# ccPDP4 WG Update

March 2023

ICANN76

Agenda

- Introduction and background
- Additional areas main policy since ICANN75:
  - Variant Management
  - Review of decisions
  - Confusing Similarity
- Stress Testing
- Reminder:
  - Basic Principles
  - Selection Criteria,
  - De-Selection
  - Applicability of ccTLD policies
- Next Steps

The March 2019 Roadmap

To: Policy for Selection of IDN ccTLD String
Inclusion of IDNccTLDs in ccNSO

Get from:
Fast Track Process
&
2013 IDN ccTLD policy proposals
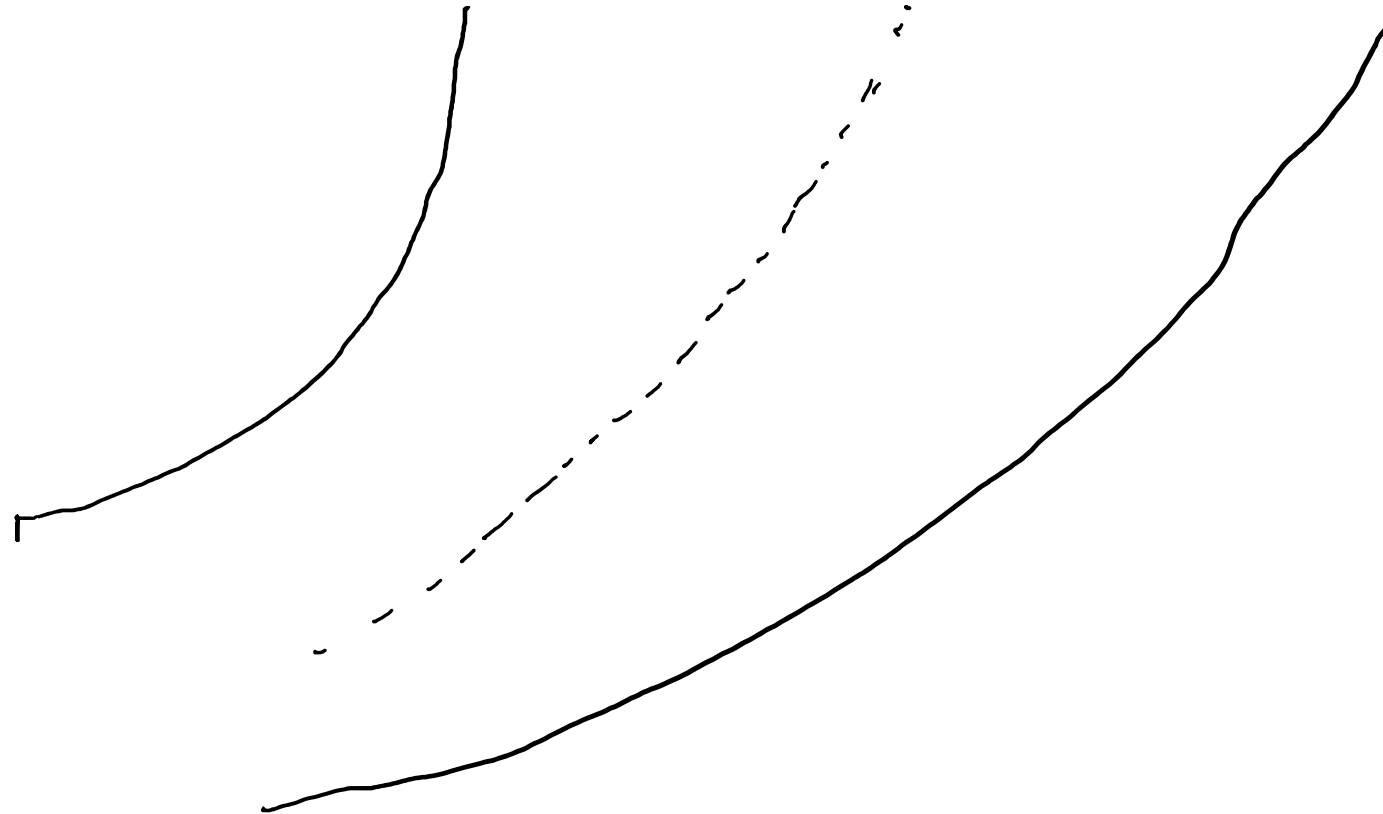
The Roadmap: Where are we now?

