



# ccPDP4 Webinar

26 March 2024

**I C A N N | c c N S O**

Country Code Names Supporting Organization



# Agenda

1. Introducing ccPDP4
2. The Council Recommendation: Part A Members Report
3. Decision making: Members Vote
4. Wrap-up & Next Steps

# 1. Introducing ccPDP4

# The March 2019 Roadmap

To:

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

From:

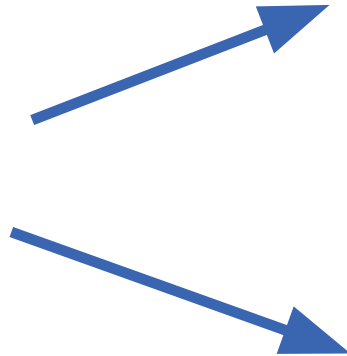
Fast Track Process  
&  
2013 IDN ccTLD  
policy proposals

# 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



**ccPDP4 (policy to select IDN ccTLDs strings):**  
Issue Report adopted ccNSO Council May 2020  
ICANN79 – February 2024 Final Report WG  
ccNSO Council Decision March  
ccNSO members vote March – April 2024

## Overview of activities and progress to date (March 2024)

What happened since August 2020?

### Policy development work completed:

Final Report approved by WG: 20 February 2024

Review of Public comment and update policy where deemed necessary, completed February 2024

Public comment Initial Report concluded October 2023

Publication Initial Report August 2023

Comparison with GNSO IDN EPDP initial results included in August 2023

### Full Group completed Variant Management completed in January 2023

- Area coordination with GNSO IDN EPDP

### Full-group Decisions subject to CCRM Completed February 2023

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

### Full-Group Confusing Similarity (Completed in February 2024)

- Review & update validation process following public comment Initial Report completed May 2023
- Sub-group completed work on Standard for Validation, Base for Comparison in February 2023

### Full-Group Stress testing (Completed June 2023)

- 33 Tests
- Update of proposals in certain areas

Full Group review of public comments and update recommendations (completed February 2024)

# Issues to be addressed through ccPDP4 (Part A Members Report)

- From the August 2020 Issue report:
  - Various issues with respect to the recommended policy for the selection of IDN ccTLD strings (ccPDP2) identified by the preliminary review team
  - Include 'variant management' as was also requested by the ICANN Board of Directors, in coordination with GNSO and consistent with GNSO IDN EPDP effort
  - Define the events which would cause the retirement of IDNccTLD through the policy as developed under the ccNSO Policy Development Process pertaining to the retirement of ccTLDs
- At the request of the ccNSO Council (August 2022): develop a view on applicability of the ccNSO policy on review mechanism and whether ICANN's Independent Review process and reconsideration process should be available

# Topics out of Scope ccPDP4 (Part B Members Report)

- (IDN)ccTLD 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* (IDN TABLES)
- A Second Level Domain registered under a delegated (variant) IDNccTLD string are expected to be registered for the same entity under all other delegated variant IDNccTLD strings
- INCLUDED FOR INFORMATIONAL PURPOSES ONLY: NOT SUBJECT TO MEMBERS VOTE



# Have the all issues been addressed in ccPDP4?

- From the (2020) issue report
  - Various issues with respect to the 2013 recommended policy for the selection of IDN ccTLD strings (ccPDP2) identified by the preliminary review team ✓
  - Include 'variant management' as was also requested by the ICANN Board of Directors, in coordination with GNSO. ✓ **Consistent, but not the same**
  - Define the events which would cause the retirement of IDNccTLD through the policy as developed under the ccNSO Policy Development Process pertaining to the retirement of ccTLDs ✓
- At the request of the ccNSO Council (August 2022) develop a view on applicability of the ccNSO policy on review mechanism and whether ICANN's Independent Review process and reconsideration process should be available ✓



## 2. The Council Recommendations – Part A Members Report

## Overview sections in Part A relating to selection of IDNccTLDs and related variants and the delegation, transfer, revocation and retirement of IDNccTLDs & variants

Sections 1 & 2	Sections 2, 3 - 6	Sections 2, 7- 10	Sections 2, 11 - 12	Section 2 & 13
Policy Objective, Overview, Applicability & Principles/Design Criteria	Selection of IDNccTLD strings and Variants	Validation of IDNccTLD string & variants	Delegation, Transfer, Revocation, and Retirement IDNccTLDs and variants	Review of Decisions
Relation to ISO3166 ASCII and IDNccTLDs are ccTLDs Preserve stability, security, and interoperability of DNS	Parties in Territory	ICANN & Independent Panels	IDNccTLD Manager & ICANN, PTI (IFO)	IDNccTLD Manager & PTI (IFO) & Independent Panel
Ongoing Process Criteria determine number of IDNccTLDs	General String selection criteria, Definition of variant, and variant management Technical, and confusing similarity criteria	Validation & Administrative Procedures	Applicability of general ccTLD policies and procedures Specific requirements for IDNccTLDs	Applicability cc Review Mechanism (under Board consideration) Exclusion IRP/ Reconsideration

