

Basic Policy proposals for IDN ccTLD String Selection Process

Update Sections 1-9: Deselection, Variant Management

Discussion Review Mechanism

Version 3, 12 December 2022

The basic policy recommendations document has been updated to include suggestions pertaining to Review Mechanism

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Introduction

TBD

Section 0. Overall Principles

The purpose of the overarching principles is to set the parameters within which the policy recommendations have been developed, and should be interpreted and implemented. They take into account the experiences of the IDN Fast Track Process and subsequent discussions. They have been developed to structure, guide and set conditions for the recommended policy, its implementation and future interpretation.

- I. **Association of the (IDN) country code Top Level Domain with a territory.** For purposes of this policy “Territory” or “Territories” are defined as a country, a subdivision, or other area of particular geopolitical interest listed in Section 3 of the ‘International Standard ISO 3166, Codes for the representation of names of countries and their subdivisions – Part 1: Country Codes’ [ISO 3166-1:2020] or, in some exceptional cases, e.g. grandfathered-in delegations, a country, a subdivision, or other area of particular geopolitical interest listed for an exceptionally reserved ISO 3166-1 code element.

Under the current policy for the delegation of (ASCII) ccTLDs¹, the country codes associated with **Territories** are eligible for delegation as a ccTLD. Only IDN ccTLD strings associated with a **Territory** are eligible to be delegated as a ccTLD.

Retirement of the IDNccTLD. If the name of a **Territory** is removed from the ISO3166 because it is divided into two or more new Territories or two or more Territories have merged, the removal is considered a “trigger event” and causes the initiation of the process for the retirement of **all the selected IDNccTLD(s) (and their variants)**, which are a meaningful representation of the name of the **Territory**.

Comment Full WG

The full WG identified the need to do a stress test with respect to the proposed de-selection criteria.

¹ RFC 1591 as interpreted by the Framework of Interpretation
(https://ccnso.icann.org/sites/default/files/filefield_46435/foi-final-07oct14-en.pdf)

- II. (ASCII) ccTLD and IDN ccTLDs are all country code Top Level Domains.** (ASCII) ccTLD and IDN ccTLDs are all country code Top Level Domains and as such are associated with a **Territory**. Whilst there may be additional, specific provisions required for IDN ccTLDs, due to their nature (for example criteria for the selection of an IDN ccTLD string), all country code Top Level Domains should be treated in the same manner.
- III. Preserve security, stability and interoperability of the DNS.** To the extent different and/or additional rules are implemented for IDN ccTLDs, these rules should:
- a. Preserve and ensure the security and stability of the DNS;
 - b. Ensure adherence with the RFC 5890, RFC 5891, RFC 5892, RFC 5893
 - c. Take into account and be guided by the Principles for Unicode Code Point Inclusion in Labels in the DNS Root (RFC 6912).
- IV. Ongoing Process.** Requests for the delegation of IDN ccTLDs should be an ongoing process and requests CAN BE submitted at any time. Currently the delegation of a ccTLD can be requested at any time, once all the criteria are met.
- V. Criteria determine the number of IDN ccTLDs.** The criteria to select the IDN ccTLD string should determine the number of eligible IDN ccTLDs per **Territory**, not an arbitrarily set number.

Section 1. Criteria for the selection of IDN ccTLD strings

1.1 Minimal Number of non-ASCII characters

An IDN country code Top Level Domain must contain at least one (1) non-ASCII character (i.e a character that is not included in ISO/IEC 646 Basic Character Set). To illustrate this criterion: For example, *españa* would qualify under this specific requirement and *italia* would not. Note that *españa* contains at least one (1) non-ASCII character (i.e a character that is not included in ISO/IEC 646 Basic Character Set² . For more formal definitions of these terms, see RFC 5890.

1.2 Meaningfulness Criteria and related processes and procedures

1.2.1 The IDN ccTLD string must be a Meaningful Representation of the name of a Territory. The principle underlying the representation of **Territories** in two letter (ASCII) **code elements** is the visual association between the names of **Territories** (in English or French, or sometimes in another language) and their corresponding **code elements**.

The principle of association between the IDN country code string and the name of a **Territory** should be maintained. A selected IDN ccTLD string **MUST** be a meaningful representation of the name of the **Territory**. A country code string is considered to be a **Meaningful Representation** if it is:

- a) The name of the **Territory**; or
- b) Part of the name of the **Territory** that denotes the **Territory**;
or
- c) A short-form designation for the name of the **Territory**,
recognizably denoting the name.

1.2.2 A Meaningful Representation of the name of the Territory must be in a Designated Language of the Territory. The selected IDN ccTLD string should be a **Meaningful Representation** of the name of the territory in a **Designated Language** of that **Territory**. For this purpose, a **Designated**

² <https://www.iso.org/standard/4777.html>

Language³ is defined as: a language that has a legal status in the **Territory** or that serves as a language of administration⁴.

The language is considered to be a **Designated Language** if one or more of the following requirements is/are met:

- a) The language is listed for the relevant **Territory** as an ISO 639 language in Part Three of the “Technical Reference Manual for the standardization of Geographical Names”, United Nations Group of Experts on Geographical Names (the UNGEGN Manual) (https://unstats.un.org/unsd/geoinfo/ungegn/docs/11th-uncsgn-docs/E_Conf.105_13_CRP.13_15_UNGEGN%20WG%20Country%20Names%20Document.pdf).
- b) The language is listed as an administrative language for the relevant **Territory** as defined in section 3.7 of ISO 3166-1 standard [2020].
- c) The relevant public authority in the **Territory** confirms that the language is used in official communications of the relevant public authority and serves as a language of administration.

Specific requirements regarding documentation of **Designated Languages** are included in the procedures and documentation sections (*see below section 2.7*).

1.2.3 Only one (1) IDN ccTLD string per Designated Language. In the event that there is more than one **Designated Language** in the **Territory**, one (1) unique IDN ccTLD for each **Designated Language** may be selected, provided the **Meaningful Representation** in one **Designated Language** cannot be confused with an existing IDN ccTLD string for that **Territory**.

It should be noted that for purposes of this policy, the restriction of one (1) IDN ccTLD string per **Designated Language** does not apply to the selection

³ The limitation to Designated Language is recommended as criteria for reasons of stability of the DNS. According to some statistics currently 6909 living languages are identified. See for example: http://www.ethnologue.com/ethno_docs/distribution.asp?by=area. If one IDN ccTLD would be allowed per territory for every language this would potentially amount to 252*6909 or approximately 1.7 million IDN ccTLDs

⁴ The definition of **Designated Language** is based on: “Glossary of Terms for the Standardization of Geographical Names”, United Nations Group of Experts on Geographic Names, United Nations, New York, 2002 https://unstats.un.org/unsd/ungegn/pubs/documents/Glossary_of_terms_rev.pdf . Note that in the Glossary the term “Official Language” is used. Experience has shown that, depending on the specific Territory, “Official Language” has a specific connotation, which sometimes creates confusion with the term “Official Language” as defined in the Glossary.

and delegation of variants of the selected IDNccTLD string, however this exception applies only to the extent the other requirements under this policy for the request and the delegation of variants of the selected IDNccTLD string are met.

Where a language is expressed in more than one script in a **Territory**, then it is permissible to have one string per script, although the multiple strings are in the same **Designated Language**.

[Placeholder: revisit text on confusing similarity after sub-group has concluded its work]

Notes and Observations

It should be noted that other requirements relating to non-confusability are applicable and should be considered, including the specific procedural rules and conditions for cases when the same manager will operate two or more (IDN) ccTLD's which are considered to be confusingly similar.

1.2.4 If the selected string is not the long or short form of the name of a Territory then evidence of meaningfulness is required. If the selected IDNccTLD string is the long or short form of the name of the relevant **Territory** in the **Designated Language and** is listed in the UNGEGN Technical Reference Manual for the Standardization of Geographic Names, Part Three column 3 or 4 version 2007⁵, or a later version of that list, it is considered to be a **Meaningful Representation**.

If the **Meaningful Representation** of the selected string is **NOT** listed in the UNGEGN Technical Reference Manual for the Standardization of Geographic Names, Part Three column 3 or 4 version 2007, or a later version of that list, then meaningfulness must be adequately documented. Adequate documentation **MUST** be provided if one of the following cases applies:

1. The selected IDNccTLD string is not the long or short form name of the **Territory** as included in the UNGEGN Manual in the **Designated Language**,

⁵https://unstats.un.org/unsd/ungegn/pubs/documents/UNGEgn%20tech%20ref%20manual_m87_combined.pdf . Note that the UNGEGN Technical Reference Manual only contains the names of 192 Countries, which is a sub-set of all the Territories listed under the ISO 3166 standard.

- or
2. The selected IDNccTLD string is an acronym of the name of the **Territory** in the **Designated Language**
or
 3. The selected IDNccTLD string is the name of a **Territory** that does not appear in the UNGEGN Manual,
or
 4. The selected IDNccTLD string is in a **Designated Language** that is not included in the UNGEGN Manual.

If such documentation is required, the documentation needs to clearly establish that:

- The meaning of the selected string in the **Designated Language** and English and
- That the selected string meets the meaningfulness criteria.

Specific requirements regarding documentation to demonstrate the **Meaningful Representation** are included in the procedures and documentation recommendations (see section 2.5 and 2.7 below).

1.2.5 Documentation of the meaningfulness of the selected IDN ccTLD string

The selected IDN ccTLD string(s) must be a **Meaningful Representation** of the name of the corresponding **Territory**. A string is deemed to be meaningful if it is in the **Designated Language** of the **Territory** and if it is:

1. The name of the **Territory**; or
2. A part of the name of the **Territory** denoting the **Territory**; or
3. A short-form designation for the name of the **Territory** that is recognizable and denotes the **Territory** in the selected language.

The meaningfulness requirement is verified as follows:

1. If the selected string is listed in the UNGEGN Manual, then the string fulfills the meaningfulness requirement.
2. If the selected string is not listed in the UNGEGN Manual, the requester must then substantiate the meaningfulness by providing documentation from an internationally recognized expert or organization.