ccPDP2 Closed and Evolution of Fast Track Process stopped
Gap Analysis Overall IDN ccTLD policy (PDP 2): completed June 2019

Bylaw change process to allow IDN ccTLDs in ccNSO
approved by the ICANN Board
Effective date: 2 June 2022

Replacing ccPDP2

ccPDP 4 (policy to select IDN ccTLDs strings):
Issue Report adopted ccNSO Council May 2020
ICANN76 progress to date

Overview of activities and progress to date (ICANN76, March 2023)

Full Working Group

- update basic policy (completed) and adding recommendations of the sub-groups
  - Deselection (completed)
  - Variant Management (completed)
  - CS discussion full WG (starts March 2022)
  - Stress Testing started in January 2023
  - Reference to review mechanism (completed January 2023)

Sub-group Variant Management (Completed in January 2023)

- Definition & validating variants of IDN ccTLDs and requirements for the delegation of variant IDN ccTLDs
- Area coordination with GNSO IDN EPDP.

Full-group Review decisions (Completed February 2023)

- Applicability ccPDP3 review Mechanism to retirement of IDN ccTLDs due to de-selection procedure
- Exluded from ICANN's Reconsideration and Independent Review Process

Sub-group Confusing Similarity (Completed in February 2023)

- Review & update validation process (completed February 2023)
- Standard for Validation, Base for Comparison (completed February2023)

Variant and Variant management:
Why is it needed?

Legitimate need for variants of an IDNccTLD to avoid user confusion

Needs to be balanced with

The general responsibilities for the security and stability of the DNS

Variants of selected IDNccTLD strings

Definition of Variants.

Compliance with Root Zone Label Generation Rules **shall** be required for the generation of an IDNccTLD string and its variants, including the determination of whether a string is **Blocked** or **Allocatable**.

Implication: All Selected IDNccTLD strings must be processed using the RZ-LGR:

- o To determine if they are valid
- o To calculate variants of the selected IDNccTLD string
- o Only allocatable variants are eligible

Root Zone –Label Generation Rule (RZ-LGR)

The RZ-LGR must be the only source to:

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

The RZ-LGR will be revised throughout its lifecycle,

for example:

- a new script LGR is being integrated
- a revision of an existing script LGR

If after a change of RZ-LGR the IDNccTLD string not longer supported, the IDNccTLD shall be grandfathered, unless demonstrable threat (high bar) to the DNS.

Variant management

All allocatable variants of a selected INDccTLD string must be delegated to the same entity (ccTLD Manager).

Only **Allocatable VARIANTS** of the selected IDNccTLD string that are **Meaningful Representations** of the name of the **Territory** in the **Designated Language** are eligible to be delegated.

- Implies all criteria for IDNccTLD strings apply, including required documentation
- SSAC pointed out potential impact on size of the root zone
- Example from staff study "Pakistan" in Arabic, would produce 1200 blocked variants and 6 allocatable variants, only 2 meaningful representations

Q&A and Polling

Polling:

- Do you support the definition of Variant?

    (support – do not support - need more information- no opinion)

- Do you support limitation of number of variants eligible for delegation to meaningful variants in designated language and other criteria?

    (support – do not support - need more information- no opinion)

Proposed Reviews & Exclusions

- All Claims and Disputes related to IDNccTLD selection process to be excluded from ICANN's IRP and Reconsideration

- Build upon ccPDP3 RM outcome: Only for specific de-selection decisions that result in action IFO to retire an IDNccTLD and/or its variant the proposed ccPDP3 review mechanism applies

- Similarity Review Procedure considered independent, autonomous review procedure for outcomes Similarity Evalaution Procedure
  - Specific knowledge and expertice required
  - Part of eleigibiltiy validation process of proposed IDNccTLD string

IDNccTLD string selection to be excluded from IRP and Reconsideration

All disputes and claims related to:

- The selection of an IDNccTLD string shall be excluded from ICANN's Reconsideration Process and the Independent Review Process for Covered Actions.

