

1 **Sub-group Findings introduction Variants IDNccTLDs**

2

3 Version 5

4 24 Janaury 2022

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1 Section 1. Introduction

2 Version 3

3 8 December 2021

4

5 The Variant Management sub-group is expected to address the following gaps with respect to (IDN)ccTLDs:

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

8 With respect to the first question - the definition of TLD Variants - on 11 Apr. 2013, the ICANN Board [resolved](#) to
9 implement the [LGR Procedure](#). The sub-group supports the definition and it is included in Section 1 as item # 1.

10

11 With respect to the second question, the management of IDNccTLDvariant TLD management mechanism, the sub-working
12 group based its work on the following documents and background material:

13 The ICANN Board of Directors resolutions:

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

21 In addition, and to provide an overview to the working group and ensure the coordinated and consistent approach as
22 requested, the sub-group first looked at the IDN Variant TLD Recommendations. Starting point are the recommendations

1 as adopted by the Board. In addition, the sub-group looked at the GNSO view on these recommendations. The
2 recommendations of the sub-group and their findings per recommendations are included (Section 2).

3
4 For that same reason the sub-group looked the recommendations on the Technical Utilization of RZ-LGR. Again, first the
5 recommendations as adopted by the Board. In addition, the sub-group looked at the GNSO view on these
6 recommendations. The recommendations of the sub-group and their findings per recommendations are included Section
7 3.

8
9 Thirdly, and for the time being the sub-group identified 3 additional work areas:

- 10 - IDN Tables. Section 4 will include the findings and recommendations of the sub-group with respect to IDN
11 Tables with respect to IDNccTLDs.
- 12 - Impact recommendations sub-group on the process proposals of the full WG. The sub-group reviewed and
13 suggested changes to the IDNccTLD selection process proposals as under development by the full WG.

14 Issues that require further discussion with the full working group. In the course of its work the sub-group has identified
15 issues that require further discussion with the full working group. These issues are listed in section 6. The main issue
16 relates to the scope of a ccPDP and hence versus the requirement and need to ensure stability, security and
17 interoperability of the DNS, both at the top and lower levels as a result of the introduction of variants.

18
19 Following the discussion of section 5. The questions around VM shape the policy and originate from a staff papers. Going
20 forward, the group to consider what is relevant for the policy, and should be adopted therefore and what is relevant but is
21 considered out of the policy scope and could be included as advise to cctld managers, with a link to background material
22 regarding the topic. The proposal is to first decide whether a topic/issue is a policy matter or not, if not, whether the WG

- 1 should /could include a reference as responsibility for the cctld manager. The goal is to ensure that a ccTLD Manager
- 2 involved in IDNs is aware of issues, risks and potential solutions to address the issues or mitigate the risks.
- 3

1 Section 2. Overview IDN Variant TLD Recommendations

2 Item 1. Defining IDN Variant TLDs

3 A. ccPDP4 VM Subgroup Recommendation.

4 **Definition of Variants.** Compliance with Root Zone Label Generation Rules (RZ-LGR, RZ-LGR-2, and any future RZ-LGR rules
5 sets) MUST be required for the generation of IDNccTLDs and variants labels, including the determination of whether the
6 label is blocked or allocatable. IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).

8 B. Sub-group Findings and Discussion.

9 Staff Question: what if, if relevant script (the script in which the Designated Language is expressed) is not (yet) integrated in RZ-LGR? (see also item 5 table
10 2). Looking at the SUBPro recommendation, distinction between blocked and allocatable
11 Clarify the difference? Discussed

12
13 Question check if understood correctly. If a IDNccTLD is requested i.e. meets criteria of meaningfulness and IDNA 2008, sufficient or also required that.
14 Blocked and allocatable. Difference: allocatable applied potential strings

15
16 RZ-LGR Designed tool string / label. Output set contain all variants. Blocked maximized, variants
17 Note discussion on requirements for IDN ccTLD string: Technical criteria in general apply.

18
19 IDN TLDs strings must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).
20
21

1 **Item 2. Allocation of TLD to the same entity**

2 **A. ccPDP4 VM Subgroup Recommendation.**

3 **IDN variant TLDs {T1, T1V1, ..,T1Vx} MUST be allocated to same entity.** The set of allocatable variant strings that is
4 generated from the selected IDNccTLD string by applying the RZ-LGR, MUST be allocated to one and the same entity, the
5 requestor (the entity that submits the selected IDNccTLD string), delegated to one and the same entity, the IDN ccTLD
6 Manager) or withheld for possible future delegation to the IDNccTLD Manager. In other words, for a selected top-level
7 label T1, its allocatable variant label(s) T1V1,..., T1Vx shall only be allocated to the IDN ccTLD requestor, or - after the
8 delegation process for the selected IDNccTLD string has been initiated - delegated to the same IDNccTLD Manager or
9 withheld for possible delegation to that IDNccTLD Manager.

10

11 If a specific IDNccTLD is operated by a "back-end" registry service provider under arrangement with the IDNccTLD
12 Manager, or will be operated by a "back-end" registry service provider under arrangement with the IDNccTLD Manager,
13 then that "back-end" service provider MUST operate all delegated variants of that specific IDNccTLD as well. See
14 recommendation 7

15 **Agreed text 27 July 2021**

16 **B. Sub-group Findings and Discussion.**

17 Question: in description the word arise is used: Does this imply no need to request? The Variants are assigned automatically?

18 Not all variants are IDNs, some may be ASCII, if ASCII how does this relate general requirement (at least one non-ASCII character). Is there a potential
19 hierarchy of requirements? uncover requirements Flag for full working group

20 If in principle all Variants of IDNccTLD are allowed to be delegated -> ASCII string. What if ASCII string already exists?

21

22 Note: related to discussion section 3 item 6. SSAC recommendation to minimize number of delegated strings. Potential unnecessary burden if to many
23 variants are all delegated. Potential solution is to limit the number allowable (delegatable) IDNccTLDs strings to variant IDNccTLD strings that are
24 meaningful.

25

1 What are characteristics of entity in context of IDNccTLDs? Once a selected string has been verified, it will be delegated as a ccTLD to the ccTLD Manager. Is
2 this the idea?
3
4 Note that some ccTLD Managers have an arrangement with a back-end provider. Should a similar, mandatory arrangement be provided as a requirement
5 for delegation of variants?
6
7 Should Back-end registry service provider be defined as term?
8
9 ccNSO Institutional Issue. Assuming variants will be delegated to the same ccTLD Manager, should the ccTLD Manager for each, and every variant of the
10 selected IDNccTLD string be treated as an individual ccTLD Manager, and may therefore become member of the ccNSO for each, and every variant
11 IDNccTLD?
12
13 Description staff recommendation, the word “arise” is used. If an organisational entity submits an IDN ccTLD string then RZ-LGR is applied, and variants
14 occur. If they are allocatable, what happens? Bundled with the selected string?
15 Yes, that is accurate, but not use term bundled. Blocked variants: not allocatable to anybody. The allocatable variants will be put aside for the same
16 applicant for potentially use.
17
18 Q: Does the entity need to request the delegation of the variant strings as well? Is that done automatically?
19 Response: “withheld” is the right term. Not use the term “reserved”, because those strings cannot go to any applicant. Being withheld is an automatic step.
20 But the delegation is not an automatic step.
21
22 Note: In principle delegation follows the IANA delegation process and at the request of the future IDN ccTD manager.
23
24 Q: next step? Automatic delegation? Other criteria of string evaluation for IDN ccTLDs. One thing for the WG to consider is to create the strings
25 automatically. May or not fulfill the evaluation criteria for the strings.
26 Q!: are the meaningfulness criteria still valid for variants?
27
28 Response: yes, but not only. Technical criteria too. Multiple factors.
29
30 Question: criteria as developed by the main group should apply to the variant as well?
31 Response: see original recommendations from the staff report. Recommendation 9: all existing processes should apply, unless there is an explicit exception.
32 Same rigour. Original process applies to each variant, unless there are documented exceptions by the WG. Response : let’s discuss when we reach
33 recommendation 9 from the staff paper.

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Q: How was this viewed in the ccNSO SubPro discussions? What should be the same entity? Should this be the ccTLD manager, or someone else? Registry operators in the gTLD world. Entity that is the TLD manager

Q: regarding the backend providers, should we include anything here? Response: IDNccTLDs with high level of complexity. Limited practice in this area. Be conservative at the start. If same entities operate the variant TLDs, it is easier to manage the complexity. Response: supported by one of the principles of the full WG.

Mechanism where we strongly urge, support and almost enforce IDNccTLD managers to adhere to this basic recommendation. ccTLD-world does not have a registry Agreement. If we suggest to leave this up to implementation, there will be a lot of push-back.

Q: what is backend provider? The technical support provider (TSP)? R: yes. Example AUDA. clear line between the policy-setting and administrative organisation on the one hand, and the operational and technical organisation.

With respect to “back-end service providers” see also item 7 below

Q: Suppose the backend is still the same, how will this recommendation become invalid?

Response: If you have multiple variants under management, the entity could assign the various variants to backends among several parties. Situation you want to avoid. To ensure coherent management of variants.

Note: Our company is a TSP. We are not a TLD manager. Even though 2 backend operators want to implement the same policies, there are always minor differences. Should be avoided for TLDs that are variants of each other.

Question: Do you agree with the principle of unified management? To be revisited next time. A few green marks, no red marks. Principle confirmed at meeting 27 June 2021

Next meeting: come up with a mechanism that would ensure this, to the extent possible.

Q: once variants are delegated, will they be listed in the root zone DB as a separate entry?

Response: the variant is an annotation to the string. Entry in the root zone, similar record as any other entry. Some constraints.

Note: suggestion to go back to IANA, and ask them for input.

Response: Currently, IANA has NOT defined how it will handle variants. However please note the following in response:

If multiple variants are intrinsically linked as an inviolable set, then IANA procedures will need to support the notion of them as a bundle and all the associated business processes will have to adapt accordingly. This would imply for example for a transfer of one, the whole set should be transferred. If, on the other hand, they are unconstrained and each variant can be treated as if it weren't part of a set (i.e. as a wholly independent TLD) then procedures do not need to be adjusted and treat each variant as a TLD with no special consideration for them being variants.

1 IANA expressed hope that whatever parameters / constraints is arrived at by ccNSO policy is will be compatible with GNSO policy. IANA strives wherever
2 possible to have common approaches across all TLDs, so if we can represent ccTLD variants and gTLD variants in the same manner in the root zone
3 database that will certainly simplify things greatly.

4
5 Note the concern in second paragraph form IANA relates to item 8 and item 9.

6 Question: do variants follow the life-cycle of selected IDNccTLD string (of which they are derived)? Life-cycle: request for delegation, transfer (consented or
7 after revocation), retirement. Should distinction be made between:

- 8 • What about blocked variants?
- 9 • What about allocatable but not delegated variants strings?
- 10 • What about delegated variant strings?

11
12 Note: 2 issues

- 13 • Membership ccNSO. Related to the iana root zone DB. if listed as a ccTLD manager, you are listed as such. Then you can apply for ccNSO
14 membership. E.g. NIXI manages 22 ccTLDs including the IDN ccTLDs and .in. You can imagine that if there would be variants as well, the number of
15 entries for NIXI in the root zone would increase. Requirements for ccNSO membership. The ccNSO had to deal with this: one vote per country.
16 Implications and impact on the membership of the ccNSO

17 Q: is this for this WG to discuss? Response: it is a consequence for introducing variants. May need to be flagged as something for the broad group to
18 discuss (included in section 5)

19
20 ccPDP3 retirement Policy recommendations on retirement are in the decision-making phase. One of the subgroups of ccPDP4 deals with the de-selection of
21 IDN ccTLD strings. (i.e. retirement) if the IDN string is de-selected, should the variants follow the rules and practices of the selected IDN ccTLD string or not?

22
23 Note: the next upcoming IDN GNSO PDP will weigh in on the implications of the same entity principle both on first and second level. One aspect is transfer
24 (same entity to be preserved), if one variant label is intended to be moved, all other labels need to move to another entity. Operator and backend.

25
26 Response: consistency principle to apply on transfer, revocation etc as well. That is the implication. Consistent with how things happen now.

27 Note comment above, IANA remarks

28
29 Use term “ASSOCIATED” IDNccTLDs, to describe the set of selected IDNccTLD string (S1) and its variants (S1V1, ...S1,Vx) ?