ICANN should recognize and accept documentation from one of the following experts or organizations as internationally recognized:

- **National Naming Authority** – A government recognized National Geographic Naming Authority, or other organization performing the same function, for the **Territory** for which the selected string request is presented. The United Nations Group of Experts on Geographical Names (UNGEGN) maintains such a list of organizations at: <https://unstats.un.org/unsd/geoinfo/ungegn/publications.html> [unstats.un.org]
- **National Linguistic Authority** – A government recognized National Linguistic Authority, or other organization performing the same function, for the **Territory** for which the selected string request is presented.

In the exceptional circumstance where there is no access to a National Naming Authority nor to a National Linguistic Authority for the **Territory**, assistance may be requested from ICANN to identify and seek reference to an expert or organization to provide the required documentation. This documentation will be considered acceptable and sufficient to determine whether a string is a **Meaningful Representation** of a **Territory** name.

1.2.6 Notes and Observations. ICANN should include in the implementation plan an example of the documentation that demonstrates the selected IDN ccTLD string(s) is a Meaningful Representation of the corresponding **Territory**.

ICANN should include a procedure in the implementation plan, including a timeframe, to identify expertise referred to or agreed as set out in the final paragraph of section 1.2.5 above.

1.2.7 Documentation Designated Language. The requirements for allowable languages and scripts to be used for the selected IDN ccTLD string is that the language must be a **Designated Language** in the **Territory** as defined in section (see above). The language requirement is considered verified if one of the following conditions is met:

1. If the language is listed for the relevant **Territory** as an ISO 639 language in Part Three of the *Technical Reference Manual for the standardization of Geographical Names, United Nations Group of Experts on Geographical Names* (“UNGEGN Manual”) (<http://unstats.un.org/unsd/geoinfo/default.htm>);

or

2. If the language is listed as an administrative language for the relevant **Territory** in ISO 3166-1;
or
3. If the relevant public authority of the **Territory** confirms that the language is used or serves as follows, (either by letter or link to the relevant government constitution or other online documentation from an official government website):
 - a. Used in official communications by the relevant public authority;
or
 - b. Serves as a language of administration.

Further, the documentation must include a reference to the script or scripts in which the **Designated Language** is expressed and which **MUST** be listed in the script charts of the latest version of UNICODE.

1.2.8 Notes and Observations

ICANN should include an example of the documentation that the selected language(s) is considered designated in the Territory in the implementation plan.

1.3 Deselection of IDNccTLD

1.3.1 Impact change of name of the Territory

The selected IDNccTLD string is no longer a (visual) association with the name of the Territory. The general policy requirement is that an IDN ccTLD string must be a **Meaningful Representation** of the name of a **Territory**. The principle underlying the representation of **Territories** in two letter (ASCII) **code elements** is the visual association between the names of **Territories** (in English or French, or sometimes in another language) and their corresponding **code elements**.

The principle of association between the IDN country code string and the name of a **Territory** is maintained: a selected IDN ccTLD string **MUST** be a meaningful representation of the name of the **Territory**.

The IDN ccTLD will be considered de-selected and should be retired when it is evidenced that a selected and /or delegated IDNccTLD string is no longer (de-selected) a **Meaningful Representation** of:

- a) The name of the **Territory** in the **Designated language of the Territory**,
- b) Part of the name of the **Territory** in the **Designated language of the Territory** that denotes the **Territory**, or
- c) The short-form designation for the name of the **Territory** in the **Designated language of the Territory** (for example the two-letter or three-letter **country code** transliterated into the **Designated Language**).

The de-selection of an IDNccTLD string is evidenced as follows:

1. If the meaningfulness requirement at the time of the delegation of the string was verified by listing of (part of the name) in the **Designated Language of the Territory** in the UNGEGN Manual, the name of the **Territory** in the **Designated Language** is no longer included.
2. If the meaningfulness was substantiated by providing documentation from an internationally recognized expert or organization⁶, by documentation or a statement of a similar, internationally recognized expert or organization that the selected string no longer denotes the name nor is a short-form designation for the name of the **Territory** in the **Designated language of the Territory** (hereafter: **Statement of (dis-)association** or if such a statement cannot be provided within a reasonable time (3 months) upon request of ICANN.

⁶ Note already included): ICANN should recognize and accept documentation from one of the following experts or organizations as internationally recognized:

- National Naming Authority – A government recognized National Geographic Naming Authority, or other organization performing the same function, for the **Territory** for which the selected string request is presented. The United Nations Group of Experts on Geographical Names (UNGEGN) maintains such a list of organizations at:
<https://unstats.un.org/unsd/geoinfo/ungegn/publications.html> [unstats.un.org]
- National Linguistic Authority – A government recognized National Linguistic Authority, or other organization performing the same function, for the **Territory** for which the selected string request is presented. In the exceptional circumstance where there is no access to a National Naming Authority nor to a National Linguistic Authority for the **Territory**, assistance may be requested from ICANN to identify and seek reference to an expert or organization to provide the required documentation. This documentation will be considered acceptable and sufficient to determine whether a string is a **Meaningful Representation** of a **Territory** name.
See section 1.2.5.

Confirmation of association or dis-association.

ICANN is not expected to actively seek confirmation of association or dis-association of an IDNccTLD string with the name of the Territory.

However, if ICANN receives a valid request⁷ for an IDNccTLD string for a **Territory** which is in the same Designated Language and related script as an IDNccTLD string associated with the same **Territory** that is either in the verification process or has been delegated, ICANN shall require a **Statement of (dis-)association** from the requester or IDNccTLD Manager of the first IDNccTLD string for the name of the Territory.

If such a **Statement of (dis-)association** cannot be provided within a reasonable time frame (3 months upon notification by ICANN), the first IDNccTLD string is deemed to be de-selected and shall be retired. As of the time a **Statement of (dis-)association** is requested until such a time the **Statement** is provided or after the reasonable time frame has passed (whatever is the earliest), the processing of the requested IDNccTLD strings for that **Territory** shall be put on hold.

If according to the **Statement of (dis-)association** the first requested IDNccTLD string or delegated IDNccTLD string is still associated with the name of the **Territory** as required, the latter requested IDNccTLD string shall be considered invalid and the requester and the related government will be informed accordingly.

ICANN should include in the implementation plan an example of the documentation required i.e. an example of the **Statement of (dis-) association**.

The full WG will revisit paragraphs on need to seek Confirmation in section 1.3.1, 1.3.2 and 1.3.3 as part of stress testing.

1.3.2 Impact change of Designated Language

The general policy requirement is that to be considered an IDNccTLD string it must be a Meaningful Representation of the name of the Territory in a Designated Language of the Territory. For this purpose, a

⁷ Note this includes documentation of support by the SIP!!

Designated Language is defined as: a language that has a legal status in the **Territory** or that serves as a language of administration⁸.

The IDN ccTLD will be considered de-selected and should be retired if it is evidenced that a selected IDNccTLD string that is either in the validation stage or is delegated as an IDNccTLD is no longer a Meaningful Representation in a **Designated Language** of the **Territory**.

A language is evidenced to be no longer Designated:

- If at the time of the request of the IDNccTLD string the **Designated Language** requirement was demonstrated and verified by a reference to the listing of (part of the) name of the **Territory** in the **Designated Language** in the UNGEGN Manual, the name of the **Territory** is no longer included in the **Designated Language** (see for the relevant **Territory** as an ISO 639 language in Part Three of the “Technical Reference Manual for the standardization of Geographical Names”, United Nations Group of Experts on Geographical Names (the UNGEGN Manual) (https://unstats.un.org/unsd/geoinfo/ungegn/docs/11th-uncsgn-docs/E_Conf.105_13_CRP.13_15_UNGEGN%20WG%20Country%20Names%20Document.pdf)).
- If at the time of the request of the IDNccTLD string the **Designated Language** requirement was demonstrated and verified by referencing it as an administrative language for the relevant **Territory** as defined in section 3.7 of ISO 3166-1 standard [2020], the language is no longer referenced as such.
- If the relevant public authority in the **Territory** confirms that the language is no longer used in official communications of the relevant public authority or serves as a language of administration (**Statement of Designation of Language**)

⁸ The definition of **Designated Language** is based on: “Glossary of Terms for the Standardization of Geographical Names”, United Nations Group of Experts on Geographic Names, United Nations, New York, 2002 https://unstats.un.org/unsd/ungegn/pubs/documents/Glossary_of_terms_rev.pdf. Note that in the Glossary the term “Official Language” is used. Experience has shown that, depending on the specific Territory, “Official Language” has a specific connotation, which sometimes creates confusion with the term “Official Language” as defined in the Glossary.

If it is evidenced that a language is no longer a **Designated Language** in the **Territory** the related IDNccTLD string for the name of that **Territory** is considered de-selected and if delegated, the IDNccTLD must be retired.

Confirmation of association or dis-association.

ICANN is not expected to actively seek confirmation of change of status of a language in **Territory**.

However, if ICANN receives a valid request⁹ for an IDNccTLD string for a **Territory** which is in the same **Designated Language** as another IDNccTLD string associated with the same **Territory** and the latter is either in the verification process or has been delegated, ICANN shall require a **Statement of Designation of Language** from the requester or IDNccTLD Manager of the IDNccTLD string being verified or delegated (whatever the case may be). The **Statement of Designation of Language** must be provided by a similar relevant public authority that provided the original documentation.

If such a **Statement of Designated Language** cannot be provided within a reasonable time frame (3 months upon notification by ICANN), the IDNccTLD already in process of being verified string or already delegated, is deemed to be de-selected and shall be retired. As of the time a **Statement of Designated Language** is requested until such a time the **Statement** is provided or after the reasonable time frame has passed (whatever is the earliest), the processing of the requested IDNccTLD string for that **Territory** shall be put on hold.

If according to the **Statement of Designated Language** the language remains to be a **Designated Language**, the (second) requested IDNccTLD string in the same **Designated Language** of the **Territory** shall be considered invalid and the requester and the related government should be informed accordingly.

ICANN should include in the implementation plan an example of the **Statement of Designated Language**.

1.3.3 Impact change of script or writing system.

⁹ Note this includes documentation of support by the SIP, with a prominent role of the government!!