- The delegation, transfer, revocation and retirement of IDN ccTLDs and its variants shall be excluded from ICANN's Reconsideration Process and the Independent Review Process for Covered Actions.

Applicability of ccPDP3 Review Mechanism

The review mechanism should be available to an IDNccTLD Manager who is served a Notice of Retirement by the IFO following a **de-selection** (=trigger event) of the IDNccTLD string and/or its variants strings resulting from:

- Change of Name of the Territory, Change of designated language, Change of script or writing system

- Loss of support for the string by the Significantly Interested Parties i.e. the IDNccTLD string has become contentious within the Territory

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

Q&A and Polling

Polling questions:

- Do you support excluding all disputes and claims re IDN string selection from IRP and Reconsideration?

    (support – do not support - need more information- no opinion)

- Do you support excluding all disputes and claims re IDN delegation, transfer, revocation and retirement from ICANN's IRP and Reconsideration ?

    (support – do not support - need more information- no opinion)

- Do you support using ccPDP3 review mechanism for review of retirement of IDNccTLDs and/or Variants (following de-selection of the string and/or its variants)?

    (support – do not support - need more information- no opinion)

Confusing Similarity Validation Process (tentative)

- Criteria
- Base for Comparison
- Procedures

Goal Confusing Similarity (CS) validation process

Goal to minimize **the risk to the stability and security of the DNS due to user confusion by exploiting potential visual confusing similarity between domain names**

- Example: . **be** in Latin script vs **.бе** in Cyrillic
- Note: The risk of visual CS is not a technical DNS issue but may adversely impact on the security and stability of the DNS

Focus of CS validation is on the avoidance **MISCONNECTION** resulting from visual similarity of strings

- Misconnection may result in the exploitation (harm) of user confusion and this could be avoided through the similarity review
- No-connection is a nuisance for the user, like a typo, but no harm

Standard for visual similarity validation

A selected IDN ccTLD string is considered confusingly similar with one or more other string(s) if the **appearance of the selected** string in common fonts in small sizes at typical screen resolutions is sufficiently **close** to **one or more other strings** so that it is **probable** that a reasonable Internet user who is unfamiliar with the script would **perceive the strings to be the same or confuse one for the other**

- Standard Fast Track process after 2nd Review

Base for Comparison

A Selected IDNccTLD and its delegatable variants are compared with a Comparison set:

- Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (letter [a-z] codes), nor
- Existing TLDs, which shall also include the already delegated variants of the selected string or primary label and of reserved names.
- Proposed TLDs which are in process of string validation and their requested delegatable or requested variant labels (however defined under the ccTLD and gTLD processes)

In addition, the Similarity Evaluation Panel should **determine the additional variants** of the basic set of strings to be **included in the Comparison Set**, factoring in:

- The likelihood of misconnection
- Scalability, and
- Unforeseen and/or unwanted side effect.

Procedures CS Validation

- **Similarity Evaluation Procedure.** Independent Panel (Similarity Evaluation Panel), comparable to DNS Stability Panel under the Fast Track. The Similarity Panel needs to include at least one member who is familiar with the script in which the selected string is expressed, For example an independent member of LGR team of the relevant script

- **Similarity Review Procedure.** Independent Panel (Similarity Evaluation Panel), comparable to EPSRP under the Fast Track Process. This procedure is considered a specific review procedure (review outcome Similarity Evaluation Procedure, using different method).
  - Specific knowledge and expertice required
  - Part of eleigibiltiy validation process of proposed IDNccTLD string

- **Risk Treatment Appraisal Procedure.** Objective is to determine if proposed mitigation measures reduce the risks associated with the confusing similarity to an acceptable level or threshold

Q&A and Polling

Polling questions:

- Do you support the goal of confusing simlarity validation process?