30 Preference is to use descriptive terms and use them consistently. Basic terms are: “set of allocatable variants”, “set of blocked variants”, “set of delegated
31 variants”.

1 Staff Note: Note that according to the IDNccTLD process the selection process ends with publication of the validated string(s). After validation the IDNccTLD
2 must be delegated in accordance with the ccTLD delegation process. Also note that the selected IDNccTLD string is requested by the reguestor (the entity
3 that request the IDNccTDL string), this could be a different entity then the entity requesting the delegation of the IDNccTLD string (the latter is the
4 IDNccTLD Manager). For example , a government agency or related entity , could request the IDnccTLD string, whilts the (ASCII) ccTLD Manager, could
5 request the delegation of the IDNccTLD string (and [some of the] allocatable variant).
6
7

1 **Item 3. Allocation of SLD to the same entity**

2 **A. ccPDP4 VM Subgroup Recommendation.**

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

7
8 Transitional arrangement to be discussed at later stage: If a variant IDNccTLD string is delegated after the IDNccTLD has
9 become operational this recommendation also applies: under the newly delegated variant IDNccTLD string an already
10 registered second level string under another variant IDNccTLD variant string MUST be registered or withheld for future
11 registration for the same entity.

12
13 Note and comment. By definition (see recommendation 1 above) a domain and its variants are one and the same. For
14 reasons of security, stability and interoperability of the DNS, one and the same domain can not be delegated or operated
15 by two or more different entities.

16

17 **B. Sub-group Findings and Discussion.**

18 From 27 July discussion:

19 We are talking about 1 SLD under multiple variant TLDs. Text should be adjusted. Variants are with the IDN ccTLD, not with the SLD. one SLD or a SLD.
20 different to gTLD environment.

21

22 Comment: Item 3 directly interferes with autonomy of ccTLDs to define policy for second level. Should be policy for TLD itself, and do not go further.

23

24 Response: Strange/grey area You play with the stability, security, interoperability.

1 Sub-group should note this is an issue and WG has an ability to alert and improve the situation. If sub-group leaves it out now, there is no opportunity to
2 add it later. Negotiating with ourselves. Anticipation is that there will be lots of discussion around this recommendation. We open possibilities.
3
4 Temperature of the room.
5 You heard the argument. On the one hand, this could be over the line of the ccNSO policy remit as defined in Annex C. On the other hand, is the argument
6 that variants are one and the same. Opening the possibility for diverging registrations would break that fundamental principle. Opportunity for the full
7 group to chime in, and there will be a public comment too. You know there will be comments on this.
8 Temperature check Alternative wording: change Must to Should = recommendation.
9 Who would be in favor to change "must" to "should"? minority
10 Leave it as it is? Majority
11 Suggestion is to keep "must".
12 Note we are talking about variants. Single second level strings. Variants under the IDN variant ccTLD. Line item 11. This part still talks about variants at the
13 2nd level. But in this recommendation we only talk about the top level.
14 Following adjustments of line 10, following needs to be adjusted too
15
16
17 Staff Note: Scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws)
18 Use language Expected, but not mandatory? However, note that by definition (second level) domains and their variants are one and the same domain. This
19 is derived from actual definition of variants.
20
21 To considered the same by TLDs If the same string then same registrant, otherwise may causes security and stability issues.
22
23 Question: what happens if two domain names which are deemed to be the same are delegated to two different entities?
24
25 Same policies/difference. Re-iterated variants are delegated to same entities, however in practice the IDN table used may be differ from IDN table used for
26 registration of SLDs under the TLD: apply different tables. Policy principle is the same.
27
28 From the Fast Track application form:
29 **By signing and submitting this request the Requestor commits to** TLD operations that will secure and enhance the stability and interoperability of the
30 Internet's Domain NameSystem (DNS) for the benefit of the local and global Internet community, and to working in good faith together with ICANN towards
31 a stable and secure Internet DNS. The Requestor understands that ICANN reserves the right to take actions necessary to protect the security, stability and
32 interoperability of the global DNS.

1 ICANN expects that IDN ccTLDs will be established and operated in the manner described below:

- 2 a. The IDN ccTLD manager shall establish, operate and maintain the authoritative name servers for the requested string in a stable and secure
3 manner, adequate to resolve names within the requested string by users throughout the Internet and in compliance with Relevant Applicable
4 Standards subject to and within the limits of relevant national law and national public policy. Relevant Applicable Standards are standards-track or
5 best current practice RFCs sponsored by the Internet Engineering Task Force;
- 6 b. IDN domain names are to be registered in accordance with a publicly available registration policy that shall comply on an ongoing basis with
7 relevant applicable standards to IDNs, such as the IDNA Protocol, and with the IDN guidelines as updated and published from time to time on
8 the ICANN website, all subject to and within the limits of relevant applicable national law and public policy. This includes, but is not limited to,
9 adherence to RFCs 3490, 3491, 3492, 3454 and their successors;
- 10 c. The IDN ccTLD manager should not use DNS redirection and synthesized DNSresponses within any level of the registry; and
- 11 d. The Requestor agrees that the IDN ccTLD manager will cooperatively engage with ICANN in the event of an activity or lack of activity that generates
12 a serious concern regarding the stability, security or interoperability of the Internet's Domain NameSystem (DNS) from a global perspective. Briefly,
13 the cooperative engagement process involves the designation of an official representative from ICANN and the IDN ccTLDmanager, who shall meet
14 with each other telephonically and/or in person to address the concerns in good faith and attempt to reach a resolution.

15 Text first paragraph agreed 10 August 2021

16

1 **Item 4. Registration of SLD variant labels under variant TLDs to the same entity**

2 **A. ccPDP4 VM Subgroup Recommendation.**

3 **All variants of a Second-Level string registered under all delegated variant IDNccTLD strings MUST be registered to the**
4 **same entity under all IDNccTLD variant strings.** IF IDNccTLD variant strings have been delegated, and for a second level
5 string to be registered under an IDNccTLD string a set of allocatable variant second level strings can generated by applying
6 the IDN Table for second level strings under the IDNccTLD string, THEN under all delegated IDNccTLD variant strings ~~at~~ the
7 set of allocatable variant second level strings MUST be either registered for one and the same entity or withheld for
8 possible future registration by that same entity

9 AN / Or

10 Transitional arrangement for discussion at later stage: If a variant IDNccTLD string is delegated after the IDNccTLD has
11 become operational this recommendation also applies: under the newly delegated variant IDNccTLD string all allocatable
12 variant second level strings of a registered second level string MUST be registered for one and the same entity or withheld
13 for possible future registration for that entity.

14 **B. Sub-group Findings and Discussion.**

15 Second reading support 21 September 2021

16 Staff Note: Relevant sections in the ccPDP4 WG document, which includes refers to IDN Tables and the related policies and procedures.

17

18 Staff Note: Scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws)

19

20 Staff Note: This recommendation is an extension of recommendation 3. Although the scope of the ccNSO PDP (Annex C of the bylaws) may be
21 limiting factor, by definition (see recommendation 1 above) a domains and its variants are one and the same. For reasons of security, stability
22 and interoperability of the DNS, one and the same domain can not be delegated or operated by two or more different entities.

23

24 Strong objection to include that recommendation in the policy (variants on the 2nd level)

1 Arguments ITEM 3 are just as relevant for this recommendation: see below
2
3 Language around a strong advice. To be revisited next time.
4 Need to determine what is the scope of the policy, what is not
5 Annex C limits the scope of the policy. At the same time, it is all in line with the security, stability and interoperability of the DNS.
6
7 Applying the same principle at second level requires a holistic (systematic) analysis, single TLD, variant TLDs, IDN or ASCII
8 Single IDNccTLD: annex C applies. Starting point is variants at Top Level
9 Selected IDNccTLD with variant IDNccTLD strings: Recommendation 3 and 4 are proposed for IDNccTLD.
10 Single ASCII ccTLD: out of scope of policy ccPDP4.
11 ASCII ccTLD, with variants?: out of scope of this policy.
12
13 Comment: Item 3 directly interferes with autonomy of ccTLDs to define policy for second level. Should be policy for TLD itself, and do not go further.
14
15 Response: Strange/grey area You play with the stability, security, interoperability.
16 Sub-group should note this si an issue and WG has an ability to alert and improve the situation. If sub-group leaves it out now, there is no opportunity to
17 add it later. Negotiating with purselves. Anticiaption is that there will be lots of discussion around this recommendation. We open possibilities.
18
19 Temperature of the room.
20 You heard the argument. On the one hand , this could be over the line of the ccNSO policy remit as defined in Annex C. On the other hand, is the argument
21 that variants are one and the same. Opening the possibility for diverging registrations would break that fundamental principle. Opportunity for the full
22 group to chime in, and there will be a public comment too. You know there will be comments on this.
23 Temperature check Alternative wording: change Must to Should = recommendation.
24 Who would be in favor to change “must” to “should”? minority
25 Leave it as it is? Majority
26 Suggestion is to keep “must”.
27 Note we are talking about variants. Single second level strings. Variants under the IDN variant ccTLD. Line item 11. This part still talks about variants at the
28 2nd level. But in this recommendation we only talk about the top level.
29 yes, following adjustments of line 10, following needs to be adjusted too
30
31
32 Staff Note: Scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws)

1 Use language Expected, but not mandatory? However, note that by definition (second level) domains and their variants are one and the same domain. This
2 is derived from actual definition of variants.
3
4 To considered the same by TLDs If the same string then same registrant, otherwise may causes security and stability issues.
5
6 “All allocatable variants” to become “any allocatable variants”
7 All of them must be either registered for 1 and the same entity, or withheld for possible registration by that entity.
8 “any” is indeed better.
9 If they are not registered, they need to be withheld, correct? Yes
10

1 **Item 4 A. Registration of SLD variant labels under IDNccTLD to the same entity**

2 **ccPDP4 VM Subgroup Recommendation**

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

8 **WG Findings and Comments**

9 Second reading support 21 September 2021

10

11 We are discussing item 3 and 4. Variant TLDs, and variants of the 2nd level, in variant TLDs. there will be cases where there are variant labels
12 at the 2nd level, in TLDs that will not have variants. So, we need consistency for all.

13

14 Staff Note: Scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws)

15 Use language Expected, but not mandatory? However, note that by definition (second level) domains and their variants are one and the same
16 domain. This is derived from actual definition of variants.

17

18 To considered the same by TLDs If the same string then same registrant, otherwise may causes security and stability issues.

19

20 Question: what happens if two domain names which are deemed to be the same are delegated to two different entities?

21

22 Same policies/difference. Re-iterated variants are delegated to same entities, however in practice the IDN table used may be differ from IDN
23 table used for registration of SLDs under the TLD: apply different tables. Policy principle is the same.

24

1 **Item 5. Harmonization of SLD IDN Tables**

2 **A. ccPDP4 VM Subgroup Recommendation.**

3 To be discussed as part of discussion Section 4.

4 **B. Sub-group Findings and Discussion.**

5 Additional item discussion in section 4 IDN Tables Item 6. Not all variants across Variant TLDs need to be operational

6 **A. Staff recommendation.**

7 IDN variant label allocatable or activated under IDN variant TLDs may not necessarily be the same.

8

9 The set of allocatable or activated second-level variant labels may not be identical across the activated IDN variant TLDs.
10 For two variant labels s1 and s1v1 which are allocatable under the active IDN variant TLDs t1 and t1v1, the label s1.t1 may
11 be allocated or activated but s1.t1v1 may not be allocated or activated. Similarly, if s1v1.t1 is allocated or activated,
12 s1v1.t1v1 may not be allocated or activated.

13

14 **B. GNSO SubPro Recommendation.**

15 **Recommendation 25.8:** Second-level labels derived from Recommendation 25.6 or Recommendation 25.7 are not
16 required to act, behave, or be perceived as identical.

17

18

1 **C. ccPDP4 VM Subgroup Recommendation.**

2 ~~The sub-set of registered and sub-set of withheld for possible future second level variant IDN strings may vary across~~
3 ~~the IDNccTLD variant strings.~~ IF IDNccTLD variant strings have been delegated, and for a second level string to be
4 registered under an IDNccTLD string a set of allocatable variant second level strings can generated by applying the IDN
5 Table for second level strings under the IDNccTLD string, THEN the sub-set of registered allocatable variant second
6 level strings and sub-set of allocatable variant second level strings the withheld for possible future registration may
7 vary across the delegated IDNccTLD variant strings.
8

9 **D. Sub-group Findings and Discussion.**

10 Staff Note: scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws), to define this a policy requirement.

11 At the same time, note that recommendations is cast in terms of advice or guidance, not as a requirement.

12 Explanation needed: is intention of the original staff recommendation that not all variants of one and the same Second
13 level strings, which according to recommendation 4 have been registered for the same entity under each variant IDNcTLD
14 need to be operational? In other words: not all variants of a second level have to be “in use”?