The general policy requirement is only one (1) IDN ccTLD string per Designated Language. In the event that there is more than one **Designated Language** in the **Territory**, one (1) unique IDN ccTLD for each **Designated Language** may be selected, provided the **Meaningful Representation** in one **Designated Language** cannot be confused with an existing IDN ccTLD string for that **Territory**.

Further, where a language is expressed in more than one script in a **Territory**, then it is permissible to have one string per script, although the multiple strings are in the same **Designated Language**. For that matter the documentation to request an IDNccTLD string must include a reference to the script or scripts in which the **Designated Language** is expressed, and which **MUST** be listed in the script charts of the latest version of UNICODE.

If it is evidenced that in the **Territory** a **Designated Language** is no longer expressed in the script or scripts in which the IDNccTLD string associated with the **Territory** was expressed at the time it was requested, then that IDNccTLD string shall be considered de-selected and if delegated, must be retired.

Confirmation of script to express Designated Language. ICANN is not expected to actively seek confirmation of change of status of the script in which a **Designated Language** in **Territory** is expressed.

However, if ICANN receives a valid request¹⁰ for an IDNccTLD string for a **Territory** which is in the same **Designated Language** as another IDNccTLD string associated with the **Territory** but is expressed in another script, ICANN shall require a **Statement of Referenced Script** from the requester or IDNccTLD Manager of the IDNccTLD string already being verified or delegated (whatever the case may be). The **Statement of Referenced Script** must be provided by a similar relevant public authority that provided the original documentation with respect to the referenced script.

If such a **Statement of Referenced Script** cannot be provided within a reasonable time frame 3 months upon notification by ICANN), the IDNccTLD already in process of being verified string or already delegated, is deemed to be de-selected and shall be retired. As of the time a **Statement of Referenced Script** is requested until such a time the **Statement** is provided or after the reasonable time frame has passed (whatever is the

¹⁰ Note this includes documentation of support by the SIP, with a prominent role of the government!!

earliest), the processing of the requested IDNccTLD string for that **Territory** shall be put on hold.

If according to the **Statement of Referenced Script** the Designated Language remains to be expressed in the script originally referenced, the (second) requested IDNccTLD string in the same **Designated Language** of the **Territory** shall be considered invalid and the requester and the related government should be informed accordingly.

ICANN should include in the implementation plan an example of the **Statement of Referenced Script**.

2. Required SUPPORT for IDNccTLD string

2.1 The selected IDN ccTLD string MUST be non-contentious within the Territory. The selected IDN ccTLD string must be non-contentious within the **Territory**. The non-contentiousness is evidenced by a statement of support/endorsement/non-objection by the **Significantly Interested Parties**¹¹ in the **Territory**.

If during the process for selecting an IDN ccTLD string concurrent requests for the same or more IDN ccTLD strings in the same **Designated Language** for the same **Territory** are submitted, they shall be considered competing requests and are therefore deemed to be contentious within the **Territory**. Before any further steps are taken in the selection process, this issue needs to be resolved in **Territory**, before proceeding with any of the requests. If a concurrent request for an IDNccTLD string is received after the validation of the first requested IDNccTLD string has been completed and the requested IDNccTLD is published (see section 10, below), this second request shall be considered erroneous and section **Change, withdrawal or termination of the request** (section [update nr] below) applies.

2.2. Documentation of required endorsement / support/non-objection for selected string by Significantly Interested Parties

2.2.1 Definition of Significantly Interested Parties. Significantly Interested Parties include but are not limited to:

1. the government or territorial authority for the **Territory** associated with the IDN ccTLD string and

¹¹ The concept Significantly Interested Parties is derived from RFC 1591 and used as detailed in the Framework of Interpretation by the FOIWG (https://ccnso.icann.org/sites/default/files/filefield_46435/foi-final-07oct14-en.pdf). Accordingly: The FOIWG interprets “Significantly Interested Parties” (section 3.4 of RFC1591) to include, but not be limited to: a) the government or territorial authority for the country or territory associated with the ccTLD and b) any other individuals, organizations, companies, associations, educational institutions, or others that have a direct, material, substantial, legitimate and demonstrable interest in the operation of the ccTLD(s) including the incumbent manager. To be considered a Significantly Interested Party, any party other than the manager or the government or territorial authority for the country or territory associated with the ccTLD must demonstrate that it is has a direct, material and legitimate interest in the operation of the ccTLD(s). The FOIWG interprets the requirement for approval from Significantly Interested Parties (section 3.4 of RFC1591) to require applicants to provide documentation of support by stakeholders and for the IANA Operator to evaluate and document this input for delegations and transfers

2. any other individuals, organizations, companies, associations, educational institutions, or others in the **Territory** that have a direct, material, substantial, legitimate and demonstrable interest.

To be considered a **Significantly Interested Party**, any party other than the government or territorial authority for the **Territory** associated with the selected IDN ccTLD must demonstrate that it has a direct, material, legitimate and demonstrable interest in the operation of the proposed IDN ccTLD(s).

Requesters should be encouraged to provide documentation of the support of stakeholders for the selected string, including an opportunity for stakeholders to comment on the selection of the proposed string via a public process. “Stakeholders” is used here to encompass **Significantly Interested Parties**, “interested parties” and “other parties.”

2.2.2 Classification of input

For procedural purposes the following cases should be distinguished:

- Request for the full or short name of **Territory** (as defined in Section 3, reference needs to be updated in final version).
- Other cases, where additional documentation is required.

In both cases the relevant Government / Public Authority needs to be involved and at a minimum its non-objection should be documented.

Notes and Observations.

In cases that additional documentation is required:

- Unanimity should NOT be required.
- The process should allow minorities to express a concern i.e. should not be used against legitimate concerns of minorities
- The process should not allow a small group to unduly delay the selection process.

ICANN should include an example of the documentation required to demonstrate the support or non-objection for the selected string(s) in the implementation plan.

2.3 Impact IDNccTLD string becomes contentious within the Territory

The general policy requirement is that the selected IDN ccTLD string **MUST** be non-contentious within the **Territory**. The non-contentiousness is

evidenced by a statement of support/endorsement/non-objection by the **Significantly Interested Parties (SIP)** in the **Territory**.

If it is evidenced that the selected IDN ccTLD string has become contentious within the Territory, it shall be retired in accordance with the policy for retirement of ccTLDs.

The contentiousness of the IDNccTLD string is evidenced by a statement of the **Significantly Interested Parties** in the **Territory** the IDNccTLD string is contentious (Hereafter: **Statement of De-Selection**).

For purposes of the procedure, The Definition of Significantly Interested Parties (section 2.2.1) and Classification of input (section 2.2.2) apply.

Further, in all cases the relevant Government / Public Authority needs to be involved and it must express its written support for the **Statement of De-Selection** i.e express its written objection to the originally selected IDNccTLD string, which must be included in the Statement of De-Selection.

To be effective the **Statement of De-Selection** MUST be published on the ICANN Website. Prior to publication of the **Statement**, the IDNccTLD Manager shall be informed by ICANN of receipt of such a **Statement of De-Selection**.

If a concurrent **SIP** statement in support of the IDN ccTLD string(s) is received by ICANN before the **Notification of Retirement** is provided to the Manager of the de-selected IDNccTLD string, this SIP Statement and the **Statement of De-Selection** shall be deemed to be conflicting within the **Territory**. Before any further steps are taken in the retirement process, this issue needs to be resolved in **Territory**.

If a request for an IDNccTLD string in the same **Designated Language** for the same **Territory** is received at the same time or after the **Statement of De-Selection** is received, but before the date the **Notification of Retirement** is sent, then the issue of contradicting statements with respect to the de-selection of the IDNccTLD string needs to be resolved in **Territory**, before any further steps are taken in the de-selection process of the delegated IDNccTLD string and/or validation process for the newly requested IDNccTLD string.

The Review Mechanism for IFO decisions which apply to ccTLDs is available to the IDN ccTLD Manager who receives a Notification of Retirement under section 2.3

ICANN should include in the implementation plan an example of the documentation required to demonstrate the support for the De-Selection of the selected string(s).

Section 3 Variant Management

3.1 Introduction

In the Variant Management section the working group will address two questions with respect to (IDN)ccTLDs:

- **How are Variants of the selected IDNccTLD string defined?**
- **How should variants of the selected IDNccTLD string be managed?**

With respect to the first question - the definition of TLD Variants -, the ICANN Board [resolved](#) on 11 Apr. 2013 to implement the [Label Generation Rule \(LGR\) Procedure](#). The working-group supports implementation of the LGR.

With respect to the second question, the management of IDNccTLD variant, the results of the deliberations of the sub-group are included in section 3 of this document. The sub-working group based its work on the following documents and background material:

The ICANN Board of Directors resolutions:

- [approved](#) on 14 March 2019 [IDN Variant TLD Recommendations](#) and requested ccNSO and GNSO take into account the recommendations while developing their respective policies to define and manage the IDN variant TLDs for the current TLDs as well as for future TLD applications, and communicate for a consistent solution.
- [approved](#) on 26 January 2020 [Recommendations for the Technical Utilization of the Root Zone Label Generation Rules](#) and requested the ccNSO and GNSO Councils take into account the Recommendations while developing their respective policies to define and manage the IDN variant TLDs for current TLDs as well as for future TLD applications.

In addition, and to provide an overview to the working group and ensure the coordinated and consistent approach as requested, the sub-group first looked at the IDN Variant TLD Recommendations. In addition, the sub-group looked at the GNSO view on these recommendations and was kept informed about the progress of the GNSO EPDP in this area and the latest SSAC advise in this area (SAC 120).

The working group looked the recommendations on the Technical Utilization of RZ-LGR. Again, first the recommendations as adopted. In addition, the sub-group looked at the GNSO view on these recommendations, if any.

Recommendations or advice.

In the course of its work the working group identified issues that due to the limited policy remit of the ccNSO required further discussion and possibly another way to address then a policy recommendation.

The working group considered that addressing these issue would be needed to ensure stability, security and interoperability of the DNS, but would be outside the remit of the policy. The working group opted therefore to include recommendations as advise to ccTLD managers.

The Policy recommendations pertaining to management of variant IDNccTLDs are contained in section 3-9. The advice to IDNccTLD Managers is contained in Annex C.

