Sub-group Findings introduction Variants IDNccTLDs

3 Version 3

4 8 December 2021

1 Table of Contents

2	Section 1. Introduction
3	Section 2. Overview IDN Variant TLD Recommendations
4	Item 1. Defining IDN Variant TLDs7
5	Item 2. Allocation of TLD to the same entity
6	Item 3. Allocation of SLD to the same entity13
7	Item 4. Registration of SLD variant labels under variant TLDs to the same entity16
8	Item 5. Harmonization of SLD IDN Tables19
9	Item 6. Not all variants across Variant TLDs need to be operational20
10	Item 7. Back-end registry service providers for variant TLDs
11	Item 8. Update of basic policies to take into account variant management recommendations
12	Item 9. All existing policies apply to IDN variants, unless specifically stated otherwise25
13	Section 3. Overview of Recommendations on the Technical Utilization of RZ-LGR
14	Item 1. All TLD strings/labels to be processed using RZ-LGR28
15	Item 232
16	Item 3. Need to address any existing possible deviations from the calculation of the RZ-LGR
17	Item 4. RZ-LGR Validation41
18	Item 5. Should RZ-LGR for script be required?44
19	Item 544
20	Item 6. Limiting number of delegated variants
21	Item 7. Need to grandfather existing TLDs after revision of RZ-LGR48
22	Section 4. IDN Tables: use cases and requirements

1	Section 5. Review of IDNccTLD string selection process	l
2	Section 6. Issues for discussion with full working group)
3		
4		
5		

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:
- How are Variants of the selected IDNccTLD string defined?
- **•** 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 <u>resolved</u> to
- 9 implement the <u>LGR Procedure</u>. 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 <u>Rules</u> 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
- 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:
- IDN Tables. Section 4 will include the findings and recommendations of the sub-group with respect to IDN
 Tables with respect to IDNccTLDs.
- Impact recommendations sub-group on the process proposals of the full WG. The sub-group reviewed and
 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.

- 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
- 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.

Section 2. Overview IDN Variant TLD Recommendations

2 Item 1. Defining IDN Variant TLDs

3 A. ccPDP4 VM Subgroup Recommendation.

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

7

1

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 RZ-LGR Designed tool string / label. Output set contain all variants. Blocked maximized, variants 16 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

1 Item 2. Allocation of TLD to the same entity

2 A. ccPDP4 VM Subgroup Recommendation.

IDN variant TLDs {T1, T1V1, ...,T1Vx} MUST be allocated to same entity. The set of allocatable variant strings that is generated from the selected IDNccTLD string by applying the RZ-LGR, MUST be allocated to one and the same entity, the requestor (the entity that submits the selected IDNccTLD string), delegated to one and the same entity, the IDN ccTLD Manager) or withheld for possible future delegation to the IDNccTLD Manager. In other words, for a selected top-level label T1, its allocatable variant label(s) T1V1,..., T1Vx shall only be allocated to the IDN ccTLD requestor, or - after the delegation process for the selected IDNccTLD string has been intitated - delegated to the same IDNccTLD Manager or 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 (delgatable) IDNccTLDs strings to variant IDNccTLD strings that are
- 24 meaningful.
- 25

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

1	
2	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?
3	Registry operators in the gTLD world. Entity that is the TLD manager
4	
5	Q: regarding the backend providers, should we include anything here? Response: IDNccTLDs with high level of complexity. Limited practice in this area. Be
6	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
7	the full WG.
8	Mechanism where we strongly urge, support and almost enforce IDNccTLD managers to adhere to this basic recommendation. ccTLD-world does not have a
9	registry Agreement. If we suggest to leave this up to implementation, there will be a lot of push-back.
10	Q: what is backend provider? The technical support provider (TSP)? R: yes. Example AUDA. clear line between the policy-setting and administrative
11	organisation on the one hand, and the operational and technical organisation.
12	With respect to "back-end service providers" see also item 7 below
13	Q: Suppose the backend is still the same, how will this recommendation become invalid?
14	Response: If you have multiple variants under management, the entity could assign the various variants to backends among several parties. Situation you
15	want to avoid. To ensure coherent management of variants.
16	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
17	differences. Should be avoided for TLDs that are variants of each other.
18	
19	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
20	meeting 27 June 2021
21	
22	Next meeting: come up with a mechanism that would ensure this, to the extent possible.
23	Q: once variants are delegated, will they be listed in the root zone DB as a separate entry?
24	Response: the variant is an annotation to the string. Entry in the root zone, similar record as any other entry. Some constraints.
25	
26	Note: suggestion to go back to IANA, and ask them for input.
27	Response: Currently, IANA has NOT defined how it will handle variants. However please note the following in response:
28	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
29	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
30	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
31	not need to be adjusted and treat each variant as a TLD with no special consideration for them being variants.
32	