# Overview sections in Part A relating to selection of IDNccTLDs and related variants and the delegation, transfer, revocation and retirement of IDNccTLDs & variants

Sections 1 & 2	Sections 2, 3 - 6	Sections 7 - 10	Sections 2, 11 - 12	Section 2, 13
Policy Objective, Overview, Applicability & Principles/Design Criteria	Selection of IDNccTLD strings and Variants	Validation of IDNccTLD string & variants	Delegation, Transfer, Revocation, and Retirement of IDNccTLDs and variants	Review of Decisions
Relation to ISO3166	Geographic Names in Territory	ICANN & Independent Panels	IDNccTLD Manager & ICANN, PTI (IFO)	IDNccTLD Manager & PTI (IFO) & Independent Panel
ASCII and IDNccTLDs are ccTLDs				
Preserve stability, security, and interoperability of DNS	General Selection criteria		Applicability of general ccTLD policies and procedures	Applicability cc
Ongoing Process	Definition of variants, and variant management	Validation & Administrative Procedures	Specific requirements for IDNccTLDs	Review Mechanism (under Board consideration)
Criteria determine number of IDNccTLDs	Technical, and confusing similarity criteria			Exclusion of IRP/ Reconsideration

# Principles or Design Criteria

- 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 (one per Designated/ Script combination)

# Selection of IDN strings and variants

# Overview sections in Part A relating to selection of IDNccTLDs and related variants and the delegation, transfer, revocation and retirement of IDNccTLDs & variants

Sections 1 & 2	Sections 2, 3 - 6	Sections 2, 7- 10	Sections 2, 11 - 12	Sections 2, 13
Policy Objective, Overview, Applicability & Principles/Design Criteria	Selection of IDNccTLD strings and Variants	Validation of IDNccTLD string & variants	Delegation, Transfer, Revocation, Retirement of IDNccTLDs and variants	Review of Decisions
Relation to ISO3166 ASCII and IDNccTLDs at ccTLDs	Parties in Territory	Independence	IDNccTLD Manager & ICANN, PTI (IFO)	IDNccTLD Manager & PTI (IFO) & Independent Panel
Preserve stability, security, and interoperability of DNS Ongoing Process Criteria determine number of IDNccTLDs	General String selection criteria, Definition of variant, and variant management Technical, and confusing similarity criteria	Validation & Administrative Procedures	Applicability of general ccTLD policies and procedures Specific requirements for IDNccTLDs	Applicability of Review Mechanism (under Board consideration) IRP/ Reconsideration

# General Criteria selection of IDNccTLD string

## **The IDNccTLD 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 selection of IDNccTLD strings

- Technical Criteria
  - IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s)
  - RZ-LGR
- Only one (1) IDNccTLD string per Designated Language
- Selected IDNccTLD 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

# 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

## Variants (UPDATED DEFINITION IN FINAL REPORT)

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 (allocatable and blocked)
- o Only allocatable variants are eligible

# Variant Management

All allocatable variants of a selected IDNccTLD 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

# Technical Criteria

Requested selected IDN ccTLD string and the related requested variants must abide by all Technical Criteria set for IDN TLD strings

- The selected IDN ccTLD string MUST abide to 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, use the RZ-LGR to determine whether the variant string is blocked or allocatable

# Validation of IDNccTLDs & Variants

# Overview sections in Part A relating to selection of IDNccTLDs and related variants and the delegation, transfer, revocation and retirement of IDNccTLDs & variants

Sections 1 & 2	Sections 2, 3 - 6	Sections 2, 7- 10	Sections 2, 11 - 12	Section 2, 13
Policy Objective, Review, Applicability & Principles/Design Criteria	Selection of IDNccTLD strings and Variants	Validation of IDNccTLD string & variants	Delegation, Transfer, Revocation, and Retirement of IDNccTLDs and variants	Review of Decisions
Relation to ISO3166	Parties in Territory	ICANN & Independent Panels	IDNccTLD Manager & ICANN PTI (IFO)	IDNccTLD Manager & PTI (IFO) & Independent Panel
ASCII and IDNccTLDs are ccTLDs	General String selection criteria, Definition of variant, and variant management	Validation & Administrative Procedures	Applicability of general ccTLD policies and procedures	Applicability ccTLD Review Mechanism (under Board consideration)
Preserve stability, security, and interoperability of DNS	Technical, and confusing similarity criteria		Specific requirements for IDNccTLDs	Exclusion of IRP/ Reconsideration
Ongoing Process				
Criteria determining number of IDNccTLDs				

