisions regarding what strings are allowed. A fundamental purpose for this approach was to ensure that the string selection process and any dispute procedures associated with that process are as objective as possible by basing them on recognized laws. It is worth noting the UNESCO Paris Convention on the Protection and Promotion of the Diversity of Cultural Expressions (e.g., Article 1h and 2.2) reaffirms the principle of sovereign rights over such matters, and the rule of international law.

To the extent that this approach is feasible for ccTLD IDNs, it is recommended by the GNSO Council. Where this approach is not feasible, a pre-consultation process for inclusion of the interested parties, whether opposing governments

(e.g., the two Koreas for Hangul), or organized language communities (e.g., majority government vs. language minorities, language-based secessionists, etc.).

*b) Can anyone get acceptance of a script under the IDNA protocol or are there restrictions? For example, can a gTLD registry get the Kanji script accepted under the IDNA protocol? Should that use be vetted/approved by Japan? If yes, would the same requirement apply if a script is used in more than one 'territory'?*

Proposed GNSO response: Are there any recognized international principles of law that could be applied in this regard? If there are, then they could provide an objective measure to use; if not, then any restrictions would have to be based on specific countries' laws. That might work for the ccTLD in the country that treats the script as official, but it is not clear that it would work in other cases unless global restrictions are to be established by one country's view. Should the Australian ccTLD be restricted from offering a Japanese version of its ccTLD for its Japanese residents? Assuming the answer is no, we would add that it would seem most appropriate for the Australian ccTLD operator to consult with Japan regarding the choice of Japanese string for .au. Whether that consultation is required or voluntary seems like a good discussion for the GAC and the ccNSO. And since there is nothing that can be done to prevent a country from unilaterally stopping by legal or other means the use of any script or TLD in that script within its jurisdiction, it would seem prudent and sensible for ICANN and a prospective IDN TLD registry wishing to deploy their TLD in a given script to approach that country and/or the local language community in question to vet their intent, particularly from the point of view of viability and market acceptability. In the case of the cited example Kanji script, it should be noted that under the Unicode unified CJK script, Kanji is shared with Chinese (simplified and traditional) and Korean (Hanja). The same could be said of other scripts that are widely used by more than one language community (e.g., Arabic, Cyrillic, etc.).

*c) Should it be possible to adopt two or more 'versions' of a script with only minor differences for use under the IDNA protocol and are there issues or concerns should this occur?*

Proposed GNSO response: If we understand this question correctly, we think that the following recommendations from the GNSO IDN WG apply:

**4.1.5. Limit Variant Confusion and Collision: Agreement** that measures must be taken to limit confusion and collisions due to variants (i.e. substitutable characters/symbols within a script/language) while reviewing and awarding new IDN gTLDs.

**4.1.6. Limit Confusingly Similar Strings: Agreement** that measures be taken to ensure that an IDN gTLD string with variants (see 4.1.4 and 4.1.5 above) be treated in analogy with current practice for IDN SLD labels, i.e.

strings that only differ from an IDN gTLD string by variants (see above) are not available for registration by others.

## **2. Introduction of IDN ccTLDs**

### ***Should a list of IDN ccTLD strings be mandated?***

*In the US-ASCII case, ccTLD strings are currently primarily based on the ISO 3166-1 Alpha 2 list. If a similar mechanism were adopted for IDN ccTLDs, this could mean that every ISO 3166 entry would have an equivalent IDN ccTLD string(s) to represent it.*

#### *a) Is such a list necessary?*

Proposed GNSO response: Probably not. Would such a list result in an earlier ability to meet the needs of non-English users? If so, it would seem to be a good idea. If not, then it seems like the higher priority should be to meet user needs and, if that can be done without a list, that might be the better approach. If the list avoided conflicts and confusion, it might be needed (e.g., in situations where there are reports of conflicts and confusion among ccTLD members themselves or where there are reports of such conflicts and confusion from traditional standards bodies like the ISO).

#### *b) Who would develop such a list?*

Proposed GNSO response: Individual countries/territories could start the process by working with language experts in their country and/or trans-boundary language communities with local government input to develop and propose names in their official scripts for their ccTLD. Those names could then be vetted via ccNSO and GAC processes and against principles of IDN TLDs that could be agreed to in advance (e.g., not confusingly similar to other TLDs, no variants, etc.). The ccNSO and the GAC could then develop the list in conjunction with traditional bodies such as the ISO or UN-related entities, particularly when the issue is not just technical interoperability but also linguistic suitability and when there may be perceived legitimacy of such a list.