3.2 Definition of IDNccTLD Variants

The ccPDP4 VM Subgroup Recommendations and Advise.

3.2.1 Definition of Variants. Compliance with Root Zone Label Generation Rules (RZ-LGR, RZ-LGR-2, and any future RZ-LGR rules sets) **shall** be required for the generation of an IDNccTLD string and its variants, including the determination of whether the string is **Blocked** or **Allocatable**. IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).

Notes and Observations

- IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).

- All selected IDNccTLD strings must be processed using the RZ-LGR:
 - to determine if they are valid and.
 - Calculate Variants. Use RZ-LGR to assign status blocked or allocatable.

3.2.2 Scripts integrated into RZ-LGR. For the scripts and writing systems which have been integrated into the RZ-LGR, the RZ-LGR must be the only source for processing the following cases:

- Validate an applied-for TLD string and determine its variant string(s) with corresponding dispositions
- Calculate variant strings, and corresponding disposition values, for each one of the already delegated TLD Strings

Transitional arrangement. Desired Variant String (variants that have been requested under the Fast Track Process) are only eligible if they are generated through RZ-LGR and accordingly allocatable.

3.2.3. Limitation of delegation of variants. Only **Allocatable VARIANTS** of the selected IDNccTLD string that are **Meaningful Representations** of the name of the **Territory** in the **[Designated¹²] Language** according to section 1.1-1.8 and section 2.1 and 2.2, are eligible to be delegated.

This criteria shall be subject of the first review of the IDNccTLD string selection policy, as foreseen in Section 9.E Review of policy for the selection of IDN ccTLD strings.¹³

Notes and Observations

For variants to be eligible for delegation, section 3.2.3 implies that all criteria apply and the required documentation and support from the Significantly Interested Parties must be available for all requested variants before validation. The proposal is attempting to strike a balance between the legitimate need for variants of an IDNccTLD to avoid user confusion and the general responsibilities for the security and stability of the root by the need to limit proliferation of strings at the root level.

¹² Taking on suggestion to put “designated” between brackets. For later discussion we need to seek input from the Arabic script/language community on what the impact of this limitation would be.

¹³ **Section 9.E Review of policy for the selection of IDN ccTLD strings** It is recommended that the policy will be reviewed within five years after implementation or at such an earlier time warranted by extraordinary circumstances. It is also recommended that the the ccNSO Council initiates such a review by launching a review group who will be tasked to review the ascertain whether the policy needs to be updated and advise the ccNSO Council on the proposed method for such an update. The scope and working method of such a review must be determined by the ccNSO after consulting relevant stakeholders, and take into account the experience with the ccPDP4 process and relevant circumstances and developments with respect to IDN TLDs

In the event such a review results in a recommendation to amend the policy, the rules relating to the country code Policy Development Process as defined in the ICANN Bylaws should apply.

3.2.4. Impact of possible amendment of RZ-LGR. It is expected that the RZ-LGR be revised throughout its lifecycle, because a new script LGR is being integrated or a revision of an existing script LGR is being integrated into the Root Zone LGR. There may be a case where the update in the Root Zone LGR does not support an existing IDN ccTLD. In such a case, the delegated IDN ccTLD(s) must be grandfathered, unless grandfathering would demonstrably threaten the stability and security of the DNS and deselection of a delegated IDN ccTLD string is demonstrably the only measure to mitigate such a threat.

Note and observation

Section 3.2.4 is on impact of possible amendment of the RZ-LGR. Assuming that an amendment would demonstrably threaten the stability and security of the DNS, de-selection and hence retirement of the IDNccTLD string and/or its delegated variants may be the only measure. According to the ccTLD retirement policy, the retirement may take at least 5 years.

Question for scenario testing: Does this imply that the amendment of the RZ-LGR which caused the demonstrably threat, should not become effective until the IDNccTLD has been retired?

3.3 Allocation of Variant Top Level Domain strings to the same entity

Allocatable IDNccTLD variant strings. The set of allocatable variant strings that is generated from the selected IDNccTLD string by applying the RZ-LGR, must be

- allocated to one and the same entity: the requestor (the entity that submits the selected IDNccTLD string),
- delegated to one and the same entity: the IDN ccTLD Manager or withheld for possible future delegation to the IDNccTLD Manager.

In other words, for a selected top-level label T1, its allocatable variant label(s) T1V1,..., T1Vx shall only be allocated to the IDN ccTLD requestor, or - after the delegation process for the selected IDNccTLD string has been initiated - delegated to the same IDNccTLD Manager or withheld for possible delegation to that IDNccTLD Manager.

If a specific IDNccTLD is operated by a "back-end" registry service provider under arrangement with the IDNccTLD Manager, or will be operated by a "back-end"

registry service provider under arrangement with the IDNccTLD Manager, then that “back-end” service provider must operate all delegated variants of that specific IDNccTLD as well.

3.4 Review of the existing IDNccTLD string selection process (Fast Track Process)

With respect to the update of the Fast Track Process Implementation Plan, The ccNSO has requested a standstill of the evolution of the Fast-Track process. See letter ccNSO to the ICANN Board of Directors

<https://ccnso.icann.org/sites/default/files/field-attached/sataki-to-chalaby-04sep19-en.pdf> and response from the chair of the Board:

<https://www.icann.org/en/system/files/correspondence/chalaby-to-sataki-31oct19-en.pdf>

The ccPDP4 WG agrees with this approach and the evolution of the Fast-Track Process, if at all, should be limited to address issues that cause a demonstrable threat to the security and stability of the DNS, can only be addressed through an amendment of the Fast-Track Process, and require resolution before completion and implementation of the envisioned ccPDP 4.

Please note that the general review mechanism of the policy is addressed in section 9 F.

Section 4 TECHNICAL & OTHER STRING REQUIREMENTS AND THEIR VALIDATION

4.1.1 Technical Criteria

The requested selected IDN ccTLD string and its requested variants must abide by all Technical Criteria for an IDN TLD string. In addition to the proposed general requirements for all labels (strings), the selected IDN ccTLD string MUST abide by the normative parts of RFC 5890, RFC 5891, RFC 5892 and RFC 5893.

All selected IDNccTLD strings must be processed using the RZ-LGR to determine:

1. if they are valid and

2. Calculate Variants (e.g use the RZ-LGR to determine whether the variant string is blocked or allocatable).

If the RZ-LGR is applied to the selected IDNccTLD string (for a script used to express the meaningful representation in the Designated Language), and this results in variant ASCII string (Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (2-letter [az] codes), these variants be:

- Blocked and
- Result in not allowing the selected IDN ccTLD (to maintain the predictability of the current ccTLD delegation policy

For the scripts and writing systems which have been integrated into the RZ-LGR, the RZ-LGR must be the only source for processing the following cases:

- Validate a requested IDNccTLD string and determine its variant string(s) with corresponding dispositions
- Calculate variant strings, and corresponding disposition values, for each one of the already delegated TLD Strings

All applicable technical criteria (general and IDN specific) for IDN ccTLD strings should be documented as part of the implementation plan. For reasons of transparency and accountability they should be made public prior to implementation of the overall policy and endorsed by the ccNSO.

Validation that a string meets the technical criteria is a process step and shall be conducted by an external, independent panel. The recommended procedure is described in Section 2.1.3, Processes and Documentation.

The method and criteria for the technical and RZ-LGR conformity validation should be developed as part of the implementation plan and are a critical part of the review process. For reasons of transparency and accountability they should be made public prior to implementation of the overall policy and endorsed by the ccNSO.

4.1.2 Confusing Similarity (From section 2.1.2) (to be reviewed by 3rd Sub-Group) Note that the criteria and process and procedures of this section shall be reviewed and updated by one of the sub-groups

4.2 TECHNICAL, RZ-LGR Conformity and CONFUSING SIMILARITY Validation Processes and Procedures

Staff Note: The original text was structured in such a way that combining the text in criteria section and Processes and Procedures, is difficult to combine in a consistent manner.

4.2.1 General description of Technical and string confusion review

It is recommended that ICANN appoint the following external and independent Panels:

- To validate the technical requirements ICANN should appoint a “Technical Panel¹⁴” to conduct a technical review of the selected IDN ccTLD string.
- To validate **that the requested string and its delegatable variants conform to RZ-LGR** requirements ICANN should appoint a Panel to conduct the conformity review¹⁵.
- {PLACEHOLDER: To validate a selected string is not confusingly similar, ICANN should appoint an external and independent Panel(s)}

4.2.2 Process for Technical Validation & RZ-LGR conformity review

1. After completion of the ICANN staff validation of the request (see below section) , ICANN staff will submit the selected IDN ccTLD string to the “Technical Panel” for the technical & RZ-LGR review.
2. The Technical Panel conducts a technical string evaluation of the string and its variants submitted for evaluation. If needed, the Panel may ask questions for clarifications through ICANN staff.
3. The findings of the evaluation will be reported to ICANN staff. In its report the Panel shall include the names of the Panelists and document its findings, and the rationale for the decision.

Usually the Panel will complete its review and send its report to ICANN staff within 30 days after receiving the IDN ccTLD string to be evaluated. In the event the Panel expects to need more time, ICANN staff should be informed accordingly. ICANN staff shall then inform the requester accordingly.

¹⁴ Or any other name ICANN would prefer.

¹⁵ Or any other name ICANN would prefer.

If according to the technical review the selected IDN ccTLD string, and requested variants, if any, meet(s) all the technical criteria, the string is technically validated. If the selected IDNccTLD string fails to meet the technical criteria, the requested string and the requested variants, if any, is/are not valid under the policy.

If according to the technical review the selected IDN ccTLD string meets all the technical criteria, but one or more of the requested variants does not meet the technical criteria, only the requested variants that do not meet the technical criteria are not valid under the policy.

ICANN staff shall inform and notify the requester accordingly and section **Change, withdrawal, or termination of the request** (see section 8 below) applies.

Notes and Observation. If the selected IDN ccTLD string does not meet the technical criteria, ICANN org and the requestor are strongly advised to jointly and cooperatively review the results, including the manner in which the relevant RZ-LGR has been implemented with the goal to clarify any issues. However, if after such a review the selected string remains to be determined “invalid”, the selected IDNccTLD string it shall not pass.