1 2 3	IANA expressed hope that whatever parameters / constraints is arrived at by ccNSO policy is will be compatible with GNSO policy. IANA strives wherever 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 database that will certainly simplify things greatly.
4	
5	Note the concern in second paragraph form IANA relates to item 8 and item 9. Question: do variants follow the life-cycle of selected IDNccTLD string (of which they are derived)? Life-cycle: request for delegation, transfer (consented or
6 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
20 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 31	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 32	variants".
54	

- 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].

1 Item 3. Allocation of SLD to the same entity

2 A. ccPDP4 VM Subgroup Recommendation.

A Second Level string registered under a delegated variant IDNccTLD strings MUST be registered for the same entity under all other variant IDNccTLD strings. If (multiple) IDNccTLD variant strings have been delegated, then a second-level string that is registered under a (variant) IDNccTLD string MUST be registered for one and the same entity or withheld for 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 anopther variant IDNccTLD variant string MUST be registered or withold for future 11 regsitration for the same entity.

12

Note and comment. By definition (see recommendation 1 above) a domain and its variants are one and the same. For reasons of security, stability and interoperability of the DNS, one and the same domain can not be delegated or operated 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 purselves. Anticiaption 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 manner, adequate to resolve names within the requested string by users throughout the Internet and in compliance with Relevant Applicable 3 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 DNS responses 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

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

2 A. ccPDP4 VM Subgroup Recommendation.

3 4 5 6 7 8 9	All variants of a Second-Level string registered under all delegated variant IDNccTLD strings MUST be registered to the same entity under all IDNccTLD variant strings. IF IDNccTLD variant strings have been delegated, and for a second level string to be registered under an IDNccTLD string a set of allocatable variant second level strings can generated by applying the IDN Table for second level strings under the IDNccTLD string, THEN under all delegated IDNccTLD variant strings all the set of allocatable variant second level strings MUST be either registered for one and the same entity or withheld for possible future registration by that same entity AN / Or
10 11 12 13	Transitional arrangement for discussion at later stage: If a variant IDNccTLD string is delegated after the IDNccTLD has become operational this recommendation also applies: under the newly delegated variant IDNccTLD string all allocatable variant second level strings of a registered second level string MUST be registered for one and the same entity or withheld for possible future registration for that entity.
14	B. Sub-group Findings and Discussion.
15 16 17 18	Second reading support 21 September 2021 Staff Note: Relevant sections in the ccPDP4 WG document, which includes refers to IDN Tables and the related policies and procedures. Staff Note: Scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws)
19 20 21 22 22	Staff Note: This recommendation is an extension of recommendation 3. Although the scope of the ccNSO PDP (Annex C of the bylaws) may be limiting factor, by definition (see recommendation 1 above) a domains and its variants are one and the same. For reasons of security, stability and intertoperability 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 interfers 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 28	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 29	2nd level. But in this recommendation we only talk about the top level.
29 30	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)

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

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 at the 2nd level, in TLDs that will not have variants. So, we need consistency for all. 12 13 14 Staff Note: Scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws) Use language Expected, but not mandatory? However, note that by definition (second level) domains and their variants are one and the same 15 domain. This is derived from actual definition of variants. 16 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.

