Expedited Policy Development Process on Internationalized Domain Names (EPDP on IDNs)

Update for and Q&A with At-Large CPWG

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Agenda

- Opening Remarks / Commentary
- Status of EPDP deliberations 2 Dec 2021 to 27 Jan 2022

  Topic A of Charter:
  Consistent definition and technical utilization of RZ-LGR

  - CQ a4: Dealing with variant TLD labels of script not yet in RZ-LGR
  - CQ a5: Managing permutation issue associated with variant labels
  - CQ a6: How to handle exceptions in RZ-LGR caused by updates by GP?
  - CQ a7: Allow single character (ideograph/ideogram) TLDs for limited scripts?
- Q & A for each CQ (charter question)

CQ a4: Dealing with variant TLD labels in scripts not yet in RZ-LGR

- **CQ a4: How should applications for variant TLD labels of existing gTLDs whose scripts are not yet integrated into RZ-LGR be handled?**
- Context:
  - SubPro PDP Implementation Guidance says applicants for future gTLDs should be able to apply for strings in a script that is not yet integrated into the RZ-LGR, processed up to but not including contracting – warning of no guarantee of TLD delegation, additional evaluation cost
  - Extend SubPro IG to variant labels to existing gTLDs in scripts not yet in RZ-LGR? If not, then?
- What did data analysis show?
  - All existing gTLDs (and ccTLDs) are either in scripts already integrated in RZ-LGR-4 or will soon be integrated in RZ-LGR-5 by mid-2022 (expected)
- **PROPOSED ANSWER:** Since all scripts of all existing gTLDs are already or will be accounted for in the RZ-LGR soon, CQ a4 is moot.

CQ a5: Managing permutation issue associated with variant labels (1/4)

- **CQ a5 has 2 parts:**
  - **Should there be a ceiling or other mechanism to keep number of activated variant labels small?**
  - **Should there be additional security & stability guidelines developed to make variant domains manageable at the registry, registrar and registrant levels?**

- Context:
  - Permutation issue & conservatism principle – SAC060 Rec 14 & TSG Rec 6 -- the more variant labels “allowed to be delegated” the greater the challenges for their management at registry, registrar & registrant levels

CQ a5: Managing permutation issue associated with variant labels (2/4)

A real example of RZ-LGR output for an Arabic label

Allocatable means available for delegation and activation but will introduce permutation issues challenges even if "allocated to same registry"

#	Type	U-label	A-label	Disposition	Code point sequence
1	original	شبكة	xn--ngbc5azd	valid	U+0634 U+0628 U+0643 U+0629
2	varlabel	شبكه	xn--ngbx0cq	allocatable	U+0634 U+0628 U+0643 U+0647
3	varlabel	شبكھ	xn--ngbx0c15a	blocked	U+0634 U+0628 U+0643 U+06BE
4	varlabel	شبكهٔ	xn--ngbx0c95a	blocked	U+0634 U+0628 U+0643 U+06C0
5	varlabel	شبكہ	xn--ngbx0cy6a	blocked	U+0634 U+0628 U+0643 U+06C1
6	varlabel	شبكۂ	xn--ngbx0c26a	blocked	U+0634 U+0628 U+0643 U+06C2
7	varlabel	شبكۃ	xn--ngbx0c66a	allocatable	U+0634 U+0628 U+0643 U+06C3
8	varlabel	شبكه	xn--ngbx0c31b	blocked	U+0634 U+0628 U+0643 U+06D5
9	varlabel	شبكة	xn--ngbc5az1b	allocatable	U+0634 U+0628 U+06A9 U+0629
10	varlabel	شبكه	xn--ngbx2d5u	allocatable	U+0634 U+0628 U+06A9 U+0647
11	varlabel	شبكھ	xn--ngbx66ayc	blocked	U+0634 U+0628 U+06A9 U+06BE
12	varlabel	شبكهٔ	xn--ngbx66a6c	blocked	U+0634 U+0628 U+06A9 U+06C0
13	varlabel	شبكہ	xn--ngbx66agd	blocked	U+0634 U+0628 U+06A9 U+06C1
14	varlabel	شبكۂ	xn--ngbx66akd	blocked	U+0634 U+0628 U+06A9 U+06C2
15	varlabel	شبكۃ	xn--ngbx66aod	allocatable	U+0634 U+0628 U+06A9 U+06C3
16	varlabel	شبكه	xn--ngbx66a0f	blocked	U+0634 U+0628 U+06A9 U+06D5
17	varlabel	شبكة	xn--ngbc5a31b	allocatable	U+0634 U+0628 U+06AA U+0629
18	varlabel	شبكه	xn--ngbx2d9u	allocatable	U+0634 U+0628 U+06AA U+0647
19	varlabel	شبكھ	xn--ngbx96asc	blocked	U+0634 U+0628 U+06AA U+06BE
20	varlabel	شبكهٔ	xn--ngbx96a0c	blocked	U+0634 U+0628 U+06AA U+06C0
21	varlabel	شبكہ	xn--ngbx96a4c	blocked	U+0634 U+0628 U+06AA U+06C1
22	varlabel	شبكۂ	xn--ngbx96a8c	blocked	U+0634 U+0628 U+06AA U+06C2
23	varlabel	شبكۃ	xn--ngbx96ahd	allocatable	U+0634 U+0628 U+06AA U+06C3
24	varlabel	شبكه	xn--ngbx96arf	blocked	U+0634 U+0628 U+06AA U+06D5