4.2.3 Conformity to RZ-LGR

At the time the selected IDNccTLD string is submitted for validation, the script in which the selected IDNccTLD string is expressed must be in compliance with the RZ-LGR i.e. the Label Generation Rules (LGR) for the script/writing system in which the Designated Language is expressed must be integrated in the Label Generation Rules for the Root Zone.

If at the time the requested IDNccTLD string is submitted for validation the LGR for the writing system or script in which the Designated Language is expressed has not been generated or is not yet integrated in the RZ-LGR, or if the selected IDNccTLD string is not in compliance with the RZ-LGR, ICANN shall inform the requester and section 5.2.2 sub C. applies accordingly.

The risk of selecting a potential “invalid” string should remain with the selecting parties and hence no review mechanism is necessary for this aspect of the process. Therefore, if a selected IDN ccTLD string - of which the script is supported by the RZ-LGR - is determined to be “invalid” according to the RZ-

LGR, it shall not pass the string evaluation phase and section 8 below (termination of the process) shall apply accordingly.

4.2.4 Process for confusing similarity validation (to be reviewed by 3rd sub-group confusing similarity)

Section 5. Two-Step Process

Under the overall policy a two-stage process is recommended for the selection of an IDN ccTLD string:

Step 1: String selection stage in Territory

Step 2: Validation of IDN ccTLD string

The policy recommendations on process, procedures and required documentation, if any, will be described both at a general level and in a more detailed fashion for both stages.

5.1 Stage 1: String Selection in Territory

5.1.1 General Description

The string selection stage is a local matter in Territory and should ideally involve all relevant local actors in Territory. The actors in Territory must:

1. Identify the script and language for the IDN Table and prepare this Table if necessary,
2. Select the IDN ccTLD string. The selected string must meet the meaningfulness and technical requirements and should not be confusingly similar.
3. Document endorsement /support of the relevant stakeholders in Territory for the selected string, and
4. Select the intended IDN ccTLD string requester before submitting an IDN ccTLD string for validation. In cases where the string requester is not yet selected, the relevant public authority of the Territory may act as nominee for the to be selected string requester.

Notes and Comments

As stated, the string selection stage is a local matter in Territory and should ideally involve all relevant local actors in Territory. Typically, this would include:

- The IDN ccTLD string requester. This actor initiates the next step of the process, provides the necessary information and documentation, and acts as the interface with ICANN. Typically this actor is the expected IDN ccTLD manager.
- Significantly Interested Parties.
 - The relevant public authority of the Territory associated with the selected IDN ccTLD.

- Parties to be served by the IDN ccTLD. They are asked to show that they support the request and that it would meet the interests and needs of the local Internet community.

Additionally, these actors may wish to involve recognised experts or expert groups to assist them to select the IDN ccTLD string, prepare the relevant IDN Table or assist in providing adequate documentation.

As part of the in territory step the following documentation should be prepared:

i. Documentation of required endorsement / support for selected string by Significantly Interested Parties

Definition of Significantly Interested Parties.

Classification of input

Notes and Comments

ii. Documentation of the meaningfulness of the selected IDN ccTLD string

Notes and Comments

iii. Documentation Designated Language

Notes and Comments

Further, and at the request of the actors in **Territory**, ICANN may assist them with the in-Territory Process.

5.1.2 Detailed aspects String Selection Stage

5.2. Stage 2: Validation of IDN ccTLD string

5.2.1 General description

The String Validation stage is a set of procedures to ensure all criteria and requirements regarding the selected IDN ccTLD string have been met.

Typically this would involve:

- The IDN ccTLD string requester. This actor initiates the next step of this stage of the process by submitting a request for adoption and associated documentation.
- ICANN staff. ICANN staff will process the submission and coordinate between the different actors involved.
- Independent Panels to review the string (Technical and Similarity Panels).

The activities during this stage would typically involve:

1. Submission of IDN table, See Annex C.
2. Submission of selected string and related documentation.
3. Validation of selected IDN ccTLD string:
 - a. ICANN staff validation of request. This includes:
 - i. Completeness of request
 - ii. Completeness and adequacy of Meaningfulness and Designated Language documentation
 - iii. Completeness and adequacy of support from relevant public authority
 - iv. Completeness and adequacy of support from other Significantly Interested Parties
 - b. Independent Reviews
 - i. Technical review
 - ii. String Confusion review
4. Publication of selected IDN ccTLD string on ICANN website
5. Completion of string Selection Process
6. Change, withdrawal or termination of the request.

5.2.2 Detailed aspects String Validation Stage

A. Submission of the selected string and related documentation

This part of the process is considered a matter of implementation.

B. Validation of selected string

a. ICANN staff validation of the request

After the requester has submitted a request for an IDN ccTLD string, ICANN should at least validate that:

- The selected IDN ccTLD refers to a **Territory**
- The selected string (A-label) does not exist in the DNS, nor is approved for delegation to another party,
- The selected string (U-label) contains at least one (1) non-ASCII character.
- The required A-label, U-label, and corresponding Unicode points to designate the selected IDN ccTLD string are consistent.
- Documentation on **Meaningfulness** is complete and meets the criteria and requirements.
- Documentation on the **Designated Language** is complete and meets the criteria and requirements.
- Documentation to evidence support for the selected string is complete and meets the criteria and requirements and is from an authoritative source.

If one or more elements listed are not complete or deficient, ICANN shall inform the requester accordingly. The requester should be allowed to provide additional information, correct the request, or withdraw the request (and potentially resubmit at a later time). If the requester does not take any action within 3 months after the notification by ICANN that the request is incomplete or contains errors, the request may be terminated by ICANN for administrative reasons and in accordance with section 8 below.

Question: Should any of the ICANN validations be subject to the review mechanism?

If all elements listed are validated, ICANN shall notify the requester accordingly and the Technical and Confusing Similarity Validation Process will be initiated.

If ICANN staff anticipates issues pertaining to the Technical and String Confusion Review during its initial review of the application, ICANN staff is advised to inform the requester of its concerns. The requester will have the opportunity to either:

1. Change the selected string,
or

2. Tentatively request two or more strings as part of the application including a ranking of the preference to accommodate the case where the preferred string is not validated,
or
3. Withdraw the request,
or
4. Continue with the request as originally submitted.

Details of the verification procedures and additional elements, such as the channel of communication, will need to be further determined. This is considered a matter of Implementation planning.

b. Independent Reviews

I General description of Technical and string confusion review

WG Comments and Findings

Note some of the topics in this section from Section 2.1.3 , 2013 Report to the Board have already been reviewed. The sections on confusing similarity will be reviewed and updated by the confusing similarity sub-group .

It is recommended that ICANN appoint the following external and independent Panels:

- To validate the technical requirements ICANN should appoint a “Technical Panel¹⁶” to conduct a technical review of the selected IDN ccTLD string.
- {PLACEHOLDER: To validate a selected string is not confusingly similar, ICANN should appoint an external and independent Panel(s)}

I. Process for Technical Validation

4. After completion of the ICANN staff validation of the request (see section 7.2.2 3.a above), ICANN staff will submit the selected IDN ccTLD string to the “Technical Panel” for the technical review.
5. The Technical Panel conducts a technical string evaluation of the string submitted for evaluation. If needed, the Panel may ask questions for clarifications through ICANN staff.
6. The findings of the evaluation will be reported to ICANN staff. In its report the Panel shall include the names of the Panelists and document its findings, and the rationale for the decision.

¹⁶ Or any other name ICANN would prefer.

Usually the Panel will complete its review and send its report to ICANN staff within 30 days after receiving the IDN ccTLD string to be evaluated. In the event the Panel expects to need more time, ICANN staff should be informed accordingly. ICANN staff shall then inform the requester accordingly.

If according to the technical review the string meets all the technical criteria the string is technically validated. If the selected string fails to the technical criteria, the requested string is not-valid under the policy. ICANN staff shall inform and notify the requester accordingly and section **Change, withdrawal or termination of the request** (see section below) applies.

II. Process for confusing similarity validation (to be reviewed by 3rd sub-group confusing similarity)

Section 6. Publication of IDN ccTLD string

After successful completion of the request validation procedure and the IDN ccTLD string is valid according to both technical and string similarity review procedures, ICANN shall publish the selected IDN ccTLD String publicly on its website.

Section 7. Completion of IDN ccTLD selection process

Once the selected IDN ccTLD string is published on the ICANN website, and the IDN ccTLD selection process is completed, delegation of the IDN ccTLD string may be requested in accordance with the current policy and practices for the delegation, transfer, and retirement of ccTLDs. ICANN shall notify the requester accordingly.

Section 8. Change, withdrawal, or termination of the request

ICANN staff shall notify the requester of any errors that have occurred in the application. These errors include, but are not limited to:

- The selected string is already a string delegated in the DNS, or approved for delegation to another party.
- Issues pertaining to the required documentation.
- The country or territory of the request does not correspond to a listing in the ISO3166-1 list or the European Union.

- If in accordance with the independent review procedure the selected string is not valid.

If such errors emerge, ICANN staff should contact the requester, who should be provided the opportunity to:

- Amend, adjust or complete the request under the same application in order to abide to the criteria,
or
- Withdraw the request.

If the requester has not responded within 3 calendar months of receiving the notice by ICANN staff, the request will be terminated administratively.

Details of the procedures and additional elements, such as the channel of communication, will need to be further documented. This is considered a matter of Implementation planning.

Section 9. Miscellaneous

A1. Delegation of an IDN ccTLD must be in accordance with current policies, procedures, and practices for delegation of ccTLDs

Once the IDN ccTLD string has been selected and the String Validation Stage has been successfully concluded, the delegation of an IDN ccTLD shall be according to the policy and practices for delegation of ccTLDs. This means that the practices for delegation, transfer, revocation and retirement of ccTLDs apply to IDN ccTLDs.

A2. Delegation of variant(s) of the selected IDN ccTLD must be in accordance with current policies, procedures, and practices for delegation of ccTLDs

All ccTLD policies with respect to the delegation, transfer, revocation and retirement of ccTLDs are applicable to the delegation, transfer, revocation and retirement of (variant) IDNccTLDs. However, specific requirements under a policy may vary for the selected IDN ccTLD string and its variants if foreseen under this policy.