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

1 C. ccPDP4 VM Subgroup Recommendation.

The sub-set of registered and sub-set of withheld for possible future second level variant IDN strings may vary across 2 the IDNccTLD variant strings. IF IDNccTLD variant strings have been delegated, and for a second level string to be 3 registered under an IDNccTLD string a set of allocatable variant second level strings can generated by applying the IDN 4 Table for second level strings under the IDNccTLD string. THEN the sub-set of registered allocatable variant second 5 level strings and sub-set of allocatable variant second level strings the withheld for possible future registration may 6 vary across the delegated IDNccTLD variant strings. 7 8 D. Sub-group Findings and Discussion. 9 Staff Note: scope of ccNSO PDPs may be a limiting factor (Annex C ICANN Bylaws), to define this a policy requirement. 10 At the same time, note that recommendations is cast in terms of advice or guidance, not as a requirement. 11 Explanation needed: is intention of the original staff recommendation that not all variants of one and the same Second 12 level strings, which according to recommendation 4 have been registered for the same entity under each variant IDNcTLD 13 need to be operational? In other words: not all variants of a second level have to be "in use"? 14 Behaviour, Blocked or allocatable 15 RZ-LGR to validate the TLD 16 17 Policies IDN Table -> ccTLD Manager define their own IDNccTLD tables 18 To be discussed in context of Section 4 (IDN Tables) 19 20 21

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

2 A. ccPDP4 VM Subgroup Recommendation.

- All delegated variant IDNccTLD strings MUST be operated by the same entity. If a specific IDNccTLD is operated by the
 IDNccTLD Manager all variants MUST be operated by the IDNccTLD Manager (IDNccTLD Manager is the entity or
 organisation listed in the IANA rootzone database as the ccTLD Manager for a specific [IDN]ccTLD). If a specific IDNccTLD is
 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:
 - What about blocked variants?
 - What about allocatable but not delegated variants strings?
 - What about delegated variant strings?
- 14 15

12

- 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

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

2 A. ccPDP4 VM Subgroup Recommendation.

 may vary for the selected IDN ccTLD string and its allocatable variants. If a selected IDNccTLD string is delegated under the existing relevant policy for delegation of ccTLD, the whole set of allocatable IDNccTLD variants SHALL be delegated, or withheld for future delegation to the same entity, on the basis of the request for delegation of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string is requested to be transferred in accordance with RFC1591 as interpreted by the Fol to another entity, the whole set of allocatable IDNccTLD strings SHALL be transferred or withheld for future delegation to the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked. If the selected IDNccTLD string should be retired as foreseen under this policy, all variant IDNccTLD strings SHALL be
 allocatable IDNccTLD variants SHALL be delegated, or withheld for future delegation to the same entity, on the basis of the request for delegation of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string is requested to be transferred in accordance with RFC1591 as interpreted by the Fol to another entity, the whole set of allocatable IDNccTLD strings SHALL be transferred or withheld for future delegation to the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 the request for delegation of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string is requested to be transferred in accordance with RFC1591 as interpreted by the Fol to another entity, the whole set of allocatable IDNccTLD strings SHALL be transferred or withheld for future delegation to the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 If a selected IDNccTLD string is requested to be transferred in accordance with RFC1591 as interpreted by the FoI to another entity, the whole set of allocatable IDNccTLD strings SHALL be transferred or withheld for future delegation to the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the FoI, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 another entity, the whole set of allocatable IDNccTLD strings SHALL be transferred or withheld for future delegation to the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 the same other entity, on the basis of the request for transfer of the selected IDNccTLD string, unless otherwise foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 foreseen under this policy. If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the FoI, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 If a selected IDNccTLD string or any of its variants is revocated in accordance with RFC1591 as interpreted by the Fol, a other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked.
 other allocated variant IDNccTLDs (delegated or withheld for future delegation) SHALL be revoked. 16
16
18 retired, unless otherwise foreseen under this policy.
19
20
Implementation of this and other recommendations pertaining to variant IDNccTLD strings is considered a matter of
22 implementation.
23
24