#### *c) Should such a list be mandated?*

Proposed GNSO response: Only if there were not other means to avoid security, stability, interoperability and user confusion issues or if consensus develops that such a list be mandated.

#### *d) If yes, by whom?*

Proposed GNSO response: This should be answered by the ccNSO and the GAC with applicable input from sovereign governments, transnational cross-boundary language communities and standards bodies such as ISO.

*e) Who would develop the criteria and relevant policies for identifying IDN ccTLDs?*

Proposed GNSO response: The ccNSO is the policy making body for ccTLDs. It seems like the appropriate body for this task with appropriate input from the broader community within ICANN and with input from the abovementioned non-ICANN entities to establish the legitimacy of the process and the outcome.

*f) Under what policy or authority would the list be created?*

Proposed GNSO response: The ccNSO Policy Development Process.

*g) If additional criteria and or policies are required, who is responsible for formulating that policy?*

Proposed GNSO response: The ccNSO with input from the above mentioned non-ICANN entities

***What precedence should be given to ccTLDs in the IDN implementation process?***

Proposed GNSO response: If this question is asking whether ccTLDs should be given precedence over gTLDs in the IDN implementation process, the answer is 'no'. The IDN implementation process involves technical, security and policy issue identification and resolution. This work is independent of whether the top-level IDNs represent ccTLDs or gTLDs. Once the technical and security issues have been identified and resolved, a moment will come when top-level IDNs are technically ready to be put into the root. At that time, the GNSO and ccNSO communities will be able to assess for themselves whether the policy issues have been resolved to their satisfaction. If they have, and if processes for the introduction of IDN TLDs are in place, the GNSO and ccNSO should move ahead at their own pace to introduce top level IDNs. One should not have precedence over the other at that time. The GNSO has worked diligently over the last year and a half to develop procedures for the introduction of new gTLDs including IDN gTLDs. Why should that process be put on hold for IDN gTLDs unless there are technical reasons for doing so (i.e., the IDNA protocol revision is not yet finished)? There are over one million second level gTLD IDN registrations in operation today; the majority of those registrants have wanted all along to have a full IDN name (IDN.IDN); why should their needs be delayed longer than necessary?

The GNSO IDN WG made the following recommendation that has some application here (see reference 3 above):

#### **4.1.1 Avoidance of ASCII-Squatting:**

**Agreement** to avoid “ASCII-squatting” situations where applications for new non-IDN gTLD strings, if accepted for insertion in the root at an earlier stage than IDN gTLDs, could pre-empt later applications for IDN gTLDs. For example, a new non-IDN gTLD “.caxap”, if accepted, would prohibit the acceptance of a later application for an IDN gTLD “.caxap” (in Cyrillic script and meaning “sugar” in Russian).

If there are technical reasons for delaying the introduction of IDN gTLDs when new ASCII gTLDs are introduced, steps could be taken to avoid ASCII-squatting as suggested by the IDN WG. Similarly, if ccTLDs are not ready to offer IDN ccTLDs as early as the GNSO is ready to offer IDN gTLDs, procedures could be developed to avoid possible conflicts. For example, IDN country names could be reserved until such time that ccTLD IDN names corresponding to countries are determined.

Both ccTLD and gTLD users have needs for IDN TLDs and meeting those needs as quickly as possible for both groups should be a priority. Members from both the ccTLD community and the gTLD community have contributed many man hours and financial resources to achieve this objective. In the case of the GNSO, gTLD registrants fund well over 90% of ICANN’s budget. It would be very unfair if the gTLD registrants funded activities that worked against their own needs. In the same vein of fairness, technical, operational and financial criteria for the selection and operation of IDN ccTLDs should be consistent with a level playing field appropriate to the context of the deployment (i.e., such criteria should not be set so high that it excludes certain minority communities who have desperate need of IDN ccTLDs but do not have the wherewithal to meet and sustain performance criteria more appropriate for wealthy corporations and incumbents).

#### ***Who selects the IDN ccTLD string in the absence of a mandated list?***

*If IDN ccTLD strings are not going to come from a mandated list then, how does an IDN ccTLD string become designated as the string for a particular ‘territory’?*

*a) What are the criteria and policies to determine who can submit a request for the designation of an IDN ccTLD?*

Proposed GNSO response: This seems like an appropriate activity for the ccNSO, the ccTLDs and the GAC. It does not seem appropriate for the GNSO to comment on this. However, a criterion or policy that excluded by design or accident, local government, local Internet business or user communities and

language communities, particularly minority groups within a sovereign state should be discouraged.