15 Behaviour. Blocked or allocatable

16 RZ-LGR to validate the TLD

17

18 Policies IDN Table -> ccTLD Manager define their own IDNccTLD tables

19 To be discussed in context of Section 4 (IDN Tables)

20

21

22

1 **Item 7. Back-end registry service providers for variant TLDs**

2 **A. ccPDP4 VM Subgroup Recommendation.**

3 **All delegated variant IDNccTLD strings MUST be operated by the same entity.** If a specific IDNccTLD is operated by the
4 IDNccTLD Manager all variants MUST be operated by the IDNccTLD Manager (IDNccTLD Manager is the entity or
5 organisation listed in the IANA rootzone database as the ccTLD Manager for a specific [IDN]ccTLD). If a specific IDNccTLD is
6 operated by a "back-end" registry service provider under arrangement with the IDNccTLD Manager, or will be operated by
7 a "back-end" registry service provider under arrangement with the IDNccTLD Manager, that "back-end" service provider
8 MUST operate all delegated variants of that specific IDNccTLD.

9 **B. Sub-group Findings and Discussion.** See discussion Item 2:

10 Question separate item 2 and 5? or combine under one item?

11 Include definition of back-end provider, if feasible

12 Adopted 27 July. 2021

13

14 Examples from IANA Root Zone Database to illustrate the definition of ccTLD Manager:

15 **Example 1 (ASCII ccTLD):**

16 **Delegation Record for .AC**

17 (Country-code top-level domain)

18

19 **ccTLD Manager**

20 Internet Computer Bureau Limited

21 c/o Sure (Ascension Island)

22 Georgetown

23 ASCN 1ZZ

24 Ascension Island

25

1 **Example 2 (IDNccTLD):**
2 **Delegation Record for .இலங்கை**
3 (Country-code top-level domain designated for two-letter country code LK)
4 **ccTLD Manager**
5 LK Domain Registry
6 c/o Computer Science and Engineering Department, University of Moratuwa
7 Moratuwa 10400
8 Sri Lanka

9
10 What is a ccTLD manager? An IDN ccTLD manager? How is it defined?
11 The term “ccTLD manager”. See future ICANN bylaws. Also included in the IANA root zone. As a result of the delegation process. Same process
12 for ASCII and IDN ccTLDs.
13 Captured in the examples included.
14 Sri Lanka ccTLD manager. Captured the point Sarmad made regarding the definition of (same) entity. We should be consistent in the use of the
15 term ccTLD manager.
16
17 Page 23. Hope this clarifies the intention of the recommendation.
18 Same entity could be either :
19 • the IDN ccTLD manager (see root zone)
20 • Back-end operator, under agreement with the ccTLD manager

21
22

1 **Item 8. Update of basic policies to take into account variant management recommendations**

2 **A. ccPDP4 VM Subgroup Recommendation.**

3 **Staff note: See section 5 below. It includes the notes with questions from the staff paper.**

4

5 **B. Sub-group Findings and Discussion.**

6 IANA expressed hope that whatever parameters / constraints is arrived at by ccNSO policy is will be compatible with GNSO policy. IANA strives wherever
7 possible to have common approaches across all TLDs, so if we can represent ccTLD variants and gTLD variants in the same manner in the root zone
8 database that will certainly simplify things greatly.

9 Note the concern in second paragraph from IANA reply relates to item 8 and item 9.

10 Question: do variants follow the life-cycle of selected IDNccTLD string (of which they are derived)? Life-cycle: request for delegation, transfer (consented or
11 after revocation), retirement. Should distinction be made between:

- 12 • What about blocked variants?
 - 13 • What about allocatable but not delegated variants strings?
 - 14 • What about delegated variant strings?
- 15

16 Meeting 27 July 2021

17 Is this what was intended by the staff recommendation?

18 Response: Series of analysis in the staff recommendation. ccTLDs or implications on application process

19 E.g. how would variants impact the string? How do we define the same entity? Discussion at top level and also 2nd level. Useful to look at the top level.

20 Implications on dispute, after delegation, because of variants.

21 Collate items to be inserted into section 5 and item 9.

22 Define as part of section 5 of the paper. We start from the notes identified in the staff paper.

23 Group agrees to discuss them specifically for the overall selection

24 One abstention. No red marks

25 Revisited next time

26

27

1 **Item 9. All existing policies apply to IDN variants, unless specifically stated otherwise**

2 A. **ccPDP4 VM Subgroup Recommendation.**

3 **All ccTLD related policies MUST apply to variant IDNccTLDs as well. However, specific requirements under a policy**
4 **may vary for the selected IDN ccTLD string and its allocatable variants.**

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

8
9 If a selected IDNccTLD string is requested to be transferred in accordance with RFC1591 as interpreted by the FoI to
10 another entity, the whole set of allocatable IDNccTLD strings SHALL be transferred or withheld for future delegation to
11 the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise
12 foreseen under this policy.

13
14 If a selected IDNccTLD string or any of its variants is revoked in accordance with RFC1591 as interpreted by the FoI, all
15 other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.

16
17 If the selected IDNccTLD string should be retired as foreseen under this policy, all variant IDNccTLD strings SHALL be
18 retired, unless otherwise foreseen under this policy.

19
20
21 Implementation of this and other recommendations pertaining to variant IDNccTLD strings is considered a matter of
22 implementation.

23
24

1 B. Sub-group Findings and Discussion.

2 Staff Note: scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws. ccPDP4 is limited to the selection of IDN ccTLD strings. The
3 basic premise is that delegation, transfer, revocation and retirement should be in accordance with existing policies. This is reflected in the
4 ISSUE Report, and proposed policy proposals.

5
6
7 See discussion items 2 and 8 above.

8 Note: IANA expressed hope that whatever parameters / constraints is arrived at by ccNSO policy is will be compatible with GNSO policy. IANA
9 strives wherever possible to have common approaches across all TLDs, so if we can represent ccTLD variants and gTLD variants in the same
10 manner in the root zone database that will certainly simplify things greatly.

11
12 Comment on version 09: variant TLDs are considered as far as the actual ccTLD strings. That is implied with this recommendation

13 Question: why?

14 General recommendation. Any variant TLD string is as good as a regular TLD string. Same rules should apply.

15 May need to specify the exception. Worth further discussion. Please raise concerns explicitly

16 Action: ask IANA staff what they expect/experience. Ask if they want to have exceptions.

17
18 Text version 09

19 **All ccTLD related policies pertaining to (IDN)ccTLDs MUST apply to variant IDNccTLDs, unless specifically identified otherwise under the**
20 **INDccTLD string selection policy.**

21 The set of allocatable variant strings that is generated from the selected IDNccTLD string by applying the RZ-LGR, MUST be delegated to the
22 same IDNccTLD Manager or withheld for possible delegation to that IDNccTLD Manager. If a (selected?) IDNccTLD string is transferred, the
23 full set of allocatable variant(s) of the IDNccTLD string, which is being transferred (whether delegated or withheld for future delegation)
24 MUST be transferred to the same IDNccTLD Manager at the same time or withheld for future delegation to that IDNccTLD Manager, to
25 which the IDNccTLD string is transferred. If a IDNccTLD string is revoked all allocated variant IDNccTLDs (delegated or withheld for future
26 delegation) MUST be revoked at the same time. If an IDNccTLD string shall be retired, all allocatable variants (delegated or withheld for
27 delegation) MUST be retired, at the same time.

28
29 Implementation of this and other recommendations pertaining to variant IDNccTLD strings is considered a matter of implementation.

1 First reading adopted

2

1 Section 3. Overview of Recommendations on the Technical Utilization 2 of RZ-LGR

4 Item 1. All TLD strings/labels to be processed using RZ-LGR

5 A. TSG Recommendation

6 All TLD labels, IDN and ASCII labels, MUST be processed using the RZ-LGR.

7
8 Lowercase alphabetic ASCII labels are, as a practical matter, a subset of the Latin script labels defined by RZ-LGR;
9 therefore, these ASCII Labels must be subject to RZ-LGR processing to determine their cross-script variant labels, e.g. with
10 Armenian, Cyrillic, Greek, and other applicable scripts. Consequently, GNSO and ccNSO should incorporate the use of RZ-
11 LGR into their TLD application processes accordingly and in a consistent manner.

12 GNSO SubPro Recommendation.

13 **Recommendation 25.2:** Compliance with Root Zone Label Generation Rules (RZ-LGR, RZ-LGR-2, and any future RZ-LGR
14 rules sets) must be required for the generation of TLDs and variants labels, including the determination of whether the
15 label is blocked or allocatable. IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s). To the extent
16 possible, and consistent with Implementation Guidance 26.10, algorithmic checking of TLDs should be utilized.

17 B. ccPDP4 VM Subgroup Recommendation.

18 ~~All TLD labels, IDN and ASCII labels, MUST be processed using the RZ-LGR. Lowercase alphabetic ASCII labels are, as a~~
19 ~~practical matter, a subset of the Latin script labels defined by RZ-LGR; therefore, these ASCII Labels must be subject to~~

1 ~~RZ-LGR processing to determine their cross-script variant labels, e.g. with Armenian, Cyrillic, Greek, and other~~
2 ~~applicable scripts. Consequently, the use of RZ-LGR should be incorporated into the (IDN)ccTLD application processes~~
3 ~~accordingly and in a consistent manner.~~

4 Elements VM Recommendation

- 5 • IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).
- 6 • All selected IDNccTLD strings MUST be processed using the RZ-LGR to determine:
 - 7 1. if they are valid and.
 - 8 2. Calculate Variants. Use RZ-LGR to assign status blocked or allocatable.
- 9 • Special use case: RZ-LGR in relation to ASCII ccTLDs: Should RZ-LGR be applied used to all combination of two ISO 646
10 Basic Version (ISO 646-BV) characters (2-letter [az] codes) to ascertain all potential variants? If so, what is consequence in
11 case:
 - 12 ○ Variants in other scripts?
 - 13 ○ Variants in Latin?
- 14 • If RZ-LGR is applied to selected IDNccTLD string (for a script used to express the meaningful representation in the
15 Designated Language), and this results in variant ASCII string (Any combination of two ISO 646 Basic Version (ISO 646-BV)
16 characters (2-letter [az] codes), should these variants be:
 - 17 ○ Blocked
 - 18 ○ Result in not allowing the selected IDN ccTLD (to maintain the predictability of the current ccTLD delegation
19 policy

20

21 **C. Sub-group Findings and Discussion.**

1 Staff Comments: As ASCII ccTLD application process is a matter out of scope of this ccPDP. It is a matter that is most likely first and
2 foremost operational and a matter of the IFO and IANA Naming Function. Further impact and effort analyses would be required to
3 understand the full breadth and consequences of a recommendation in this area.

4 Staff Comment: What if a script of writing system has not yet been integrated in RZ -LGR and a selected string is requested in such a
5 writing system or script?

6 Possible scenario:

7 1. Not allowed i.e., not processed & await RZ-LGR for script or writing system

8 2. Only Selected string processed (as under Fast Track Process), no variant identified/generated

9 **Discussion on TSG Recommendation**

10 General introduction TSG Recommendation

11 Background is being developed and provides technical community perspective and proposed items to be considered as technical background
12 parameters and not as policy.

13
14 The proposed string is processed: validate the label and identify the variants and assign as:

- 15 • Blocked,
- 16 • Allocatable

17
18 Reason to process ASCII. Variant in other scripts -> in case those are created variants will be identified be blocked.