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 slection 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 revocated all allocated variant IDNccTLDs (delegated or withheld for future
26	delegation) MUST be revocated 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

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

3

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
- IDN TLDs must comply with IDNA2008 (RFCs 5890-5895) or its successor(s).
- All selected IDNccTLD strings MUST be processed using the RZ-LGR to determine:
- 7 **1.** if they are valid and.
- 8 2. Calculate Variants. Use RZ-LGR to assign status blocked or allocatable.
- Special use case: RZ-LGR in relation to ASCII ccTLDs: Should RZ-LGR be applied used to all combination of two ISO 646
 Basic Version (ISO 646-BV) characters (2-letter [az] codes) to ascertain all potential variants? If so, what is consequence in
- 11 case:
 - Variants in other scripts?
 - Variants in Latin?
- If RZ-LGR is applied to selected IDNccTLD string (for 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 o Blocked
 - Result in not allowing the selected IDN ccTLD (to maintain the and predictability of the current ccTLD
 - delegation policy
- 20

19

12 13

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	
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
,	1. Not anowed i.e., not processed & await ite Edit for script of writing system
0	2. Only Salastad string processed (as under East Track Drasses), no variant identified (concreted
8	2. Only Selected string processed (as under Fast Track Process), no variant identified/generated
0	
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:
14	The proposed string is processed. Valuate the laber and identity the variants and assign as.
1 5	
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-Igr 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 Cyrilic 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

- For the scripts and writing systems which have been integrated into the RZ-LGR, the RZ-LGR must be the only source for processing the following cases:
- Validate an applied-for TLD label and determine its variant labels with corresponding dispositions
- Calculate variant labels, and corresponding disposition values, for each one of the already allocated or delegated TLD
 labels
- Calculate variant labels, and corresponding disposition values, for each one of the reserved TLD labels

1 B. **GNSO SubPro Recommendation.**

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

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:

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

1 D. Sub-group Findings and Discussion.

Staff Note: Currently IDNccTLD strings are only delegated. Desired IDNccTLD Variant Strings have been identified, and are 2 considered "reserved". However their status needs to be defined. According to the ICANN website: "The desired variant 3 string(s) are strings allocated to the requester. This does not mean that they will be delegated in the DNS root zone. They will be 4 allocated to the requester in order to be reserved to the entitled manager for potential future delegation in the DNS root zone." 5 According the Fast Track Implementation Plan (section 3.4): 6 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 Final 8 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 the 11 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 models, 13 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 launch:

- Variant TLDs desired by the requester for delegation must be indicated by the requester
 Desired variant TLDs will be allocated to the requester (if successfully evaluated). This do
 - 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 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 zone.
- 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.
- 19 Subsequent application or request for non-desired variants will be denied.

20 The community is expected to continue working on more clear definitions of variants, solutions or methods for delegation of variants, and any necessary dispute 21 mechanisms related to disagreement regarding desired and non-desired variants. For the purpose of including new development in the Fast Track Process, it is

22 scheduled for revision.(See Module 9 for more details)

- 1 Question 1: if "desired variant IDNccTLD strings are allocatable in accordance with the RZ-LGR, should special
- 2 arrangement still be made?
- 3 Question 2: if "desired variant IDNccTLD strings are NOT allocatable in accordance with the RZ-LGR, should special
- 4 arrangement still be made?
- 5 From 30 November 2021 meeting
- 6 What is meant by special arrangements?
- 7 Response: for instance, a rule, by you.
- 9 Note: allocatable and blocked variants.
- When variants are not defined as symmetric. Concrete example: Arabic scripts. Allocatable variant: diacritice form to a simple form. The other way is a blocked variant. If the applicant applied with the diacritice form, they would be eligible for the simplified variant.
- 13 Querstion: do you foresee issues with RZ-LGR?
- 14 Iran, Macao, Pakistan, 3 Saudi Arabia, Syria, Taiwan: desired variants under the fast track process.
- 15 Comment: refers to example mentioned above. Even if this variant is allowed by a special arrangement, wouldn't it be blocked afterwards, due to
- 16 similarity checks?
- 17 Response: It will be allocated to the same entity. To avoid security issues. Variants allocated to the same TLD operator.
- 18
- 19 Comment: Note the limited number "desired variants" under Fast Track process of . If you look at the fast track, these are the corner cases.
- 20 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
- 21 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.
- 26 But not so complicated to solve.
- 27
- 28 Question: What about desired variants under Fast Track Process
- 29 Response: Not sure which category they fall
- 30
- 31 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?