If a selected IDNccTLD string is delegated under the existing relevant policy for delegation of ccTLD, the whole set of allocatable IDNccTLD variants shall be delegated to the same entity, on the basis of the request for delegation of the selected IDNccTLD string, unless otherwise foreseen under this policy.

If a selected IDNccTLD string is requested to be transferred in accordance with RFC1591 as interpreted by the FoI to another entity, the whole set of allocatable IDNccTLD strings shall be transferred to the-same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy.

If a selected IDNccTLD string or any of its variants is revoked in accordance with RFC1591 as interpreted by the FoI, all allocated variant IDNccTLDs (delegated or withheld for future delegation) shall be revoked.

If the selected IDNccTLD string should be retired as foreseen under this policy, all variant IDNccTLD strings shall be retired, unless otherwise foreseen under this policy.

Implementation of this and other recommendations pertaining to variant IDNccTLD strings is considered a matter of implementation.

A 3 All delegated variant IDNccTLD strings must be operated by the same entity. If a specific IDNccTLD is operated by the IDNccTLD Manager all variants must be operated by the same IDNccTLD Manager (Definition: the IDNccTLD Manager is the entity or organization listed in the IANA rootzone database as the ccTLD Manager for a specific IDNccTLD).

If a selected specific a IDNccTLD is operated by a "back-end" registry service provider under arrangement with the IDNccTLD Manager, or will be operated by a "back-end" registry service provider under arrangement with the IDNccTLD Manager, that "back-end" service provider must operate all delegated variants of that IDNccTLD.

Note and observation

The concept "same entity" is not defined. What is considered an entity or organization varies across the various national legal systems, policies, business practices, etc. For ccTLD managers this concept is detailed in Section 10.4 (a) of the ICANN Bylaws: *"(For purposes of Article 10) a ccTLD manager is the organization or entity responsible for managing a ccTLD according to and under the current heading "Delegation Record" in the Root Zone Database, or under any later modification, for that country-code top-level domain"*

B. Confidentiality of information during due diligence stage (read: validation Stage), unless otherwise foreseen.

It is recommended that the information and support documentation for the selection of an IDN ccTLD string is kept confidential by ICANN until it has been established that the selected string meets all criteria.

Notes and comments

As noted above, the ISO 3166-1 is not only relevant for the creation of a ccTLD. Once an entry is removed from the list of country names, the ccTLD entry in the root zone database may need to be adjusted/removed to maintain parity between the ISO 3166 list and the root-zone file¹⁷.

C. REVIEW MECHANISM for decisions under the proposed policy

Some proposals under this proposed policy may result in ICANN org decisions to de-select an IDNccTLD string and/or its variants, and hence to retire an IDNccTLD or its variants. According to the ccTLD retirement policy (as adopted in September 2022), the retirement of an (IDN)ccTLD requires the IFO to serve a Notice of Retirement to the (IDN)ccTLD Manager. This Notice formally starts the (clock of the) ccTLD retirement process.

Similar as under the proposed ccPDP3 Review Mechanism policy – if a ccTLD Manager is directly impacted by a Notice of Retirement for two-letter Latin ccTLD which does not correspond to an ISO 3166-1 Alpha-2 Code Element - it is proposed that the review mechanism should be available to an IDNccTLD Manager who is served a Notice of Retirement following the de-selection of an IDNccTLD string and/or its variants strings resulting from:

- (Section 1.3. De-selection.) Change of Name of the Territory, Change of designated language, Change of script or writing system
- (Section 2.3.) Impact IDNccTLD string becomes contentious within the Territory

¹⁷ See: <http://www.iana.org/reports/2007/rs-yu-report-11sep2007.html>

- (Section 3.2.4.)Demonstrable threat of DNS security and stability of the DNS as the result of the impact of an amendment of the RZ-LGR.

Notes and Observations

Note 1. The case that the de-selection of an IDNccTLD and its variants is the result of the removal of the name of the **Territory** from the ISO3166 is excluded from the review process. The decision to remove the name of a territory from the ISO3166-1 is an external decision (ISO3166-MA).

Rationale: The circumstance leading up to the removal of a line item should not be subject to a review. This reflects the basic understanding that *IANA (read ICANN) is not in the business of determining what is and what is not a country (read Territory)* and further the understanding that ISO has a process to do so.

Note 2. Note that the Confusing Similarity subgroup may propose to view the Extended Review Process and Risk Mitigation process as specific review mechanisms, in addition to the review mechanism proposed by ccPDP3.

Rationale: Firstly, the IFO is not involved in any decisions pertaining to confusing similarity or whether a IDNccTLD string meets the technical criteria.

D. Transitional arrangement regarding IDN ccTLD strings under the Fast Track IDN ccTLD Process

1. Closure of Fast Track Process. As of the moment ccPDP4 has been fully implemented and is available for processing requested selected IDNccTLD strings, the Fast Track Process must be closed for new selected IDNccTLD string requests.
2. If at the time the IDNccTLD request process based on ccPDP4 becomes available, IDN ccTLD string requests which are still in the Fast Track Process must be completed through the Fast Track Process. Completion results either in publication of the selected IDNccTLD string in accordance with section 5.6.4 of the FIP, or results in the withdrawal of the request by the requestor or in

termination of the request by ICANN in accordance with section 5.4 of the Final Implementation Plan¹⁸.

3. All IDNccTLD strings that have been validated under the Fast Track Process, will be deemed to be validated under the IDNccTLD policy for the selection of IDNccTLD strings, and are grandfathered. The recommendations under this policy development process with respect to the de-selection of IDNccTLD strings shall be applicable to the grandfathered IDNccTLD strings.

E. Review of policy for the selection of IDN ccTLD strings

It is recommended that the policy will be reviewed within five years after implementation or at such an earlier time warranted by extraordinary circumstances. It is also recommended that the ccNSO Council initiates such a review by launching a review group who will be tasked to review the ascertain whether the policy needs to be updated and advise the ccNSO Council on the proposed method for such an update. The scope and working method of such a review must be determined by the ccNSO after consulting relevant stakeholders, and take into account the experience with the ccPDP4 process and relevant circumstances and developments with respect to IDN TLDs

In the event such a review results in a recommendation to amend the policy, the rules relating to the country code Policy Development Process as defined in the ICANN Bylaws should apply.

F. Verification of Implementation

It is anticipated that some parts of the recommendations and process steps will need to be further refined and interpreted by ICANN staff before they will be implemented. It is further anticipated that this will be done through

¹⁸ <https://www.icann.org/en/system/files/files/idn-ccTld-implementation-plan-28mar19-en.pdf> . From the FIP: *“Several of the steps in the Request Submission for String Evaluation (Stage 2) allow for a requester to withdraw a request. It is also possible that ICANN will terminate a request if the request contains certain errors. “ In addition several circumstances are listed in the FIP, which trigger a termination by ICANN, for example, according to Section 5.6.3 “If the requester has not notified ICANN within three (3) calendar months after the date of notification by ICANN of DNS Stability Panel findings, the Termination Process will be initiated. See section 5.4 “*

an implementation plan or similar planning document. It is therefore recommended that the ccNSO monitors and evaluates the planned implementation of recommendations and the ccNSO Council reviews and approves the final planning document before implementation by staff.

G. Non-applicability IRP/RECONSIDERATION

In July 2022 the ccNSO Council requested that the ccPDP4 WG look at the need for further clarification of the ICANN Bylaws Sections 4.2 (d) (i) and 4.3 (c) (ii), and, if clarification is needed, make a recommendation to that effect.

The ccPDP 4 WG makes the following recommendations regarding ICANN Bylaws Sections 4.2 (d) (i) and 4.3 (c) (ii):

- As IDNccTLDs are ccTLDs, all disputes and claims related to the delegation, transfer, and revocation of IDN ccTLDs, shall remain excluded from ICANN’s Reconsideration Process and the Independent Review Process for Covered Actions.
- As IDNccTLDs are ccTLDs, all disputes and claims related to the retirement of an IDNccTLD shall be excluded from ICANN’s Reconsideration Process and the Independent Review Process for Covered Actions.
- The ccPDP 4 WG recommends that the relevant section of the ICANN Bylaws shall be amended accordingly, including but not limited to amending the terms “ delegation and re-delegation” to “delegation, transfer, revocation and retirement ”, and if considered advisable for avoidance of doubt, replace “ccTLDs” with “ccTLDs and IDNccTLDs”
Amendment of the Bylaws is considered a matter of implementation.
- The ccNSO is advised to consider that any future policy to be developed by the ccNSO and which can affect the stewardship of a ccTLD, including an IDNccTLD, should include a consideration whether claims and disputes flowing from the application of the policy should be excluded from ICANN’s Reconsideration Process and the Independent Review Process for Covered Actions, and if so, explicitly specify the outcome of this consideration in any such policy.