19 Should be done generically? It is argued processing country codes (2-alpha codes effectively protects country codes (2-alpha codes). If all 2-
20 alpha code would be processed all variants also in related scripts would be identified. If application would come in it would be clear if
21 application would contain blocked character, and hence would not be permissible (Staff note: this assumes a view at individual characters and
22 not at the level of string)

23
24 ccTLD -> two lower case as exception lower and upper case inherent in DNS protocol

1 Note making the distinction between Lower and Upper case From a DNS perspective confusing
2
3 Use of RZ-LGR = 1) Syntax validation and 2) calculation of variants
4
5 syntax validation = “letters” are valid for TLD string (e.g. no hyphen or digits), whole-label evaluations are applied as well (e.g. combining mark
6 cannot start label, no mixing of scripts, etc.)
7
8 calculate of variant = these rules are applied by the algorithm defined by each script Generation Panel, and the integration of the merged RZ-
9 LGR
10
11 SubPro recommendation is gTLD focused.
12 Applicability calculate the variants of existing, already delegated
13 Other than calculate the variants. WG should focus on IDN ccTLD; afraid
14 RZ-LGR
15
16 Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (2-letter [az] codes),
17 Advises to RZ-IGR
18 Variants - > what will
19 ASCII Variants
20
21 RZ-LGR not modify
22 ASCII not prevent to protect them for
23 Two-letter Mechanism / policy method
24
25 Did discuss use cases RZ-lgr Input and output.
26 What is valid is protocol decision? What is blocked and what is allocatable policy decision?
27
28 Technical question: What is VALID?
29 Simple PP is not Cyrillic PP however applied located IDNccTLD. In future ASCII PP? Priority of ASCII code variants blocked
30

1 **Discussion SUBPro Recommendation**

2 3 parts compliance

3 Two uses:

4 1. Syntax validation of application (proposed selected string in terms of IDNccTLD)

5
6 2. Variant calculation: RZ-LGR disposition calculates value Blocked or allocatable

7 "Blocked" should not be delegated

8 "Allocatable" could find a path for delegation

9

10 Questions/ Comment

11 When applying RZ-LGR to ASCII: In future an application for country code TLD should prevail: standing policy, which is fundamental to
12 distinguish between ccTLD and gTLDs, and their related processes, criteria, requirements and procedures

13 If cannot be applied because of RZ-LGR two-letter ccTLD; new territories. Impact beyond scope of IDNccPDP.

14 Question is possible two letter ASCII ccTLD priority new IDNccTLD? TWO-letter (ASCII) excluded from other processes, only available as (ASCII)
15 ccTLD: ISO3166 is not static.

16 **Item 2**

17 **A. TSG Recommendation**

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

- 20
- 21 • Validate an applied-for TLD label and determine its variant labels with corresponding dispositions
 - 22 • Calculate variant labels, and corresponding disposition values, for each one of the already allocated or delegated TLD labels
 - 23 • Calculate variant labels, and corresponding disposition values, for each one of the reserved TLD labels

24

1 **B. GNSO SubPro Recommendation.**

2 **Recommendation 25.2:** Compliance with Root Zone Label Generation Rules (RZ-LGR, RZ-LGR-2, and any future RZ-LGR
3 rules sets) must be required for the generation of TLDs and variants labels, including the determination of whether the
4 label is blocked or allocatable. IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s). To the extent
5 possible, and consistent with Implementation Guidance 26.10, algorithmic checking of TLDs should be utilized.
6

7 **C. ccPDP4 VM Subgroup Recommendation.**

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

- 10 • Validate an applied-for TLD string and determine its variant string(s) with corresponding dispositions
11 • Calculate variant strings, and corresponding disposition values, for each one of the already allocated and delegated TLD
12 Strings
13 • ~~Calculate variant labels, and corresponding disposition values, for each one of the reserved TLD labels~~

14 **Conclusion**

15 First step. Does the desired variant meet the RZ-LGR? If not, what happens next?

16 Question Do you want to create an exception, based on the past, where there were expectations. Should be
17 independent, or linked? For the full WG to resolve. If it does meet the RZ-LGR, what do you do if it is blocked, or not
18 blocked.

19 Do you agree that if Desired Variant does not meet the RZ-LGR the RZ-LGR remains paramount

20 Group agrees: RZ-LGR remains paramount.
21

1 **D. Sub-group Findings and Discussion.**

2 Staff Note: Currently IDNccTLD strings are only delegated. Desired IDNccTLD Variant Strings have been identified, and are considered “reserved”. However
3 their status needs to be defined. According to the ICANN website: “The desired variant string(s) are strings allocated to the requester. This does not mean
4 that they will be delegated in the DNS root zone. They will be allocated to the requester in order to be reserved to the entitled manager for potential future
5 delegation in the DNS root zone.”

6 According the Fast Track Implementation Plan (section 3.4):

7 The number of strings that a country or territory can apply for is not limited to a specific number (in accordance with Guiding Principle G in the IDNC WG
8 Final Report). However, the following maximum limitation applies:

- 9 • *One string per official language or script per country or territory.*

10 This limitation may cause issues for some countries and territories which have expressed the importance of having variant TLDs allocated and delegated in
11 the DNS.

12 The topic of delegation of variant TLDs and management of variant TLDs has been discussed broadly in the community. ICANN staff has proposed a few
13 models, none of which were agreeable across the policy and technical community reviewing the topic.

14 In order to stay within ICANN’s mandate for ensuring a stable and secure operation of the Internet, the following will be the case for the Fast Track Process
15 launch:

- 16 • Variant TLDs desired by the requester for delegation must be indicated by the requester
17 • Desired variant TLDs will be allocated to the requester (if successfully evaluated). This does not mean that the variant TLD will be delegated in the
18 DNS root zone. It will be allocated to the requester in order to be reserved to the entitled manager for potential future delegation in the DNS root
19 zone.
20 • A list of non-desired variants will be generated based on the received IDN Tables. Non-desired variants will be placed on a blocked list by ICANN.

21 Subsequent application or request for non-desired variants will be denied.

1 The community is expected to continue working on more clear definitions of variants, solutions or methods for delegation of variants, and any necessary
2 dispute mechanisms related to disagreement regarding desired and non-desired variants. For the purpose of including new development in the Fast Track
3 Process, it is scheduled for revision.(See Module 9 for more details)

4 Question 1: if “desired variant IDNccTLD strings are allocatable in accordance with the RZ-LGR, should special arrangement still be made?”

5 Question 2: if “desired variant IDNccTLD strings are NOT allocatable in accordance with the RZ-LGR, should special arrangement still be made?”

6 **From 30 November 2021 meeting**

7 What is meant by special arrangements?

8 Response: for instance, a rule, by you.

9

10 Note: allocatable and blocked variants.

11 When variants are not defined as symmetric. Concrete example: Arabic scripts. Allocatable variant: diacritice form to a simple form. The other way is a
12 blocked variant. If the applicant applied with the diacritice form, they would be eligible for the simplified variant.

13

14 Question: do you foresee issues with RZ-LGR?

15 Iran, Macao, Pakistan, 3 Saudi Arabia, Syria, Taiwan: desired variants under the fast track process.

16 Comment: refers to example mentioned above. Even if this variant is allowed by a special arrangement, wouldn't it be blocked afterwards, due to similarity
17 checks?

18 Response: It will be allocated to the same entity. To avoid security issues. Variants allocated to the same TLD operator.

19

20 Comment: Note the limited number “desired variants” under Fast Track process of . If you look at the fast track, these are the corner cases.

21 Question: if this WG grants an exception, is exception needed for both cases? RZ-LGR says 2 strings are distinct, and applicant says they are variants

22 Question for clarification: if the RZ-LGR considers them blocked, they should not be used?

23 Response: no. 2 cases

24 Firstly, an application identified a variant which is not a variant in RZ-LGR. Case 1. Much larger exception. 2 unique strings.

25 Secondly, strings have been identified as variants, and are also variants through RZ-LGR. Carefully consider. Do not override the RZ-LGR calculation. But not
26 so complicated to solve.

27

28 Question: What about desired variants under Fast Track Process

29 Response: Not sure which category they fall

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Question: case that is not a variant according to RZ-LGR. Case 1. How do we override the RZ-LGR, even if we want to do so? How?
Question for clarification and initial response: why needed? How? The answer is “by policy”. However does the WG want to have an exception?

Comment: we are talking case 1. applied-for variant not calculated by RZ-LGR —> what is the outcome? policy could say: sorry, not valid per RZ-LGR as variant, but may be delegated if not already allocated to other operator.
The applicant calculated a variant label, but the RZ-LGR does not agree.
If the ccnsd determines the RZ-LGR is the sole source to calculate the variants, that is the wall. But, if the label is valid in its own right, and not yet delegated, you can go through the standard route as a stand-alone label. How you intend to manage it is up to you.

Comment: second option is not even open. Limited set of desired variants, which have been requested originally.
See: <https://www.icann.org/resources/pages/string-evaluation-completion-2014-02-19-en>

Question: How would the applicant know this, though? It would require prior knowledge that the set of allocatable labels depends on the primary label. I think the applicant should be made aware of this particularity.
GNSO IDN PDP is discussing an analogy. Applicants that wanted an IDN label, were asked to specify a variant label. Self-identified variants. There was a clarification that the applicant had no legal rights over that variant in future. GNSO IDN PDP is discussing what to do. Similar case of “desired variants”. But: no legal claims or rights. If in future, there is an appetite to apply for a variant label, they will have to look at the RZ-LGR calculation.

Additional: direction where EPDP is going. If we do allow variants for the current ccTLDs, what if another country - when it finds that the desired variants are allocated to the ccTLD - wouldn't they try to apply also for desired variants? Would they be entitled?
Other ccTLDs in future could also apply for desired variants?

Response: depends on whether you allow to apply for desired variants. Would be internally inconsistent. If they do not meet the RZ-LGR, that's it.

Question: In case an applicant applies for a desired variant, can the applicant go for an appeal? Should we modify the RZ-LGR to accommodate the desired variant?

Response: RZ-LGR has its own review process. Anybody at anytime can raise change or request a proposal to a certain community. Panel can review the request. Is it reasonable? Then they can update.

Comment: even if we allow those self-identified variants now, that would not mean we need to do so also in future. The situation is different now. There was no RZ-LGR then, there were no rules to adhere to back then

1 Additional comment: When we applied the IDN ccTLD under fast track process, we submit the IDN variant table, and the desired variant string come from
2 the IDN variant table.

3
4 Concluding question: If you look at the self-identified variants, should they be checked by RZ-LGR, or proceed anyhow?
5 Group checked green marks (yes, should be checked)

6
7 Question: There are a few of these strings (desired variants), so could we know whether they are variants or not of the original label per the latest version
8 of the RZ-LGR? perhaps we are discussing theoretical problem that may not exist
9 Response: In respond to question. The self-identified variant labels of existing ccTLDs not covered by the RZ-LGR calculation is Syria.

10
11 Comment: What to do if desired variant string in Arabic is not considered a variant of the selected idn ccTLD string.
12 We just discussed and agreed the RZ-LGR should be paramount. To continue as none-variant would i.e Desired variant with independent existence, would
13 be inconsistent with the general principle the WG already agreed upon, only one IDN country code per Desired Language / Script combination
14 This is major distinction between the GNSO EPDP and the cc-PDP

15 Comment: if this exception is considered by the WG. not sure if it is an exception to the RZ-LGR. Exception to the rule. 2 independent strings to be
16 delegated to same TLD operator, in same language, and in same script.

17
18 Conclusion
19 First step. Does the desired variant meet the RZ-LGR? If not, what happens next?

20 Question Do you want to create an exception, based on the past, where there were expectations. Should be independent, or linked? For the full WG to
21 resolve. If it does meet the RZ-LGR, what do you do if it is blocked, or not blocked.

22 Bart: do you agree that if Desired Variant does not meet the RZ-LGR the RZ-LGR remains paramount
23 Group agrees: RZ-LGR remains paramount.

24

25 **Conclusion was supported in second reading as well (14 December 2021)**

26 **Item 3. Need to address any existing possible deviations from the calculation of the RZ-LGR**

27 **A. TSG Recommendation**

1 GNSO and ccNSO should work collaboratively and consider their respective policy, procedure and/or contract changes to
2 address any existing possible deviations from the calculation of the RZ-LGR:

- 3 • Delegated TLDs.
- 4 • Self-identified “variant” TLDs.

5
6 **3.1. Delegated TLDs:** These are cases that have occurred under special circumstances in which labels generally deemed as
7 the same (i.e. variant TLDs under RZ-LGR) were previously delegated as independent TLDs, albeit with special
8 considerations (e.g. synchronized TLDs). Any such variations should be considered for alignment with RZ-LGR.