*b) Who will develop the criteria and policies for determining the designation of an IDN ccTLD?*

Proposed GNSO response: The technical protocol criteria will be determined by the IETF in the revised IDNA protocol. The non-technical policies for selecting ccTLD strings should be determined by the ccNSO as the policy making body for ccTLDs with input from local stakeholders, sovereign government, local and language communities. Currently, the process for selection of a ccTLD is coordinated by IANA in its role as staff support to the ICANN Board of Directors.

*c) How will such issues as competing requests (both domestic and international) be dealt with?*

Proposed GNSO response: The GNSO New gTLD Committee recommended procedures for string contention (see reference 4 above) which may be of relevance here. Implementation Guideline F from those recommendations reads like this: "If there is contention for strings, applicants may: i) resolve contention between them within a pre-established timeframe; ii) if there is no mutual agreement, a claim to support a community by one party will be a reason to award priority to that application. If there is no such claim and no mutual agreement, a process will be put in place to enable efficient resolution of contention and; iii) the ICANN Board may be used make a final decision, using advice from staff and expert panels." Such a process should allow for formal input from local sovereign government, the local business/user community and language communities.

*d) What will happen if 2 'territories' are eligible for the same or confusingly similar strings for IDN ccTLD?*

Proposed GNSO response: See the previous response as one possible approach for consideration.

### ***What coordination should exist between the different actors?***

*The deployment of IDN ccTLDs will require coordination among various actors, within territories and ICANN constituencies. Irrespective of the methodology employed, some coordination questions must be addressed, such as:*

*a) Who are the appropriate actors?*

Proposed GNSO response: ccNSO, GNSO, SSAC, GAC, ALAC, RSSAC, IANA, registrants and potential registrants, IETF, ISO, sovereign governments, the community most directly served, and organised language communities.

*b) What are their roles?*

Proposed GNSO response: ccNSO – policy making body for ccTLDs; GNSO – policy making body for gTLDs; SSAC, GAC, ALAC and RSSAC – advisory committees; IANA - providing experience of ccTLD delegation processing; registrants and potential registrants – the users of IDNs; IETF – the standards development body for the domain name system.; ISO – the body whose standards have been used thus far for ASCII ccTLDs; sovereign governments – rulers of the territory where deployment is desired; local Internet Community – the community most directly served; organised language communities – the cultural/linguistic “gatekeepers” of the language to be deployed. For the non-ICANN entities, their role will be analogous to that between ccTLDs and ISO3166MA or IDNs and the Unicode Consortium; this role is especially important for areas outside of ICANN's mission but which overlap or are impacted by decisions made.

*c) Do the GAC ccTLD principles need to be revised in the light of the introduction of IDN ccTLDs?*

Proposed GNSO response: This is a decision for the GAC. . Clearly, as new lessons are learned via the deployment of IDN ccTLDs, the GAC principles may be revised several times in the future to reflect the new knowledge that all stakeholders acquire.

### **3. Delegation of IDN ccTLDs**

*Do existing ccTLD delegation policies apply to the delegation of IDN ccTLDs?*

Proposed GNSO response: This is primarily a decision for ICANN and the ccNSO with consultation with other ICANN supporting organizations and advisory committees as applicable.

*If not:*

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

Proposed GNSO response: As in the previous response, this is a decision for ICANN and the ccNSO with other supporting organizations and advisory committees. Nevertheless, the approved applicant should at least be from or be supported by the local sovereign government, local Internet business and user community and the organized language community.



b) *Who decides on the delegation and in particular:*

- *Are there specific reasons for deviating from the standard practice/guidelines that a zone should only be delegated with the support of the local internet community, which includes the government?*

Proposed GNSO response: An aspect that could be considered is: Should local legitimacy be a guiding principle in this context?

- *Is consent/involvement/knowledge of government required?*

Proposed GNSO response: The following may be worth considering in this regard: It may be useful to clarify legitimacy of an IDN ccTLD by encouraging government involvement and knowledge, particularly in cases where local legitimacy is in question.

- *Is consent/involvement/knowledge of incumbent ccTLD manager required?*

Proposed GNSO response: It would seem desirable to allow involvement by the incumbent ccTLD manager along with other stakeholders because of the experience they can bring to the table. It may be helpful to note that the International Domain Name Committee Proceedings Report as chaired by Masanobu Katoh recommended in 2002 that consent of the ASCII ccTLD manager not be required.