Annex A: Specific terminology used in policy proposal

Term	Definition/Description	Document, section	Comment
Territory, Territories	<p>“Territory” or “Territories” are defined as a country, a subdivision, or other area of particular geopolitical interest listed in Section 3 of the ‘International Standard ISO 3166, Codes for the representation of names of countries and their subdivisions – Part 1: Country Codes’ [ISO 3166-1:2020] or, in some exceptional cases, e.g. grandfathered-in delegations, a country, a sub-division, or other area of particular geopolitical interest listed for an exceptionally reserved ISO 3166-1 code element</p>	<p>ccPDP4-WG Work Document Section 2.1.1 Version 05 – 06 January 2021, I</p>	<p>The definition of territory may be included in Article 10 of the ICANN Bylaws for purposes of Article 10.</p>
Meaningful Representation	<p>A country code string is considered to be a Meaningful Representation if it is:</p> <ul style="list-style-type: none"> a. The name of the Territory; or b. Part of the name of the Territory that denotes the Territory; or c. A short-form designation for the name of the Territory, recognizably denoting the name. 	<p>Policy proposals for IDN ccTLD String Selection Criteria, Requirements and Processes v05, section 3.2</p>	
Designated Language	<p>A language that has a legal status in the or that serves</p>	<p>Policy proposals for</p>	

Term	Definition/Description	Document, section	Comment
	as a language of administration	IDN ccTLD String Selection Criteria, Requirements and Processes v05, section 3.2	
Withheld-same-entity Variant	A Withheld label or string is set aside for possible allocation only to the same entity of the other labels in the variant set.		
Blocked Variant	A status of some label (string) with respect to a zone, according to which the label is unavailable for allocation to anyone. The term “to block” denotes the registry (the zone operator) taking this action.		Source document: IDN Variant TLD Implementation: Appendices Page 5
Allocatable or Allocated Variant	A status of some label (string) with respect to a zone, whereby the label is associated administratively to some entity that has requested the label. This term (and its cognates “allocation” and “to allocate”) represents the first step on the way to delegation in the DNS. When the registry (zone operator) allocates the label, it is effectively making a label a candidate for activation. Allocation does not, however, affect the DNS at all.		IDN Variant TLD Implementation: Appendices Page 5
Activated/Active	A status of some label with respect to a zone,		

Term	Definition/Description	Document, section	Comment
	<p>indicating that there are DNS resource records at that node name; or else that there are subordinate names to that name, even though there are no resource records at that node name. In the case where there are resource records at the node name, any resource record will do. In the case where there are subordinate names but no resource records (except those to support DNSSEC), the label names an empty non-terminal. A registry (zone operator) setting the active status activates the name, or performs activation.</p>		
Delegation	<p>Process to assign a ccTLD to a manager</p>		<p>https://www.iana.org/help/ccTLD-delegation</p>
Delegatable IDNccTLD	<p>IDNccTLD string eligible to be assigned to a ccTLD Manager</p>		
Delegated (technical definition)	<p>A status of some label with respect to a zone, indicating that in that zone there are NS resource records at the label. The NS resource records create a zone cut, and require an SOA record for the same owner name and corresponding NS resource records in the subordinate zone. The act of entering the NS records in the zone at the parent side of the zone cut is delegation, and to do that is to delegate. This</p>		<p>IDN Variant TLD Implementation: Appendices Page 5</p>

Term	Definition/Description	Document, section	Comment
	definition is largely based on RFC 1034; the reader should consult RFC 1034 for detailed discussion of how the DNS is broken into zones.		
Withheld-same-entity	A Withheld label is set aside for possible allocation to only the same entity of the labels in the variant set		IDN Variant TLD Implementation: Appendices Page 5
Selected String or Selected IDNccTLD	The IDNccTLD that was selected in Territory and supported by the Significantly Interested Parties in the Territory to which the IDNcountry code relates.		
Rejected or non-Valid string	A Rejected string is set aside on administrative grounds outside the ordinary LGR procedures. Other terms used “Not Approved” and “Will Not Proceed”. Strings that cannot be allocated on visual confusability grounds, based on the string similarity review step in the TLD application process, are also Rejected.		
IDNccTLD Manager	IDNccTLD Manager is the entity or organisation listed in the IANA rootzone database as the ccTLD Manager for a specific IDNccTLD		ccTLD Manager definition derived from general definition ICANN Bylaws section 10.4 (a)

Annex B Terminology derived from the ISO 3166 Standard

Included is basic terminology included in the ISO3166 Standard, which was identified by the ccPDP3 Retirement WG in the context of developing the process for the retirement of ccTLDs. Some of these terms are also used in the context of ccPDP4.

Notes with respect to the terminology derived from the ISO 3166 Standard:

- In this overview a distinction is made between terminology defined in the 2013 and 2020 editions of the Standard and the ISO Online Browsing Platform (OBP). The terminology defined in the Standard is included in the table in normal font. The terminology used in the Online Browsing Platform is *emphasized*.
- The definitions contained in the Standard are considered to take precedent. Terminology from the Online Browsing Platform is only included for informational purposes. It is strongly advised not to use or refer to the informational terms in Policy and policy related documents.
- A new version of ISO 3166 was published very recently (2020). The major change is that the table of country codes is no longer part of the printed standard but online as part of the ISO Open browser Platform (iso.org/obp). The text of the standard reflects this change with some additional definitions. Also, there are non-substantial changes to other definitions to abide to the new ISO guidelines for writing and publishing standards.

Term/Practice	Definition/Description	Defined in:	ISO 3166: 2020 terminology
Assigned (or allocated) code elements	The result of applying the principle of visual association between the country names (in English or French, or sometimes in another language) and their corresponding code elements.	ISO Standard Section 5.1	Section 5.2: The principle behind the alphabetic codes in the code corresponding to this document is a visual association between the country names (in English or French, or sometimes in another language) and their corresponding code elements. In applying this principle, the code elements have generally been assigned on the basis of the short names of the countries, thus avoiding, wherever possible, any reflection of their political status. The distinguishing signs for road vehicles reported by the contracting

Term/Practice	Definition/Description	Defined in:	ISO 3166: 2020 terminology
			parties to the Conventions on Road Traffic (1949 and 1968; see Reference [21]) provided the major source for code elements for the code corresponding to this document.
Unassigned	NOT DEFINED IN THE STANDARD		Mentioned in 3.10. status of alpha-2 country code element (in the OPB) information whether the code element is assigned, unassigned or reserved transitionally, exceptionally, or for an indeterminate period
Unassigned	<i>Code Elements that have not been assigned to country names.</i>	ISO Online Browsing Platform	
Deletions from the list of country names	Deletions from the list of country names shall be made on the basis of information from the United Nations Headquarters, or upon the request of a member of ISO 3166/MA. The ISO 3166/MA shall decide upon deletion, on the basis of the information given. ISO3166-3 provides the list of country names deleted in this part of ISO 3166 since its first edition in 1974.	ISO Standard Section 7.3	Deletions from the list of country names shall be made on the basis of information from the United Nations Headquarters, or upon the request of a member of ISO 3166/MA. The ISO 3166/MA shall decide upon deletion, on the basis of the information given. ISO3166-3 provides the list of country names deleted in this part of ISO 3166 since its first edition in 1974.
Reservation of Code Elements	Some code elements are reserved. For a limited period when their reservation is the result of the deletion or alteration of a country name. For an indeterminate period when the reservation is the result of the application of international law or of exceptional requests.	ISO Standard Section 7.5 & 7.5.1	Now in Section 7.6 & 7.6.1
Reallocation Period	Some code elements are reserved. For a limited period when their reservation is the result of the deletion or alteration of a country name. For an indeterminate period when the reservation is the result of the application of international law or of exceptional requests.	ISO Standard Section 7.5.2	<i>Section 7.6.2 New text</i> Country code elements that the ISO 3166/MA has altered or deleted should not be reassigned during a period of at least fifty years after the change. The exact period is

Term/Practice	Definition/Description	Defined in:	ISO 3166: 2020 terminology
	international law or of exceptional requests.		determined in each case on the basis of the extent to which the former code element was used.
Transitionally Reserved	NOT DEFINED IN THE STANDARD		mentioned in 3.10. status of alpha-2 country code element (in the OPB)
	<i>Codes that are reserved during a transitional period while new code elements that may replace them are taken into use. This results from changes in the standard.</i>	ISO 3166 Online Browsing Platform Glossary.	
Period of Non-Use	<p>Certain code elements existing at the time of the first publication of the ISO 3166 country codes and differing from those in this part (ISO 3166-1) should not be used for an indeterminate period to represent other country names.</p> <p>These code elements should be included in the list of reserved code elements and should not be reallocated during a period of at least fifty years after the date the countries or organizations concerned have discontinued their use.</p>	ISO Standard 7.5.3	<p>Now section 7.6.2 Certain country code elements existing at the time of the first publication of the ISO 3166 country codes and differing from those in this part of ISO 3166 should not be used for an indeterminate period to represent other country names. This provision applies to certain vehicle designations notified under the 1949 and 1968 Conventions on Road Traffic.</p> <p>Code elements to which this provision applies should be included in the list of reserved code elements (see 7.6.5) and should not be reassigned during a period of at least fifty years after the date when the countries or organizations concerned have discontinued their use.</p>
Exceptionally Reserved	Code elements may be reserved, in exceptional cases, for country names which the ISO 3166/MA has decided not to include in this part of ISO3166, but for which an interchange requirement exists. Before such code elements are reserved, advice from the relevant authority must be sought.	ISO Standard 7.5.3	Now Section 7.6.4

Term/Practice	Definition/Description	Defined in:	ISO 3166: 2020 terminology
Exceptionally Reserved	<i>Codes that have been reserved for a particular use at special request of a national ISO member body, governments or international organizations.</i>	ISO 3166 Online Browsing Platform Glossary.	Section 7.6.4 Code elements may be reserved, in exceptional cases, for country names which the ISO 3166/MA has decided not to include in the code corresponding to this document, but for which an interchange requirement exists. Before such code elements are reserved, advice from the relevant authority should be sought.
Reallocation	Before reallocating a former code element or a formerly reserved code element, the ISO3166/MA shall consult, as appropriate, the authority or agency on whose behalf the code element was reserved, and consideration shall be given to difficulties which might arise for the reallocation.	ISO Standard Section 7.5.5	Section 7.6.2. See the period of non-use entry
Indeterminately Reserved	NOT DEFINED IN THE STANDARD		mentioned in 3.10. status of alpha-2 country code element (in the OPB)
Indeterminately Reserved		ISO 3166 Online Browsing Platform glossary.	
Country Name	Name of country, dependency, or other area of particular interest	ISO Standard Part 1 Section 3.4	Section 3.4 (OBP 3.14-3.18, 3.22)
Country Code	Listing of country names with their representations by code elements	ISO 3166 Part 1 Section 3.3	Section 3.3 (OBP 3.10-3.13)
Code Element	The result of applying a code to an element of a coded set	ISO 3166 Part 1 Section 3.2	Section 3.2 (OBP 3.10-3.13)
Code	Set of data	ISO 3166 Part 1 Section 3.1	Section 3.1, changed definition: set of data transformed or represented in different forms according to a pre-established set of rules

Term/Practice	Definition/Description	Defined in:	ISO 3166: 2020 terminology
List of Country Names	Part of the Clause 9 list	ISO 3166 Part 1 Section 6, 6.1. In clause 6 of part 1 the content of the list is enumerated in Clause 9.	The whole clause disappeared. The list is replaced with the ISO Open Browser Platform portal. and that is therefore there are definitions 3.xx in the standard
Formerly Used Codes	NOT DEFINED IN THE STANDARD		Defined in Part 3, Section 3.3.3 alpha-4 formerly used country code element coded representation of country no longer in use
Formerly Used Codes	<i>Codes that used to be part of the standard but that are no longer in use. See alpha-4 codes.</i>	ISO 3166 Online Browsing Platform	

Annex C:

Advise to IDNccTLD Managers with respect to IDNTables and registrations under the IDNccTLD (variants)

C.1 Advise to IDNccTLD Managers with respect to IDNTables

A. Submission of IDN Table

Observations.