9
10 **3.2. Self-identified “variant” TLDs:** Historically IDN TLD applications, for gTLDs and ccTLDs, have asked the applicant to
11 identify and list any variant labels (based on their own calculations) corresponding to the applied-for string. These self-
12 identified “variant” labels may or may not conform to the RZ-LGR once implemented. The self-identified “variant” labels
13 which are also variant labels based on RZ-LGR will need to be assigned a variant disposition based on RZLGR calculation.
14 Further, self-identified “variant” labels that are not variant labels based on the RZ-LGR definition should not be considered
15 as variant TLD labels and it needs to be determined on how to address such labels previously identified by the applicants.

16
17 GNSO and ccNSO must consider a resolution of such outstanding cases that conforms to the LGR Procedure and RZ-LGR
18 calculations.

19

20 **B. GNSO SubPro Recommendation**

21 No corresponding SubPro recommendations

22

23 **C. ccPDP4 VM Subgroup recommendation**

1

2 D. Subgroup Findings and Discussion

3 Staff Note: Transitional Arrangement to be developed

4 The self-identified variants are included in the overview of IDNccTLD strings validated under the Fast Track Process, under heading “desired variant
5 string(s)”. See: <https://www.icann.org/resources/pages/string-evaluation-completion-2014-02-19-en>

6

7 Question: did these “desired variant strings” pass all criteria under the Fast Track process?

8

9 As a principle should the “desired variant strings” only be allocatable if they are generated through RZ-LGR?

10 **See conclusion Item 2 above. Desired variant string only allocatable if generated through RZ-LGR**

11

12 **Other specific issue to be addressed: should simplified and traditional IDNccTLD strings be considered variants or not?**
13 **If not, grandfathered?**

14

15 See Board resolution 2010: <https://www.icann.org/resources/board-material/resolutions-2010-04-22-en#synchronized>
16 and - related - the Board decision 12 March 2010 (Nairobi meeting)
17 <https://www.icann.org/resources/board-material/resolutions-2010-03-12-en#13>

18

19 Board resolution 22 April 2010.

20 *Whereas, there is general and wide community support for the notion of simultaneously delegating this particular requested pair of IDN ccTLDs to meet the*
21 *well understood needs of users of Chinese, namely that users accessing a domain expect that the traditional and simplified Chinese names have been*
22 *assigned to the same registrant, and that such delegations would solve a significant problem for the user communities;*

23

24 *And the delegation of these IDN ccTLDs would be an extension to the current published IDN ccTLD Fast Track Process;*

25

26

27 *Public comment makes it clear that **the methodology for operation and management of IDN ccTLDs based on such parallel strings can only be achieved***
28 ***today through operational and administrative procedures, as there are no DNS protocol mechanisms yet that provide the desired behavior, which***
29 ***procedures must be handled by the local IDN ccTLD manager;***

30 (emphasis added, note this was situation in 2010, also note the recent comment from SSAC members below and in context of the IDN EPDP)

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The ICANN Board on 12 March 2010 resolved on a set of "Principles for Handling Synchronized IDN ccTLDs for the specific requests related to the Fast Track Process";

This resolution (March 2010) includes description of synchronized IDNccTLD strings: requests are for multiple corresponding strings that are considered equivalent, so that users of the community accessing domains under all versions of the string expect that each of them will resolve to the same address (hereafter referred to as "Synchronized IDN ccTLDs").

The (Board) ES-WG recommends that requests for synchronized IDN ccTLD strings must be accompanied by adequate and verifiable procedures to enable convergence at every level of the domain named by the TLD following criteria established in the ES Implementation Plan, and to take immediate steps to remove any divergence should it occur; and

The (Board) ES-WG recommended that if an improved technical standard for the delegation and management of Synchronized IDN ccTLDs is arrived at, and is applicable for such delegations, IDN ccTLD managers should migrate to that standard in a safe, stable and timely manner.

From the Board resolution <https://www.icann.org/resources/board-material/resolutions-2010-09-25-en#2.5> The recent delegation of Chinese-language ccTLDs does not yet provide a generally workable approach for gTLDs; there are serious limits to extending this approach at this time. ICANN will coordinate efforts to develop long-term policy and technical development work on these issues.

Note that SSAC recently (30 November) re-iterated and wished **"to emphasize that currently there is no DNS protocol solution that enforces equivalence (or the same behavior) of variants in the DNS. Policy makers need to understand this crucial limitation, so as not to design policies that attempt to force such equivalence. So in essence, although administratively these domains are considered a package, technically speaking, they are different domain names."**

Staff note: this remark was made in the context of Item 6 below

Comments on question: should simplified and traditional IDNccTLD strings be considered variants or not?
If not, grandfathered?

1 **Item 4. RZ-LGR Validation**

2 **TSG Recommendation**

3 For an applied-for TLD label whose script(s) are supported by the applicable version of the RZ-LGR, the RZ-LGR will
4 calculate either of two values: “valid” or “invalid”. Consequently, an applied-for TLD that is determined “valid” may
5 proceed with the subsequent evaluation process, whereas an applied-for TLD that is determined “invalid” must not
6 proceed, because it did not pass the validation by RZ-LGR.

7
8 Recommendation 4 describes the cases in which **an applied-for label, whose script is supported by the RZ-LGR, is**
9 **determined to be “invalid”**. The SG defers to the GNSO and ccNSO to **determine the process to deal with these cases**
10 (e.g. suspend or reject the applied-for TLD) as this is considered a matter of policy or procedure. While there may be
11 merits for either choice, the SG provides items 4.1 to 4.4 as technical input for community’s consideration, to help address
12 SSAC’s SAC060 recommendation: "ICANN must maintain a secure, stable, and objective process to resolve cases in which
13 some members of the community (e.g., an applicant for a TLD) do not agree with the result of the LGR calculations."

14
15 Consequently, an applied-for TLD that is determined “valid” may proceed with the subsequent evaluation process,
16 whereas an applied-for TLD that is determined “invalid” must not proceed, because it did not pass the validation by RZ-
17 LGR. While policy needs to determine how an “invalid” label should be dealt with (Recommendation 2 in SAC060), the
18 following technical input should be considered by the relevant policy development process:

19
20 **4.1 Conformance with IDNA2008.** An applied-for label must be in Normalization Form C7 and must conform to IDNA2008.

21
22 **4.2. Conformance with LGR Procedure.** Policy or procedure must not override the results of the RZ-LGR. That is, policy or
23 procedure alone cannot turn an “invalid” label into a “valid” label, or vice-versa. Doing so would invalidate the entire
24 RZLGR. Any change to the RZ-LGR (e.g. repertoire, variant rules or WLEs) must be undertaken using the process stipulated
25 in the LGR Procedure.

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4.3. Script LGR can be updated, if justified, using the LGR Procedure. In general, GPs make design choices based on current knowledge and available information. These choices determine the code point repertoire and its context rules, the whole-label evaluation rules and variant sets. If and when there is new information available, the LGR Procedure defines the process to update the RZLGR9.

4.4. Re-validation of applied-for label is possible. The applied-for TLD label may be re-validated when a new RZ-LGR version becomes available.

**GNSO SubPro Recommendation
[Regarding the remedy element]**

Recommendation 32.1: The Working Group recommends that ICANN establish a mechanism that allows specific parties to challenge or appeal certain types of actions or inactions that appear to be inconsistent with the Applicant Guidebook.

The new substantive challenge/appeal mechanism is not a substitute or replacement for the accountability mechanisms in the ICANN Bylaws that may be invoked to determine whether ICANN staff or Board violated the Bylaws by making or not making a certain decision. Implementation of this mechanism must not conflict with, be inconsistent with, or impinge access to accountability mechanisms under the ICANN Bylaws.

The Working Group recommends that the limited challenge/appeal mechanism applies to the following types of evaluations and formal objections decisions:

(Specifically, likely the DNS Stability aspect of evaluation/challenge procedures)

ccPDP4 VM Subgroup recommendation

1
2 **Subgroup Findings and Discussion**

3 In the last call (16 November 2021) the subgroup members discussed whether or not a process needs to be in place to review the outcome of the RZ-LGR
4 validation process of the selected IDNccTLD string, specifically if a requestor should be able to request a review if the outcome of the validation process
5 considers that the selected IDN ccTLD string is invalid.

6
7 The Subgroup considered that the application process for an IDN ccTLD process is ongoing, hence there is no window of time during which the IDNccTLD
8 has to be applied for. Hence if the selected string is considered “invalid” the request may be “cured”

9
10 Secondly, and related, the RZ-LGR is the result of extensive community consultation in which the users of the script in the relevant territory, could (and
11 most likely) have participated. Hence the outcome should and could have anticipated and not come as a surprise.

12
13 Thirdly, during the internal phase of the string selection process, the RZ-LGR is available, and information will be provided when requested to alert the
14 requesting parties of potential risks. Hence, selecting a potential “invalid” string should remain at the risk of the selecting parties.

15
16 Conclusion: the risk of selecting a potential “ invalid” string should remain with the selecting parties and hence no review mechanism is necessary for this
17 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**
18 **to the RZ-LGR, it shall not pass the string evaluation phase.**

19
20 **Additional Note based on the 14 December discussion:** If the selected IDN ccTLD string is considered “invalid” according to the technical implementation
21 of the RZ-LGR for the script in which the selected IDNccTLD string is expressed and used to verify the technical validity of the string, ICANN org and the
22 requestor are strongly advised to jointly and cooperatively review the results, including the manner in which the relevant RZ-LGR has been implemented
23 with the goal to clarify any issues. However, if after such a review the selected string remains to be determined “invalid” according to the implementation
24 of the RZ-LGR used to validate the selected IDNccTLD string it shall not pass.

25
26
27 **Second reading 14 December 2022**

28 Whether or not to have a review mechanism in place

29 2 aspects: the RZ-LGR. There might be an issue with the way the RZ-LGR is implemented. Does the algorithm produce false results? What happens next?

30 See discussion in the IDN EPDP. There are a few main differences between the overall policy for IDN ccTLDs and the EPDP. The overall policy is not limited
31 to a timeslot. Update the application, as it is an ongoing process. Secondly, there is the extensive consultation of the local community. Thirdly, one has the
32 possibility to check against the RZ-LGR and check with icann staff. Can be alerted early on in the application process whether or not there is an issue.

33 Proposal is not to include a Review Mechanism for this technical validation process.

1 Comment: Possibly a problem. Currently the EPDP for IDN TLDs considers a review mechanism. Not for content, but for implementation, i.e mechanism for
2 wrongful implementation.

3 Comment 2: Distinguish and note that there is a review process built into the RZ-LGR itself. Anyone can reach out to the panel and ask them to review the
4 proposal. It is outside the policy but it can be referred to from this doc. To show there is a review mechanism that an applicant can use, outside this
5 process.

6 Clarification: it is not about the RZ-LGR but about the implementation: is there doubt about the way ICANN has implemented the RZ-LGR. EPDP will go
7 down the path of the RM. but for the reasons: there is no way back. It is more a question whether introducing a RM, what is the benefit for the overall
8 policy? What is the effort needed? Edge cases which are costly?

9

10 Response: make a difference between gTLDs and ccTLDs. Previous gTLD rounds had initiation and end date. Limited time to apply. For ccTLDs applications
11 are on an ongoing basis. No time limitations. We are envisaging a quick review cycle. Is it correct or not?

12 Response on question: because of the way it is implemented , there is a difference in evaluation. Way to deal with this technical issue?

13

14 Hadia: agrees with Dennis. Does not think that incorrect implementation is likely. But we need to add a paragraph with what Dennis said.

15

16 Question for support : red or green marks?

17 No red marks

18 If an IDN applicant continues, that is at their own risk, knowing of the potential issues.

19

20 **Proposal was again supported on call 11 January 2022**

21 Some additional questions/comments 11 January re implementation

22 Question: does Stability enter into dialogue with applicant re the implementation of the RZ-LGR? The stability panel is not implementing the algorithm, is
23 icann implementation

24 Review to be done by ICANN?

25 The technical stability panel with respect to variants would check the status of the variant. If there is a discussion, about ICANN's technical implementation,
26 it would not make sense to have an external panel, discussing the ICANN implementation, without involvement of icann org.

27 The implementation, before it is being used, is indeed tested by icann org.

28 Therefore if the WG wants icann org to do this, this can be done

29 Comment: if we make a variant invalid, can be due to an issue during the implementation process, or a stability issue. The reason why a variant is invalid...
30 who will talk to the requestor about this? Suggestion by the subgroup is good

31 Comment: understood that the applicant will be assigned a contact point from icann org. If the applicant thinks the implementation of the RZ-LGR is not
32 correct, will address concerns via the icann org contact point

33 Response: Will be a dialogue

1 **Item 5. Should RZ-LGR for script be required?**

2 **TSG Recommendation**

3 For an applied-for TLD label whose script is not yet supported by the applicable version of the RZ-LGR, the application
4 should not proceed until the relevant script is integrated into the RZ-LGR. It is implied that the application should remain
5 on-hold (or other appropriate status) until the relevant script is integrated into the RZ-LGR.