# Validation

- Administrative Validation: Does submission meet all requirements?
  - Correct form (A-Label, U-label, Translation)
  - Required Documentation is submitted
    - Support statements SIP, including documentation from the relevant government
    - Documentation IDNccTLD is meaningful representation of the name of the Territory
    - Documentation Language is Designated Language
- Validation of requested IDNccTLD string(s) by independent panels
  - Technical & RZ-LGR Validation
  - Confusing Similarity (CS) Validation



# Technical Validation Procedure

- Validation is a process step and shall be conducted by an external, independent panel
- Details for the TECHNICAL and RZ-LGR Validation process are considered a matter of implementation

# Confusing Similarity (CS) validation process

Goal CS is 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: Latin .be vs. .бe 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 IDNccTLD 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**

Note: Confusing Similarity is inherently subjective

\*Standard Fast Track process after 2nd Review

# Base for Comparison (UPDATED)

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 or reserve ed names , also including the already delegated variants
- Proposed TLDs i.e which are in process, and their requested variant labels

In addition, the Similarity Evaluation Panel should **determine the additional variants** of the basic set of strings to be **included in the Comparison Set (both the request side an comparison side) & provide a rationale on inclusion or exclusion.**

factoring in:

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

Base for Comparison to be reviewed as part of the 1st policy review (5 years after policy becomes effective)

# CS Validation Procedures

- **Similarity Evaluation Procedure** - Similarity Evaluation Panel
  - Independent Panel Comparable to DNS Stability Panel under the Fast Track
  - Should include at least one member who is familiar with the script
- **Similarity Review Procedure Independent Panel** - Similarity Review Panel
  - Comparable to EPSRP under the Fast Track Process
  - Procedure is considered a specific review procedure (review outcome Similarity Evaluation Procedure, using different method)
  - Specific knowledge and expertise required
- **Risk Treatment Appraisal Procedure** - Risk Treatment Appraisal Panel
  - Objective: to determine if proposed mitigation measures reduce the risks associated with the confusing similarity to an acceptable level or threshold

# Outcome Validation Process

Only if the selected string (or a related delegatable variant):

- Meets all the Administrative, basic requirements
- Meet all Technical Criteria and is allocatable according RZ-LGR (Technical validation)
- Is NOT deemed to be confusingly similar to other string(s) (CS Validation)



The requested selected IDNccTLD string and/or its delegatable variant(s) are deemed to be valid and are eligible under this policy for delegation

# Delegation, Transfer, Revocation, and Retirement of Selected IDNccTLD string & Variants

# Overview sections in Part A relating to selection of IDNccTLDs and related variants and the delegation, transfer, revocation and retirement of IDNccTLDs & variants

Section	Sections 2, 3 - 6	Sections 2, 7- 10	Sections 2, 11 - 12	Section 2 & 17
Policy Objective, Overview, Applicability & Principles/Design Criteria	Selection of IDNccTLD string & variants	Validation of IDNccTLD string & variants	Delegation, Transfer, Revocation, and Retirement IDNccTLDs and variants	Review of Decisions
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ASCII and IDNccTLDs are ccTLDs				
Preserve stability, security, and interoperability of DNS	General principles, and variant, and variant management	Validation & Administrative Procedures	Applicability of general ccTLD policies and procedures	Applicability cc Review Mechanism (under board consideration)
Ongoing Process	Technical, and confusing similarity criteria		Specific requirements for IDNccTLDs	Exclusion IRP/ Reconsideration
Criteria determining IDNccTLD				



# Applicable policies

All ccTLD policies & procedures apply to IDNccTLDs (variant):

- Delegation of IDNccTLDs (RFC 1591 & FoI)
- Transfer of IDNccTLDs (RFC 1591 & FoI)
- Revocation of IDNccTLDs (RFC 1591 & FoI)
- De-selection (ccPDP4) & Retirement of IDNccTLD (ccPDP3 Retirement)
- Review Mechanism & Exclusion IRP and Reconsideration (ccPDP3 Review Mechanism)