The variant management sub group agreed that it should be determined whether an issue is relevant and if so, whether it should be addressed through a policy proposal or - if considered out of the policy scope - should be considered advise to ccTLD managers, with a link to background material regarding the topic. To do so, the group will first decide whether a topic/issue should be addressed and if so, it is considered as policy matter or the WG should /could and advise and include a reference to the background material. Implementation of the advice is not mandatory, but expected. The goal is to ensure that ccTLD Managers and others involved in IDNs are aware of issues, risks and potential solutions to address the issues or mitigate the risks.

The WG notes that according to the current Guideline for the Implementation of Internationalized Domain Names¹⁹ (hereafter: IDN Guideline), *“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.”* (Currently, May 2022, IDNA 2008).

According to RFC 7940²⁰ LGRs are *“algorithms used to determine whether, and under what conditions, a given identifier label is permitted, based on the code points it contains and their context. These algorithms comprise a list of permissible code points, variant code point mappings, and a set of rules that act on the code points and mappings. LGRs form part of an administrator’s policies. In deploying Internationalized Domain Names (IDNs), they have also been known as “IDN tables” or “variant tables”.”*

¹⁹ At the time of writing this document Version 4.1 was adopted by the ICANN Board of Directors in September 2022. See: <https://www.icann.org/resources/board-material/resolutions-2022-09-22-en#2.d>. According to the introduction of version 4.1: “For other registries (e.g. Country Code TLD registries) this document is intended as the best current practice.”

²⁰ see: <https://www.rfceditor.org/rfc/pdf/rfc7940.txt.pdf>

The variant management subgroup notes that the term “IDN Table” may give rise to misunderstandings. The procedures or policies which are currently referred to as “Label Generation Rulesets²¹” (LGRs), were historically referred to as “IDN tables” or “variant tables.” Currently (May 2022) and under this policy, the term “IDN Table” or “IDN Tables” is used in the context of second and lower level registration policies. For Top Level Domains the term “Root Zone - Label Generation Ruleset” or “RZ-LGR” is used.

The subgroup WG further notes that the scope for ccNSO developed policies is limited and excludes ccTLD registration policies. The WG also notes the statement in draft²² IDN Guideline version 4.0 that the IDN Guideline version 4.0 is intended as the best current practice for Country Code TLD registries.

Finally the WG notes in this context that under the proposed policy for selection of IDNccTLDs under the Overall Principle to *Preserve security, stability and interoperability of the DNS*, it is stated that to the extent different and/or additional rules are implemented for IDN ccTLDs, these rules should:

- a.
- b. *Ensure adherence with the RFC 5890, RFC 5891, RFC 5892, RFC 5893*
- c.”

Advise.

To enhance adherence with the relevant RFCs and to inform TLD Operators, including but not limited to other IDNccTLD Managers and stakeholders, in a transparent and accountable manner, the WG strongly suggests that IDNccTLD Managers are expected (but not required) to publish *repertoires of Unicode code points that are permitted for registration under the selected IDNccTLD string and/or its variants* (hereafter: IDN Table) and be guided by the Guidelines for the Implementation of Internationalized Domain Names applicable at the time. The IDN Table or Tables are expected to be published and included in IANA IDN Practices Repository in accordance with the relevant and applicable procedures at the time the selected IDNccTLD and/or its variant(s) is requested.

Further, it is expected that the registration of any domain name containing an unlisted code point will not be accepted.

²² In June 2022, IDN Guideline version 4.0 is a draft, pending adoption by the ICANN Board of directors.

If the same script/language combination is used in two or more Territories, cooperation between relevant parties in the relevant Territories is encouraged to define an IDN Table for that script/language combination. ICANN is advised either to facilitate these processes directly or indirectly.

The WG notes that according to the current (June 2022) IANA IDN Repository procedure, the purpose of the repository is to publish IDN Tables that have been verified as coming from representatives of domain registries. Therefore, the ultimate responsibility for the content of the IDN Table for an IDNccTLD is with the IDNccTLD Manager. However, to ensure consistency across IDN Tables for the same script and/or language/script combinations and hence ensure security and stability of the DNS, IDNccTLD Managers are encouraged that prior to submission ICANN is requested to review the design of the proposed IDN Table on adherence with the relevant and applicable IDN Guidelines version. The results of the review will be shared with the relevant IDNccTLD Manager(s) to allow adjustment of the design if deemed appropriate by the IDNccTLD Manager(s).

C .2 Advise with respect to registrations under the IDNccTLD (variants) under management

Observations.

The variant management sub-group agreed that it should be determined whether an issue is relevant and if so, whether it should be addressed through a policy proposal or - if considered out of the policy scope - should be considered advise to ccTLD managers, with a link to background material regarding the topic. To do so, the group will first decide whether a topic/issue should be addressed and if so, it is considered as policy matter or the WG should /could and advise and include a reference to the background material. Implementation of the advice is not mandatory, but expected. The goal is to ensure that ccTLD Managers and others involved in IDNs are aware of issues, risks and potential solutions to address the issues or mitigate the risks.

The subgroup further noted that the scope for ccNSO developed policies is limited and excludes developing and recommending ccTLD registration policies (ANNEX C ICANN Bylaws).

The WG notes in this context that under the proposed policy for selection of IDNccTLDs under the **Overall Principle III** (Section 0, page above)

“Preserve security, stability and interoperability of the DNS. To the extent different and/or additional rules are implemented for IDN ccTLDs, these rules should:

- (a) Preserve and ensure the security and stability of the DNS;
- (b)
- (c)

The basic policy premise of introducing variants is that a selected (IDNccTLD) string/label and its variants are one and the same. However, note that from a technical perspective a selected string/label and its variants are separate entries in the DNS²³.

In various reports and studies²⁴ the following two issues have been identified, which both are driving the need to mitigate the risks associated with these issues:

- No Connection (Denial of Service)
- Misconnection

According to SSAC the second issue – Misconnection – *“causes worse results compared to denial of service because misconnection “presents issues of possible credential leakage, accidental disclosure of information, and user confusion and frustration”.* Further *“Confusability cannot be considered in isolation from other issues related to security. Phishing and other social engineering attacks based on domain name confusion are a security problem for end users”*

To maintain this basic policy premise and minimize the risk of user confusion and – related- security issues arising from diverging registrations i.e arising

²³ According to SAC060 (<https://www.icann.org/en/system/files/files/sac-060-en.pdf>) and reiterated in SAC120 (<https://www.icann.org/en/system/files/files/sac-120-en.pdf>): *“An IDN variant is an alternate code point (or sequence of code points) that could be substituted for a code point (or sequence of code points) in a candidate label to create a variant label that is considered the “same” in some measure by a given community of Internet users. There is no general agreement of what that sameness requires.”* Further, according to SAC120: *“From a technical perspective, two strings that are delegated in the DNS are two different delegations just like any two other domain names. Variants are no exception.”*

²⁴ See: SAC060, <https://www.icann.org/en/system/files/files/sac-060-en.pdf>
IDN Variant TLD Implementation: Risks and Mitigation,
<https://www.icann.org/en/system/files/files/idn-variant-tld-risks-mitigation-25jan19-en.pdf>

from delegation of domain names that are deemed to be same to two different entities to be the same, the following risk mitigation measures are proposed:

Advise to ccTLDs

A Second Level string registered under a delegated variant IDNccTLD string is expected to be registered for the same entity under all other delegated variant IDNccTLD strings. If (multiple) IDNccTLD variant strings have been delegated, then a second-level domain name that is registered under one (of the variant) IDNccTLD string **is expected** to be registered for one and the same entity or withheld for possible future registration for that entity under all delegated IDNccTLD variant strings.

If a variant IDNccTLD string is delegated after the IDNccTLD has become operational this advice also applies: under the newly delegated variant IDNccTLD string an already registered second level domain name under another variant IDNccTLD variant string is expected be registered or withheld for future registration for the same entity.

All variants of a Second-Level string registered under all delegated variant IDNccTLD strings are expected to be registered for the same entity under all IDNccTLD variant strings. Assuming multiple delegatable variant IDNccTLDs strings have been delegated, and that for assuming a second level IDN domain name, which is in process of being registered under an IDNccTLD string a set of allocatable variant second level strings can generated by applying the IDN Table ~~for second level strings under the IDNccTLD string~~, THEN the set of allocatable variant second level strings **are expected** to be either registered under all delegated IDNccTLD variant strings for one and the same entity or withheld for possible future registration under all delegated IDNccTLD variant strings for one and the same entity

All variants of a Second-Level domain name to be registered under a delegated IDNccTLD string are expected to be registered to the same entity. If for a second level string to be registered under a delegated IDNccTLD string a set of allocatable variant second level strings can generated by applying the IDN Table for second level strings under the IDNccTLD string, THEN the set of allocatable variant second level strings **are expected** to be either registered for one and the same entity or withheld for possible future registration for that entity

In addition ICANN is strongly advised to introduce a mechanism as currently (September 2022) in use under the Fast Track that as part of the IDNccTLD request procedures a requestor of the IDNccTLD commits to and/or ensures that the IDNccTLD managers commits to the advice.

The details of this commitment are considered a matter of implementation.

(New) Note and observation

The concept “same entity” is not defined. What is considered an entity or organization varies across the various national legal systems, policies, business practices, etc. For ccTLD managers this concept is detailed in Section 10.4 (a) of the ICANN Bylaws: *“(For purposes of Article 10) a ccTLD manager is the organization or entity responsible for managing a ccTLD according to and under the current heading “Delegation Record” in the Root Zone Database, or under any later modification, for that country-code top-level domain”*