6

7 **GNSO SubPro Recommendation**

8 **Implementation Guidance 25.3:** If a script is not yet integrated into the RZ-LGR, applicants should be able to apply for a
9 string in that script, and it should be processed up to but not including contracting. Applicants under such circumstances
10 should be warned of the possibility that the applied-for string may never be delegated and they will be responsible for any
11 additional evaluation costs

12

13 **ccPDP4 VM Subgroup recommendation**

14 **Proposed text**

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

19

20 **If the LGR for the writing system or script in which the Designated Language is expressed has not been generated or is**
21 **not yet integrated in the RZ-LGR, at the time the requested IDNccTLD string is submitted for validation (the moment the**
22 **selected IDNccTLD string and its variants are submitted for validation i.e the start of the second step of the process), or**
23 **the selected IDNccTLD string is not in compliance with the RZ-LGR, ICANN shall inform the requester accordingly and**
24 **section 5.2.2 sub C. applies accordingly.**

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Note: according to section 5.2.2 sub C of the 28 September 2021 process doc if the string cannot be or is not validated the following would apply *“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 its variant was not at the time of requesting validation of the selected IDNccTLD string and its variant(s).”*

Subgroup Findings and Discussion

Added 24 January 2022

Introduction/Background

The full WG has agreed on the general two-step process:

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.

Further, As part of the validation stage an IDN Table needs to be lodged with the IANA IDN Repository of IDN Practices, in accordance with the policy and procedures for the IANA IDN Practices Repository.

1 **Discussion 11 January 2022.** The GNSO EPDP looks into this issue. No conclusion or recommendation available yet. There is the SubPro
2 recommendation, which sets the bar. Not yet adopted, still in ODP process. Part of the proposed policy
3 Comment: cc vs g-process is difficult to compare in some ways.
4 Firstly, GNSO considers application to go through, and then be put on hold. gTLD application window is limited, and ccTLDs can apply on a
5 rolling basis
6 Secondly, the gTLD applicant may not come from the script community. The ccTLD manager has a clear mechanism or reach to the community
7 that uses that language and script
8 Question: What happens if this is across various countries?
9 Response: easy. They can still form a panel. We will announce it through the ICANN panels. There is no blocking of the process.
10 Added reference: [https://www.icann.org/en/announcements/details/fourth-version-of-root-zone-label-generation-rules-rz-lgr-4-published-6-](https://www.icann.org/en/announcements/details/fourth-version-of-root-zone-label-generation-rules-rz-lgr-4-published-6-11-2020-en)
11 [11-2020-en](https://www.icann.org/en/announcements/details/fourth-version-of-root-zone-label-generation-rules-rz-lgr-4-published-6-11-2020-en) and for creation of panel see for example: [https://www.icann.org/en/system/files/files/setting-running-generation-panel-](https://www.icann.org/en/system/files/files/setting-running-generation-panel-07nov13-en.pdf)
12 [07nov13-en.pdf](https://www.icann.org/en/system/files/files/setting-running-generation-panel-07nov13-en.pdf)
13
14 Comment: This was an issue 12 years ago, before the process was well-defined
15 Anil: example from Brhmi script. Works fine, and has representation from various countries.
16 Question: do you agree a RZ-LGR should be in place, before the string can be delegated?
17 No red marks
18
19 Question: they cannot apply?
20 Comment : see next step.
21 Comment: the RZ process to be available in the evaluation phase, and not in application phase?
22 Comment: likes suggestion that IDN table needs to be presented, valid code points etc. that is equivalent to a proposal for the RZ-LGR.
23 Parallels. Makes sense.
24
25 Question: If no evaluation will happen for a RZ-LGR exists, can the applicant apply for an IDN TLD? As there is no RZ-LGR with that script, it will
26 be on hold, until it is developed.
27 Comment: Is in line with what was said before. Applicant should be able to apply. But the application will be on hold, until the rules are
28 developed. It is good to know there is interest in a TLD.
29 Similar as now under Fast Track process, there needs to be an idn table at time of application.
30

- 1 Suggestion: that based on the 3 insights, we revisit this at the next meeting. There needs to be an RZ-LGR in place for processing. Whether it
- 2 can be submitted for an information purpose, is something to address.
- 3 VM group supports to address at the next meeting.
- 4
- 5

1 **Item 6. Limiting number of delegated variants**

2 **TSG Recommendation**

3 SSAC advises in SAC060 that too many variant labels should not be delegated. The SG considers that the matter on limiting
4 the number of allocatable variant labels to be a policy matter.

5
6 **GNSO SubPro Recommendation**

7 No corresponding SubPro recommendations

8
9 **ccPDP4 VM Subgroup recommendation**

10 **Strawman text**

11 Only **Allocatable VARIANTS** of the selected IDNccTLD string that are according to section 1.1-1.8 and section 2.1 and 2.2
12 to be **Meaningful Representations** of the name of the **Territory** in the **Designated Language** are eligible to be delegated.

13
14 Note: This implies that both all criteria, the required documentation and support from the Significantly Interested Parties are potentially
15 available for delegation. The proposal is attempting to strike a balance between the legitimate need for variants of an IDNccTLD to avoid user
16 confusion and the need to limit proliferation of strings at the root level, the general responsibilities for the security and stability of the
17 root.

18
19
20 **Subgroup Findings and Discussion**

21 Additional Explanatory note:

22 **SSAC member on the VM Subgroup indicated that SSAC wishes to emphasize that currently there is no DNS protocol solution that enforces**
23 **equivalence (or the same behavior) of variants in the DNS. Policy makers need to understand this crucial limitation, so as not to design**
24 **policies that attempt to force such equivalence. So in essence, although administratively these domains are considered a package,**
25 **technically speaking, they are different domain names.”**

26
27 Does this imply that variants are not equivalents and should not be considered as such, nor can equivalence be forced technically?

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Related, the policy applies to TLD selection, however the concerns raised by SSAC are not limited to the Top Level, but also apply to lower level (SLD and third level). Should the policy include a policy rule pertaining to lower levels or include a strong statement and reference to the issues identified?

Staff question: Should the number of variants be limited? Do the (de-)selection criteria also apply for the variants i.e feasibility of variants to be delegated? (For example: the selected IDNccTLD string MUST be a meaningful representation of the name of the Territory in a designated language of the Territory (as expressed in the related script). Does this criteria apply .

If the selected string is s1s2 and s1v1-5 are all variants of or include a variant of s1s2, should s1v1-5 meet all meaningfulness criteria to be eligible for delegation? What happens if only v1 and v2 meet meaningfulness criteria and the other don't?

7 January 2022 Staff Note

To understand the issues involved in delegating the full set of allocatable variants, the subgroup members are referred to:

SAC060 - SSAC Comment on Examining the User Experience Implications of Active Variant TLDs Report

<https://www.icann.org/en/system/files/files/sac-060-en.pdf>)

Recommendation 5: Be very conservative on code points allowed in the root zone.

The SSAC agrees with the approach in the root LGR procedure document as well as the recommendations in the user experience report. The SSAC would like to reiterate that the inclusion-based approach is preferable over exclusion-based approach for the root zone:

- Inclusion-based approach (preferred): Start with the current restricted Letter, Digit, Hyphen (LDH) American Standard Code for Information Interchange (ASCII) characters (a-z, A-Z, 0-9, -) and then extend it to include relevant, non- problematic "international" characters.
- Exclusion-based approach: Start with the entire Unicode set, and eliminate only characters that can be explicitly demonstrated as being harmful.

1 The fundamental advantage of the "inclusion-based" model is that it is far easier to restrict something initially and then later relax the
2 restriction than it is to permit something and then later attempt to remove it from use. With respect to the root zone, the inclusion
3 approach should be preferred because it is very difficult to un-delegate a TLD once it is permitted.

4 In addition, the following guidance given by the user experience report must be provided to both the generation and integration
5 panels:

- 6 • The code points allowed for the LGR must include only those minimally needed by a particular script community. For example,
7 the repertoire should not include dead scripts and code points representing archaic characters that are rarely used by a script.
- 8 • If the community cannot agree on the need of a code point, the default decision must be to not include it in the repertoire until
9 an agreement is reached.
- 10 • Any code point that is optionally written in a script (e.g., some combining marks) must not be included.
- 11 • There must be an explicit description and justification for inclusion of each code point that causes a variant, whether directly or
12 in combination with other code point(s), by the community developing the LGR.

13 Finally, even though the code point variants may be identified at the language level, the root LGR should be the union of all the
14 language level rules. The root LGR should apply at the script level despite the fact that this could generate extra variants in order to
15 promote consistency of use across global end users.

16
17 **Recommendation 8: A conservative process needs to be developed to activate variants from allocatable variants in LGR.**

18 Based on the SSAC's understanding, given the following LGR calculation: LGR(string) -> string1{state1}, string2{state2}, ...,
19 stringN{stateN}

20 Where state1, state2, ..., stateN is one of the two possible states: allocatable or blocked. A string that is allocatable does not imply
21 automatic activation; rather that it can be allocated. If the string is allocated it is done so "in sync" with the base string that was the
22 input to the LGR. As it is ICANN's role to stipulate this policy, a clear process needs to be developed to avoid ad hoc treatment of new
23 gTLD applications.

1 The user experience report recommends that ICANN must implement a well-defined and conservative variant TLD allocation process.
2 The SSAC agrees with the recommendations below:

- 3 • **The approval of a variant TLD must not be automatic** (emphasis added), but initiated upon the request of a TLD applicant,
4 explicitly specifying

5 (1) the variant label;

6 (2) the status for which the variant should be evaluated (activated, allocated but not activated, etc.); and

7 (3) the need for the variant (e.g., motivated by linguistic, security, usability and/or other considerations).

8 Unless such an application is initiated, all variants generated against a primary TLD application by the root LGR should remain
9 withheld (and un-allocated).

- 10 • TLD variant(s) must be applied for by and allocated to the same entity or registry that has applied for the corresponding primary
11 TLD label.
- 12 • All requirements for a TLD application approval process also apply to the approval of a variant TLD. These include, for example,
13 requirements for ICANN Governmental Advisory Committee (GAC) and public comments on the label, string similarity
14 evaluation and dispute processes, DNS stability evaluation of the variant TLD label, etc. ICANN must document this process
15 associated with all aspects of variants within the new gTLD ecosystem. The process is needed as the variant in a language may
16 be interpreted as a unique and different label in another language for the same script.
- 17 • The registry delegation and re-delegation processes must be extended to include activated variants of a TLD. The registry
18 contract must be updated accordingly.
- 19 • The registry fail-over plan should be extended to include activated variants of a TLD.

20 The relevant registry contract must be updated accordingly.

21
22 **IDN Variant TLD Implementation: Appendices**
23

1 Appendix C. Limiting the IDN Variant Domain Names with the Delegation of IDN Variant TLDs

2

3 <https://www.icann.org/en/system/files/files/idn-variant-tld-appendices-25jan19-en.pdf>

1 **11 January 2022 discussion**

2 Variant domain names can potentially cause an exponential growth of the number of TLD and SLDs that need to be managed as 1 single unit.
3 That has a big impact technically, and on users as well. Therefore, limit the number of variants. Allocation is not automatic, but needs to be
4 justified. The GNSO EPDP is still discussing the issue. They invited members from SSAC to go through the technical issues and have a
5 conversation. What are the implications? How small should the number be? A rational actor (TLD manager) needs to be able to prepare.
6 Manage the complexity. Friction between rational actors and security-stability concerns.
7 Comment: permutation issue. Stability issue larger than what we have at the top level
8 Comment: Jaap is member of SSAC. questions later for him.
9 What is included in doc to date is the comment from SSAC on the subPro recommendations. In bold on page 47.

10

11 Comment: An additional relevant matter here is a meaningfulness constraint for IDN ccTLD string (and variant?) which is not applicable for
12 gTLDs.

13

14 Comment: As said, the IDN EPDP WG has a discussion with SSAC next week. I'd suggest that we also postpone the discussion here until after
15 the SSAC discussion.