    (support – do not support - need more information- no opinion)

- Do you support standard for visual similarity validation ?

    (support – do not support - need more information- no opinion)

- Do you support base for comparison for similarity validation ?

    (support – do not support - need more information- no opinion)

Stress Testing

Scenario/stress Testing

- Step 1: Develop Scenarios

- Step 2: Impact of the policy.

How does scenario play out under the policy. What would be result of the scenario under the policy?

- Step 3: Assessment of impact

Does the outcome of step 2 result in an unwanted outcome or unforesee negative side effect? If so, does the policy need to be adjusted?

Step 2 and Step 3 are combined

Example of scenario:
When will an IDNccTLD be De-Selected?

Assume country A has in the past selected 2 IDN ccTLD strings (ȺccTLD & AccTLD), which were both valid at the time of application.

ȺccTLD is still in a designated language and related script, however the other one (AccTLD) is no longer the case in a designated language of Country A.

Now, assume that another country or territory (AA) applies for AAIDN ccTLD string that does meet the criteria, however AccTLD has not been de-selected (*no confirmation was requested).*

How will this play out under the policy? Is the outcome an issue?

Can a requestor from AA request AccTLD?

To date 30 stress tests focusing various aspects of policy

- Tests are Eligibilty
- Criteria- De-selection
- Variant Management
- Confusing Simalarity Validation

Next Steps

- Full Working group to discuss Confusing Similarity

- Full Working Group to conclude Stress Testing

- Draft Initial Report (end April 2023)

- Public comment on Initial Report (May – June timeframe)

Reminder

- Basic Principles

- Selection Criteria

- De-Selection

- Applicability of ccTLD policies

Principles underpinning the policy

- An IDN ccTLD string MUST be associated with a Territory

- (ASCII) ccTLD and IDN ccTLDs are all country code Top Level Domains

- Preserve security, stability and interoperability of the DNS

- Requests for the delegation of IDN ccTLDs should be an ongoing process

- The number of IDNccTLDs per Territory are determined by Criteria

Basic criteria for selection of an IDNccTLD string

**The IDN ccTLD string must be a
Meaningful Representation of the name of a Territory in a
Designated Language and related script**

The ISO3166-1 principle for the representation of Territories in code elements:

the **visual association** between the **name of a Territory** (in English or French, or sometimes in another language) and their **corresponding code elements**.

The principle of association should be maintained:

A selected IDN ccTLD string and its variants must be a Meaningful Representation of the name of the Territory.

Other Criteria for the selection of the IDNccTLD string

- **Technical Criteria**
  - IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).
  - RZ-LGR
- **Only one (1) IDN ccTLD string per Designated Language**
- **Selected IDN ccTLD string must be non-contentious within the Territory -> String is selected in the territory**
  - Evidenced by a statement by the Significantly Interested Parties in the Territory.
  - Significantly Interested Parties is derived from RFC 1591 and as interpreted by the Framework of Interpretation
  - Significant Interested Parties always includes relevant government

De-selection of IDNccTLD strings

- Dovetails with proposed Retirement policy

- De-selection of IDNccTLDs => Definition of trigger event in terms of Retirement policy

- Trigger event IDNccTLDs initiates Retirement process of the selected IDNccTLD and its delegated variants

Potential Trigger Events for de-selection

- Removal of the name of a Territory from ISO3166-1 list

- The selected and /or delegated IDNccTLD string is no longer a Meaningful Representation of the name of the Territory (change of name)

- Language tto denote IDNccTLD string is no longer a Designated Language

- The script in which IDNccTLD string is expressed is no longer script in which the Designated Language is expressed

- The selected IDN ccTLD string is no longer supported by the Significantly Interested Parties in the Territory

Applicable policies

The ccTLD related policies on Delegation, Transfer, Revocation,and Retirement of ccTLDs and Review Mechanism apply to (variant) IDNccTLDs, unless specific requirements under the proposed policy state otherwise.

Example of a specific requirement: An IDNccTLD and its variants must be delegated to one and the same ccTLD Manager.

Questions?