- *Is there any presumptive right of the ASCII ccTLD manager over a corresponding IDN ccTLD?*

Proposed GNSO response: In answering this question, it is suggested that the issues of local legitimacy and a good experience for those who will directly benefit from the script(s) used for IDN ccTLDs be considered. It is also noted that the International Domain Name Committee Proceedings Report as chaired by Masanobu Katoh recommended that there should not be any presumptive right of the ASCII ccTLD manager over a corresponding IDN ccTLD.

c) *Who will formulate the policy for these processes?*

Proposed GNSO response: ccNSO with input from the abovementioned non-ICANN entities such as local sovereign government, local Internet business and user community and the language community.

d) *Do existing US-ASCII ccTLD delegation policies for dealing with multiple applications, objections to applications or disputes apply to the same issues in the delegation of IDN ccTLDs? If not who will formulate the policies for these issues?*

Proposed GNSO response: Please see the response for a) above.

*e) Taking into account all experiences ICANN has acquired - should there be an agreement between ICANN and the IDN ccTLD operator on the operation of the IDN ccTLD string?*

Proposed GNSO response: At a minimum, IDN ccTLD operators should be required to follow the ICANN IDN Guidelines just like gTLD registries that offer IDNs. If that calls for an agreement between ICANN and the IDN ccTLD operator, then an agreement should be required.

For IDN ccTLDs running essentially as “gTLDs” with little or no connection to the “territory”, it would seem appropriate that a level playing field is established with similar technical, operational and financial requirements as for any IDN gTLD counterparts, at least in the same language/script/country.

#### ***4. Operation of IDN ccTLDs***

*Is the operation and management of an IDN ccTLD different to that of an existing US-ASCII ccTLD such that there are specific global technical requirements, in addition to the general IDN standards, needed for the operation of an IDN ccTLD? If so, how are those requirements developed and who would develop them?*

Proposed GNSO response: From a purely DNS perspective, there is no difference. From an administrative perspective, IDNs require implementation of special registration processes, use of variant tables where applicable, implementation of the ICANN IDN Guidelines, adherence to the IDNA protocol, etc.

IDN TLDs (ccTLDs and gTLDs) should be introduced as soon as practicable after technical requirements and tests are successfully completed.

Neither the introduction of IDN gTLDs or IDN ccTLDs should be delayed because of readiness of one category, but if they are not introduced at the same time, steps should be taken to ensure neither category is disadvantaged because of a delayed implementation.

If ccTLDs are not ready to offer IDN ccTLDs as early as the GNSO is ready to offer IDN gTLDs, procedures could be developed to avoid possible conflicts.

If any IDN ccTLDs are introduced that will function as de facto "IDN gTLDs", then the technical, financial, and operational requirements should be similar to those for an IDN gTLD to ensure that there is no unfair advantage.

If an interim solution whereby each ccTLD would be granted one IDN ccTLD in the interim to get the process started faster results in meeting the user needs sooner, we support it.

The user experience is one of the fundamental motivations for deployment of IDNs and should therefore be a guiding principle in implementation decisions.

Any IDN ccTLDs added should be done for the sole purpose of benefiting the applicable local ccTLD language community (or language communities as applicable).

IDN ccTLD strings should be meaningful to the local community and should represent, in scripts of the sovereign government's choice, a meaningful representation of the territories' name in the selected script.

If there are multiple official scripts used in a territory, the best user experience would be to provide IDN TLDs in all of those scripts where feasible.

Confusingly similar strings should be avoided.

Measures must be taken to limit confusion and collisions due to variants.

Consideration should be given to whether or not adding an IDN ccTLD increases the possibilities of 1) homographic spoofing, 2) creating TLDs with little demand except for defensive registrations and 3) adding a risk of TLDs being misused for political ends.

Variable string length would seem like the right approach for IDN ccTLDs.

A suitable process for consultation, including with relevant language communities, is needed when considering new IDN gTLD strings.

Where script mixing occurs or is necessary across multiple levels, registries must implement clear procedures to prevent spoofing and visual confusion for users.

It would seem prudent and sensible for ICANN and a prospective IDN TLD registry wishing to deploy their TLD in a given script used by another country to approach that country and/or the local language community in question to vet their intent, particularly from the point of view of viability and market acceptability.

IDN ccTLD operators should be required to follow the ICANN IDN Guidelines just like gTLD registries that offer IDNs.