16

17 Comment: to date no discussion by SSAC recently. SSAC is less optimistic now versus to 2013, that things can be done without problems. No
18 change in the DNS protocols at all. All variants are DNS delegations on itself. The protocol does not know anything about variants.
19 .cat abandoned the idea of doing variants, since it is so hard.

20

21 Comment: .cat has variants. Not on top level. We run the technical backend for .cat through CORE. Variants is property of the original domain.
22 You add a variant through the existing domain name

23 Comment: stern warning. You can do this, but there is no guarantee this will work not it is IDNA **application**

24

25 Comment: There are 1244 variant Domains in .cat, i.e. about 1%

26

27 Question: additional burden for managing variants, please explain?

28 Response: no issue for us. We meet the requirements. We assign signature for the same users. No proble for .TW

29 Additional question: Is it costly or difficult?

1 Response: no, easier. Additional comment: agrees. For dot china (traditional) it works well.

2
3 Introduction of <https://www.icann.org/en/system/files/files/idn-variant-tld-appendices-25jan19-en.pdf>

4 Table on IDNccTLD strings and variants with “Pakistan” as example.

5 Based on LR-LGR there were 1200 variants. 94 were blocked, and only 6 variants were potentially allocatable. But if you look at the
6 meaningfulness requirement, the criteria would still apply here. But the number is clearly reduced, and deviates from principle of 1 tld per
7 language-script combination. Just an example. Gives you a clearer understanding of the scope and issues we talk about here.

8 Sarmad: even though the meaningful criteria is limited to the official language, a variant could be generated in a different language. The string
9 is meaningful in “some” relevant language, even if it is not the official language.

10

11 VM agreed to discuss further at the next meeting

12

13

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1 **Item 7. Need to grandfather existing TLDs after revision of RZ-LGR**

2 **TSG Recommendation**

3 It is expected that the RZ-LGR be revised throughout its lifecycle, either as a result of a new script LGR being integrated or
4 a revision of an existing script LGR being adopted. There may be cases where a script LGR does not support an existing
5 TLD. In such cases, it is possible that the existing TLD(s) may need to be grandfathered.

6 7 **GNSO SubPro Recommendation**

8 No corresponding SubPro recommendations

9 10 **ccPDP4 VM Subgroup recommendation**

11 12 **Subgroup Findings and Discussion**

13 14 **Staff Note 7 January 2022**

15 The subgroup members are referred to SAC060, Recommendation 6

16 **Recommendation 6: Because the implications of removing delegations from the root zone can have significant non-local**
17 **impact, new rules added to LGR must, as far as possible, be backward compatible so that new versions of the LGR do**
18 **not produce incompatible results with historical (existent) activations.**

19 It is expected that the LGR for the root zone will be subject to modification from time to time. However, the SSAC
20 recommends that for stability considerations such changes must be based on a defined set of criteria and modifications
21 must be undertaken with the utmost care as it is likely that TLD implementations based on a prior version of the LGR
22 might otherwise become unstable.

1 At a high level, changes to the LGR can be in the following categories, ordered from least harmful to most harmful to
2 security and stability.

3 Adding new code points to LGR:

- 4 1. Add a code point with [blocked] status which is not considered in an earlier version of LGR and which does
5 not add any variants (e.g. due to its addition in Unicode standard);
- 6 2. Add a code point with [allocatable] status which is not considered in an earlier version of LGR and which does
7 not add any variants (e.g. due to its addition in Unicode standard);
- 8 3. Add a code point with [blocked] status which is not considered in an earlier version of LGR and which is a
9 variant of an existing code point;
- 10 4. Add a code point with [allocatable] status which is not considered in an earlier version of LGR and which is a
11 variant of an existing code point (e.g. due to its addition in Unicode standard).

12 Changing status of existing code points, causing possible stability issues:

- 13 5. Change [blocked] status to [allocatable] status for a code point which is in an earlier version of LGR and which
14 does not add any variants;
- 15 6. Change [blocked] status to [allocatable] status for a code point which is in an earlier version of LGR and which
16 is a variant of an existing code point;
- 17 7. Move an [allocatable] code point which does not have [allocatable] variant code points to [blocked] status;
- 18 8. Move an [allocatable] code point that has [allocatable] variant code points to [blocked] status.

19 Changing status of existing code points, causing possible security and stability issues:

- 20 9. Make two [allocatable] code points variants of each other, where they were not variants earlier and had no
21 variants;

1 10. Make two [allocatable] code points variants of each other, where they were not variants earlier and had
2 other variants;

3 11. Change two [allocatable] variant code points to become [allocatable] code points which are not variants
4 anymore and do not have other variants;

5 12. Change two [allocatable] variant code points to become [allocatable] code points which are not variants
6 anymore and have other variants which will have to be re-grouped with these two (now) non-variant code
7 points.

8 Because the LGR procedure adheres to the principles articulated in the Internet Architecture Board Document
9 RFC6912, “Principles for Unicode Code Point Inclusion in Labels in the DNS”, the chances of cases 7-12 occurring
10 should be limited. Nevertheless ICANN should consider implementing safeguards should these rare cases occur.

11 When making changes in the LGR, some types of changes (especially 7-12 outlined above) could *adversely impact*
12 *already allocated and delegated variant labels at TLD and other levels*. Thus, new rules added to LGR should be
13 backward compatible so that new versions of the LGR do not produce incompatible results with historical (existent)
14 activations. **The SSAC considers this issue of critical importance.**

15
16 Staff note 7 January 2022

1 Section 4. IDN Tables: use cases and requirements

2 A. Staff recommendation.

3 Second-level IDN tables offered under IDN variant TLDs MUST be harmonized.

4

5 Second-level IDN tables applicable for an IDN variant TLD set must be mutually coherent but not necessarily identical. For
6 two second-level variant labels s1 and s1v1 under any TLD t1 generated using the applicable IDN table for t1, these must
7 also be variant labels under TLD t1v1 if generated by the applicable IDN table for t1v1. This also implies that the complete
8 set of second-level variant labels may not all be valid under all variant TLDs. For example, for the second level label s1v2,
9 the domain name s1v2.t1 may be valid, but due to difference in IDN tables for variant TLDs, s1v2.t1v1 may not be valid.

10

11 B. Findings and Observations SubGroup

12 Reading deferred until section 3 is completed. Note: IDN Guidelines version 4.0 will need to be taken into consideration.

13 Background material for consideration by VM

14

- Recommendation 4 and 5 staff paper.

15

- Text and use cases defined in original Board Report. See section 5.1.2, Section 5.2.1 and 5.2.2 of ccPDP4-WG proposed sections 5-9

16

Additional background material:

17

- <https://www.iana.org/domains/idn-tables>

18

- <https://www.iana.org/help/idn-repository-procedure>

19

- <https://www.icann.org/resources/pages/idn-guidelines-2011-09-02-en>

20

21 IDN Tables submitted as part of Fast Track project. In some Fast Track process. Used by IDN ccTLD managers, earlier IDN used for variants for
22 the ccTLD label, also how as defined. Different use cases. Fast Track for second level application

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Update policies and procedures to require harmonized IDN tables across IDN variant TLDs to produce a consistent set of second-level variant labels. Also, require second level variant labels to be allocated to the same registrant under all variant TLDs.

Staff Note: This item will be addressed under section 4.

With respect to second point see Section 2 recommendations 3 and 4 & 4A

TWO TLDs variant harmonization , variants , creates variant in one, should be variants

Variant in Han traditional -and simplified

Ai-Chin: procedure IDN Tables harmonized tables, misunderstanding

RZ-LGR, only own IDNccTLD

Across IDNccTLD

1 Section 5. Review of IDNccTLD string selection process

2 The IDN string selection PROCESS as been reviewed and updated (Status July 2021) by the full WG, will need to be
3 reviewed by the sub-working group to suggest changes to accommodate the recommendations of the sub-group under
4 section 2, 3 and 4 above.

5
6 IDN and ASCII characters as variants of the selected IDNccTLD string. Not all variants are IDNs, some may be ASCII, if ASCII
7 how does this relate general requirement (at least one non-ASCII character). Is there a potential hierarchy of
8 requirements? uncover requirements Flag for full working group
9 If in principle all Variants of IDNccTLD are allowed to be delegated -> ASCII string. What if ASCII string already exists?

10

11 Note: related to discussion section 3 item 6. SSAC recommendation to minimize number of delegated strings. Potential
12 unnecessary burden if to many variants are all delegated. Potential solution is to limit the number allowable (delgatable)
13 IDNccTLDs strings to variant IDNccTLD strings that are meaningful.

14

15

16 Questions Issues Identified in Staff Paper

17 Identified issues to date

18

19 The report on [IDN Variant TLD Implementation: Recommendations and Analysis](#) raises the following items for the consideration of ccNSO in
20 Section 3 – Analysis of Recommendations:

21

22 (pg. 8)

23 1. *Update policies and procedures to ensure that the definition of variant TLDs depends exclusively on the RZ-LGR.*

24 **Sub group Findings and Comments**

25 **Staff Note:** under discussion. To be suggested by VM Subgroup.

1 Main group has not yet discussed variants. That is what this group is doing. This group needs to review the results by the full group, and come
2 up with recommendations where that proposed policy needs to change.
3

4 Main tasks by sub-group:

- 5 • First come up with recommendations on VM itself
- 6 • Review the proposals by the full WG and where needed come up with recommendations

7 2 step-process. When we discussed this in the main group, to include RZ-LGR to validate the main string, it was suggested to take this up
8 by VM-subgroup. But this group focuses mainly on other aspects. Should we say something about the original string also being validated
9 through RZ-LGR

10 Note section 3 item 1 still needs to be discussed.

11 Suppose there is no support for a particular script

12 Rephrase section 1. Idn cctlds as a sub-question. Definition of idn ccTLDs depends exclusively on RZ-LGR.

13 Note that these questions were drawn in context from variant TLDs. Copied from staff paper. Limited in scope. To be included as item
14 1a. To be revisited. All IDN ccTLD strings should depend exclusively on RZ-LGR to be valid

15 Original policy. We parked the conversation. RZ-LGR is now the one and only IDN table to select the IDN ccTLD string. Validation,
16 and then to calculate the variant labels of the applied for string. Needs to be included as one of the main questions, under section 4. Use
17 case for IDN tables. Separate discussion item

18

19 2. *Update policies and procedures to incorporate the “same entity” rule for a given label beneath two variant TLDs.*

20 Staff Note: See Section 2 Recommendation 3 and 4 above

21 Agreed

22

- 1 3. *Update policies and procedures to set a functional definition for “same entity” [for the second level] in the absence of EPP contact*
2 *objects or associated ROIDs. (The action might be that this is not a ccNSO responsibility, but one taken by each registry instead.)*

3 Staff Note: Generic Same entity definition is beyond scope, and very dependent on specific registration policies. Example: some (IDN)
4 ccTLD will allow registration by non-national individuals or legal entities, whilst others only allow registration by legal entity, which was
5 established under specific relevant laws for the Territory.

6
7 **WG discussion and observations**

8 First reading Agreed

9
10 Second reading:

11 Looking at the request to this WG to look at the policies and procedures to consider an update of the VM- TLDs. how to introduce a
12 framework to manage VM-TLDs. Top level, with consequences for second level domains. To be listed: what are the policies we
13 reviewed , and the rationale for updating - or not - the policies. E.g. change in hands of an operator. Transition from one operator to
14 another. Gaining operator needs to have the infrastructure ready. What will happen with the 2nd level TLDs? How will they transition
15 to the new operator? Domains that are somehow related to each other. Preserve that state.

16
17 Difference between number 2 and 3. 2 is for TLDs, number 3 is for second level domains. Group agrees that the variants should be
18 managed by the same entities. Question now is: general agreement on what the same entity is for the 2nd level. Some mechanism to
19 be developed. Agreed with Dennis. Motivation of having a definition is the interoperability option. We do see in the cc-space that the
20 tech operators for ccTLDs do change, albeit less frequently. Some merit of considering the definition to be consistent from an
21 interoperability perspective.

22
23 Question: Do ccTLD operators work with (accept registrations from) non-ICANN-accredited registrars? does someone know this?

24 Response: understanding ccTLD backend providers. CcTld managers could be any entity. The cctld manager will and shall define the
25 policy for the ccTLD. (ASCII and IDN). not up to the ccns0 or icann to decide. That policy is in general defined locally, to reflect the
26 relevant laws of the related country, etc.