CQ a5: Managing permutation issue associated with variant labels (3/4)

- What did consultation with individual SSAC members on SAC060 conclude?
  - Technically speaking, no such thing as “variants” because the root treats each as unique, unrelated – permutation issue is introduced due to human factors – what a script GP “builds into its LGR” which is then used to generate variant labels
  - Sheer volume of variant labels does not create security or stability risks by itself
  - But foreseeable manageability challenges with permutation issue at TL, exacerbated at the SL, so advisable to keep variant labels “allowed to be delegated” to a minimum
  - Both SAC060 Rec 14 – ICANN User Experience Implications of Active Variant TLDs: *“A variant TLD application must be accepted only if the TLD applicant clearly demonstrates the necessity for activating the string. Variants that are not necessary, but are desired, must not be allocated and activated*.”
  - SSAC2021-09 – “*… there should be a mechanism to ensure that the number of delegated TL variant labels remains small. Unless there is demonstrated widespread usage of the variant label, the variant label should not be activated*.”
  - Did not arrive at what “*demonstration of necessity*” or “*demonstrated widespread usage*” translate to.

CQ a5: Managing permutation issue associated with variant labels (4/4)

- Further Context:
  - Overproduction due to permutation applies to Arabic, Bengali, Chinese, Greek, Latin, Myanmar, and Tamil scripts. Except for Arabic, the other script communities already included a ceiling to limit the number of allocatable variants – 'built-in safeguard'
  - Who and how to decide on ceiling?
  - Else, allow "market forces" to keep things in check without artificial ceiling?

- **PROPOSED ANSWER:**
  - Due to permutation issue challenges, make sense to keep number of activated variant labels small – permutation issue at TL will be exacerbated at SL
  - Difficult to determine who and how to decide on ceiling – may be somewhat artificial
  - Safeguards built-in at GP LGR / RZ-LGR provide some level of protection
  - Perhaps, better off placing burden on applicant to "*clearly demonstrates the necessity for activating the string'* by providing evidence of *clear demand for and "demonstrated widespread usage of the variant label,"* as part of the additional guidelines to be developed
  - More work needed on additional (non-security & stability) guidelines

CQ a6: Exceptions in RZ-LGR caused by updates by GP

- **CQ a6: What ought to happen if a script Generation Panel (forced to) propose an update which causes the RZ-LGR to be not fully backward compatible?**

- Context:
  - Rare instance of incompatibility, could be beyond GP's control – changes of IDNA2008, Unicode layers
  - GP proposal is always subject to public comment period – what should it be asked to include for comment? Ultimately, it is Integration Panel that decides
  - What does non fully backward incompatibility mean? **Remote possibility** of a TLD or variant TLD being invalidated in RZ-LGR
  - Do/must we grandfather an affected TLD?

- **PROPOSED ANSWER:** Need max info –
  - GP to call out exception – explain bases for exception, include security stability risk assessment, mitigatory mechanism (if any)
  - Relevant registry & I*Org - impact on registry operation, registrar, registrants (if any)
  - What does grandfathering actually entail? **To be discussed further.**

CQ a7: Single character TLDs (think ideograph/ideogram!)

- **CQ a7 has several parts:**
  - **Should we allow single character TLDs for limited scripts?**
  - **How to identify eligible scripts?**
  - **What mechanism or criteria to identify list of allowable characters as single char TLD within eligible scripts?**

- Context:
  - SAC052 Rec 1, Joint ccNSO-GNSO IDN Workgroup (JIG) report and SubPro PDP recommendation say allow single char gTLDs but for limited script/language combinations where char is an ideograph (or ideogram) and do not introduce confusion risks that rise above commonplace similarities
  - Han script is the only ideographic script included in the RZ-LGR, used by Chinese, Japanese, and Korean languages, making these eligible scripts

- **PROPOSED ANSWER:**
  - Han script and the Chinese, Japanese, and Korean languages are appropriate for single-character gTLD
  - The Chinese, Japanese, and Korean GPs should be the ones to develop the mechanism or criteria to identify a specific list of allowable characters for Han script

Q & A

Thank you for your questions and input.