Exception specific requirements under the proposed policy

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

# **Deselection and Retirement of IDNccTLDs & Review Mechanism**

# De-selection of IDNccTLD strings

- Retirement policy applies (IDNccTLDs and ASCII ccTLD are all ccTLDs)
- De-selection of IDNccTLDs = trigger event in terms of Retirement policy
- Trigger event of selected IDNccTLDs initiates Retirement process of the selected IDNccTLD and its delegated variants

# Potential Trigger Events for de-selection IDNccTLDs

- 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 to 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

# Applicability Review Mechanism

# Overview sections in Part A relating to selection of IDNccTLDs and related variants and the delegation, transfer, revocation and retirement of IDNccTLDs & variants

Sections 1 & 2	Sections 2, 3 - 6	Sections 2, 7- 10	Sections 2, 11 - 12	Section 2 & 13
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Preserve stability, security, and interoperability of DNS	Technical, and confusing similarity criteria		Specific requirements for IDNccTLDs	Exclusion IRP/ Reconsideration
Ongoing Process				
Criteria determining number of IDNccTLDs				

# 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, Designated Language, and/or Script or writing system
- Loss of support for the string by the Significantly Interested Parties (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



## Miscellaneous (Part A section 14)

- Confidentiality of information during the validation process
- Transitional arrangement regarding IDNccTLD strings under the Fast Track IDNccTLD Process: Closure of Fast Track Process
- Review of policy for the selection of IDNccTLD strings
- Verification of Implementation
- No more Reviews of the IDNccTLD Fast Track Process

# Questions ?

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# 3. Decision making

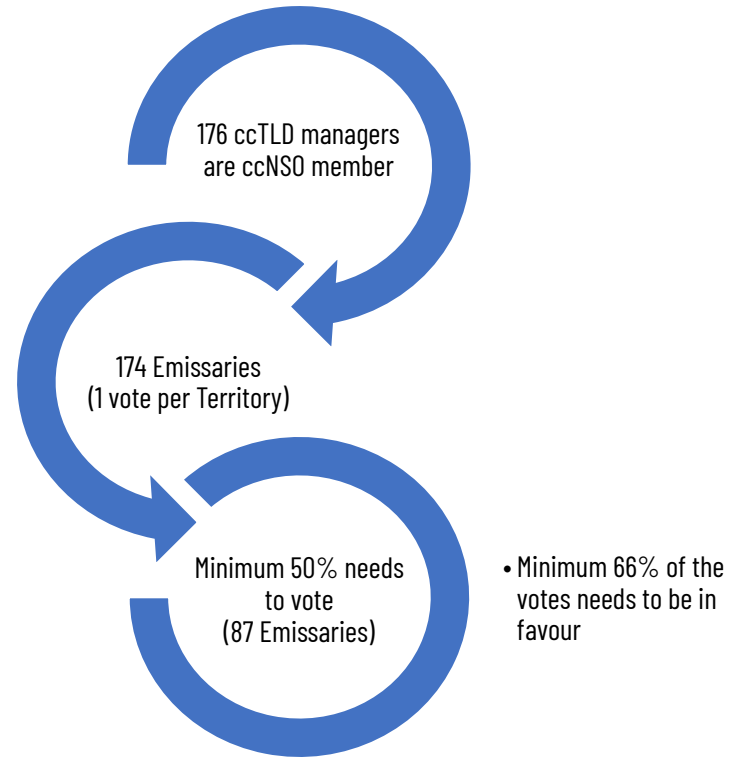
## Members vote

# **Your participation is important!**

**Decision making process to determine whether the ccNSO membership supports the ccNSO Council recommendation to adopt the proposed policy**

# Your vote counts!

- At least 50% of the Emissaries need to lodge their votes, and at least 66% of the votes needs to be in favour.
- While the policy may not immediately impact all ccTLDs, it paves the way for non-Latin script country code Top Level Domains and their variants to be accessible for domain name registration



# Who can vote?

- Ballots sent to the e-mail address of the Emissaries of each ccNSO Member.
- Mail from: [tally@icann.org](mailto:tally@icann.org)
- Questions? Contact [joke.braeken@icann.org](mailto:joke.braeken@icann.org)

# When to vote?



# Learn more

Consult the [FAQ](#)

Read the [proposed policy](#) (Members Report - Part A)

Keep an eye out for the announcements on the ccNSO members mailing list and website

Check out the [ccPDP4-IDN materials](#) on the ccNSO website

Go to [Annex B of the ICANN Bylaws](#), which describes the ccNSO policy development process



# 4. Wrap-up & next steps

**Thank you!**