27 Clear that a same entity needs to run it. How it looks and how it is defined is purely a local matter.
28

1 Appreciate the point. Interoperability concerns with the backend providers. But also interoperability concerns when the ccTLDs are
2 working with the registrars. How are variants handled by different registrars? It becomes difficult for registrars to support, for the same
3 interoperability concerns.

4 Same observation. From the ccTLD world. If they work through registrars, they have their own mechanism to accredit registrars. Some
5 cctld have a lot of registrars, an easy process. Others make it hard to become a registrar. As soon as you define this, you step over the
6 remit of the policy scope. However, it is important to alert IDN and ASCII ccTLDs to this issue. They are advised to address this, for
7 interoperability reasons.

8 Agree with proposed idea. But it is strange to add a recommendation regarding interoperability. Something good for registrars or
9 backend service providers. But is it good for ccTLD managers too? They have their own policies. This group does not have to put this
10 type of recommendation forward.

11
12 Note previous question whether ccTLDs have their own registrars. Accredited by the ccTLDs themselves. Each ccTLDs has its own
13 process for accrediting registrars. Might be icann accredited registrars, but not necessarily. Might be useful to note this as an issue that
14 ccTLD Managers should consider. Rephrase: Rather an advice, but not a policy recommendation

15
16 ccTLDs accredit their registrars themselves, with their own criteria and requirements. That needs to be made clear to the broader
17 community

18 Supported in second reading

19
20 (pp. 11-12)

- 21 4. *Update Final Implementation Plan (FIP) of the Fast Track Process and subsequent IDN ccPDP, including update of Sections 3 and 4 of FIP*
22 *(see discussion above); may include new draft letter between ccTLD managers and ICANN*

23 Staff Note: The ccNSO has requested standstill of evolution of the Fast-Track process. See letter ccNSO to the ICANN board of Directors
24 <https://ccnso.icann.org/sites/default/files/field-attached/sataki-to-chalaby-04sep19-en.pdf> and response from the chair of the Board:
25 <https://www.icann.org/en/system/files/correspondence/chalaby-to-sataki-31oct19-en.pdf>

26
27 Agreed approach: Evolution of the Fast-Track Process, if at all, should be limited to issues that cause a demonstrable threat to the
28 security and stability of the DNS, can only be addressed through an amendment of the Fast-Track Process, and require resolution before
29 completion and implementation of the envisioned ccPDP 4.

1 Question: Is suggested update an issue that causes demonstrable threat to the security and stability of the DNS, can only be addressed
2 though an amendment of the Fast-Track Process? Also, in light that the draft letters or AFs as suggested in FIP have hardly been in use.

3
4 Second reading:

5 For final implementation plan. Extensively discussed 6 weeks and 2 weeks ago as well.

6 Staff questions were raised early 2019. Ccnso has requested to stop the evolution of the fast track process, pending a policy
7 development process. Evolution of FTP should be limited to issues to demonstrate a threat to security and stability

8 Transitional arrangement.
9

- 10
11 5. *Update domain transfer and update process to reflect inter-TLD linkages due to variants and the need to enforce the “same entity” rule*
12 *(e.g. that s1.t1 and s1.v1t1 may have the same contact ROID after a <domainUpdate>).*

13 Staff Note: Explanation needed

14 What is meant is an update to a 2nd level domain, gets transferred, etc.

15 Dennis: The original policy talks about the IDN table used to select a ccTLD IDN string ... in this working group we are considering
16 using the RZ-LGR as the one and only IDN Table used by every single applicant of an IDN ccTLD string. lifecycle of domain names to
17 maintain the same entity principle?

18 Bart: if an IDN ccTLD manager agrees that the variant is delegated, all successive actions around that string should follow

19 Number 5 talks about 2nd level. Should be similar as for top level domains.

20 Suggests to include a staff note to reflect that understanding. Seems logical, if the sub group and full group agree with item 4 and 4.a.

21 However, note this is really looking at the policies of the ccTLD Managers. At a minimum suggest that it is advised.

22 To be agreed in second reading.

23 2nd level domains should be transferred as as package. Not move one of the variant TLDs separately from the rest.

24 What is included in the notes reflects that explanation. Result from the discussions at the previous meeting

25 Observation: this about the 2nd level.

26 Note that the response of the subgroup at the last meeting. If you agree with item 4 and 4a, it seems logical to do this. But, it goes into the
27 policies of TLDs. if a ccTLD has to do this, it is advised to follow this recommendation as well.

28 Supported in second reading
29
30

1 6. *Update policies and procedures to allow the lists of reserved names and the strings for inappropriate delegation to reflect any variants.*

2 Staff Note: To date there is no list of reserved names and strings for inappropriate delegation under a ccTLD policy.

3 From previous meeting. Note that from the ccNSO perspective, there are no reserved names or strings, under any policy. This question
4 is from that perspective not relevant. Any questions regarding the questions and observations? None.

5 Do you agree, that from a ccNSO policy perspective, this is not relevant?

6 No red marks.

7
8 Second reading 21 September 2021

9 Question: Is number 6 is now not relevant, but what about the future?

10 Response: if this would become relevant, it would need to be a policy. You cannot pre-empt on a policy that still needs to be
11 developed. 2 ways of dealing with this:

- 12 • Group could include a point of reference, if it ever is discussed that the ccnsso is advised to look at it from a variant perspective
- 13 • Leave it up to council and those who deal with variants, to further discuss this, if the ccnsso would ever go down the path of
14 reserved names

15 Either you suggest the action now, or you leave it up to the ccNSO to address this in future. Support for this particular section
16 understood as follows: it will not be further included.

17 Suggestion to add alternative option. Add a note.

18 Observation: note included that in case a policy will be developed around reserved names for ccTLD, variant management observations
19 need to be included. Does the group agree?

20 2nd reading needed to confirm note is included.

21
22
23 7. *Update ccTLD redelegation policy to reflect “same entity” constraint on variant TLDs.*

24 Staff Note: ccTLD transfer policy is based on RFC 1591 as interpreted by FoI. This particular point is addressed in Section 2 point 9.

25 Rationale again for inclusion: the Selected IDNccTLD string and its variants are one and the same.

26 Supported August 2021

27
28 (pg. 14)

29 8. *Update policies and procedures to incorporate variant label states and transitions between them.*

1 Staff note:

2 The label states that have been identified are:

- 3 • Delegated
- 4 • Withheld-same-entity: Withheld-same-entity: A Withheld label is set aside for possible allocation only to the same entity of the
5 other labels in the variant set.
- 6 • Blocked
- 7 • Allocated
- 8 • Rejected: A Rejected string is set aside on administrative grounds outside the ordinary LGR procedures. Other terms used “Not
9 Approved” and “Will Not Proceed”. Strings that cannot be allocated on visual confusability grounds, based on the string
10 similarity review step in the TLD application process, are also Rejected.

11 Question: are these the only relevant states with respect to variant IDNccTLD? Is selected IDNccTLD string relevant? How does selected
12 IDNccTLD string relate to its variants? See also questions section 3.

13

14 Proposed to include various definitions of states in glossary: agreed in first reading.

15 Supported second reading 21 September 2021

16

17 (pg. 15)

18 9. *Update policies and procedures for filing IDN tables using the LGR format specified in RFC 7940 as per IDN Guidelines 4.0.*

19 Staff Note: This item is addressed under section 4.

20 Agreed

21

22 10. *Update policies and procedures to require harmonized IDN tables across IDN variant TLDs to produce a consistent set of second-level
23 variant labels. Also, require second level variant labels to be allocated to the same registrant under all variant TLDs.*

24 Staff Note: This item will be addressed under section 4.

25 With respect to second point see Section 2 recommendations 3 and 4 & 4A

26 Two TLDs variant harmonization , variants , creates variant in one, should be variants

27 Variant in Han traditional -and simplified

1 Ai-Chin: procedure IDN Tables harmonized tables, misunderstanding

2 RZ-LGR, only own IDNccTLD

3 Across IDNccTLD

4 Agreed in 1st reading

5 Second reading 21 September 2021: Agreed to discuss further under Section 4 IDN Tables

6
7 *11. Those TLDs using EPP may need to create an enhancement (either a protocol modification, a standard message, or a standard*
8 *extension) that permits expressing response messages for unavailability of an unallocated label due to variants. Work with the*
9 *technical community to make this enhancement.*

10 Staff Note: Should this be a recommendation from the WG to IDNcTLD Managers?

11 To be discussed whether the WG needs to go as far as number 11 suggests. This goes deep into the business of the IDN ccTLD
12 manager. Recognising that it might be an issue, there could be an advise which is not a hard requirement, but use “may/should” type
13 of language.

14 Agreed 1st reading

15
16 Second reading 21 September

17 EPP. observation that it is into the remit of the ccTLD manager. Suggestion to include it as an advise, not as a hard requirement.

18 Question: what do we try to solve? Then we can discuss how to solve it.

19 Response: reading original notes from the staff paper. This is communicating or allowing for communicating, if someone is registering a
20 domain name, it allows to share additional domain names in the registration request. Names that are suggested as blocked or
21 allocatable. Epp request needs to be enhanced, not just limited to the original string.

22 Observation: sitting on the seat of the IDN ccTLD manager

23 Response: some managers do not use EPP. internal implementation. In case they use EPP. was rather targeted at gTLDs.

24 Observation: looks that signalling the availability of domain names is a commercial problem. Not sure how we want to prescribe this
25 from a policy standpoint.

26 Observation: This rfc is about variant EPP. <https://www.rfc-editor.org/rfc/rfc9095> [rfc-editor.org]

27 third category. Available. Not available for 2 reasons: either already registered. Or not registered, because its variant is already
28 registered.

29

1 This goes at the heart of the role of the cctld manager and the SIP.
2

3 **Proposal following the discussion of section 5. The questions around VM shape the policy and originate from**
4 **staff papers. Going forward, the group should consider what is relevant for the policy, and should be adopted**
5 **therefore and what is relevant but is considered out of the policy scope and could be included as advise to cctld**
6 **managers, with a link background material regarding the topic. The proposal is to first decide whether a**
7 **topic/issue is a policy matter or not, if not, whether the WG should /could include a reference as responsibility**
8 **for the cctld manager. The goal is to ensure that a ccTLD Manager, involved in IDNs, is aware of issues, risks and**
9 **potential solutions to address the issues or mitigate the risks.**
10
11
12

13 (pg. 21)

14 *12. Update the string similarity guidelines for TLDs and their variant labels.*

15 Staff Note: Confusing Similarity of string is topic to be discussed and worked by 3rd sub-group

16 Supported second reading
17
18

19 (pg. 23)

20 *13. Review string similarity procedure to address decorated two-character Latin labels.*

21 Staff Note: Confusing Similarity of string is topic to be discussed and worked by 3rd sub-group

22 Agreed 1st reading

23 Supported second reading
24
25

1 Section 6. Issues for discussion with full working group

2 Note: 2 issues

- 3 • Membership ccNSO. Related to the iana root zone DB. if listed as a ccTLD manager, you are listed as such. Then you
4 can apply for ccNSO membership. E.g. NIXI manages 22 ccTLDs including the IDN ccTLDs and .in. You can imagine
5 that if there would be variants as well, the number of entries for NIXI in the root zone would increase.
6 Requirements for ccNSO membership. The ccnsso had to deal with this: one vote per country. Implications and
7 impact on the membership of the ccNSO

8 Q: is this for this WG to discuss? Response: it is a consequence for introducing variants. May need to be flagged as
9 something for the broad group to discuss

10

11 Scope of Variant Management recommendations:

12 Temperature of the room.

13 You heard the argument. On the one hand , this could be over the line of the ccNSO policy remit as defined in Annex C. On
14 the other hand, is the argument that variants are one and the same. Opening the possibility for diverging registrations
15 would break that fundamental principle. Opportunity for the full group to chime in, and there will be a public comment
16 too. You know there will be comments on this.

17 Temperature check Alternative wording: change “Must” in section 2, item 3 and 4 to “Should” (strong advise, expected
18 not mandatory recommendation).

19 Who would be in favour to change “must” to “should”? Minority

20 Leave it as it is? Majority

21 Suggestion is to keep “must”.

22 Note we are talking about variants. Single second level strings. Variants under the IDN variant ccTLD. Line item 11. This
23 part still talks about variants at the 2nd level. But in this recommendation we only talk about the top level. However this is

- 1 top ensure the consistency across the delegated variants of a specific IDNccTLD, which is also required for a more
- 2 seamless transfer, revocation and retirement of (IDN)ccTLDs.