1 2	Question for clarification and initial response: why needed? How? The answer is "by policy". However does the WG want to have an exception?
- 3 4 5	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.
6 7	If the conso 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.
8 9 10	Comment: second option is not even open. Limited set of desired variants, which have been requested originally. See: <u>https://www.icann.org/resources/pages/string-evaluation-completion-2014-02-19-en</u>
11 12 13	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 be aware of this particularity.
14 15 16	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.
17 18 19	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?
20 21 22	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.
23 24 25	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?
26 27 28	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.
29 30 31	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
32 33 34	Additional comment: When we applied the IDN ccTLD under fast track process, we summit the IDN variant table, and the desired variant string come from the IDN variant table.
35 36 37	Concluding question: If you look at the self-identified variants, should they be checked by RZ-LGR, or proceed anyhow? Group checked green marks (yes, should be checked)

- 1 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 2 version of the RZ-LGR? perhaps we are discussing theoretical problem that may not exist
- 3 Response: In respond to question. The self-identified variant labels of existing ccTLDs not covered by the RZ-LGR calculation is Syria.
- 5 Comment: What to do if desired variant string in Arabic is not considered a variant of the selected idn ccTLD string.
- 6 We just discussed and agreed the RZ-LGR should be paramount. To continue as none-variant would i.e Desired variant with independent existence,
- 7 would be inconsistent with the general principle the WG already agreed upon, only one IDN country code per Desired Language / Script combination
- 8 This is major distinction between the GNSO EPDP and the cc-PDP
- 9 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
- $10\,$ delegated to same TLD operator, in same language, and in same script.

11 12 Conclusion

- 13 First step. Does the desired variant meet the RZ-LGR? If not, what happens next?
- 14 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
- 15 to resolve. If it does meet the RZ-LGR, what do you do if it is blocked, or not blocked.
- 16 Bart: do you agree that if Desired Variant does not meet the RZ-LGR the RZ-LGR remains paramount
- 17 Group agrees: RZ-LGR remains paramount.
- 18

4

19

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

- 21 A. TSG Recommendation
- GNSO and ccNSO should work collaboratively and consider their respective policy, procedure and/or contract changes to address any existing possible deviations from the calculation of the RZ-LGR:
- Delegated TLDs.
- Self-identified "variant" TLDs.
- 26

27 **3.1. Delegated TLDs**: These are cases that have occurred under special circumstances in which labels generally deemed as

the same (i.e. variant TLDs under RZ-LGR) were previously delegated as independent TLDs, albeit with special

- 1 considerations (e.g. synchronized TLDs). Any such variations should be considered for alignment with RZ-LGR.
- 2

3 3.2. Self-identified "variant" TLDs: Historically IDN TLD applications, for gTLDs and ccTLDs, have asked the applicant to identify and list any variant labels (based on their own calculations) corresponding to the applied-for string. These selfidentified "variant" labels may or may not conform to the RZ-LGR once implemented. The self-identified "variant" labels which are also variant labels based on RZ-LGR will need to be assigned a variant disposition based on RZLGR calculation. Further, self-identified "variant" labels that are not variant labels based on the RZ-LGR definition should not be considered as variant TLD labels and it needs to be determined on how to address such labels previously identified by the applicants.

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

12

13 **B. GNSO SubPro Recommendation**

- 14 No corresponding SubPro recommendations
- 15
- 16 C. ccPDP4 VM Subgroup recommendation
- 17
- 18 **D. Subgroup Findings and Discussion**
- 19 Staff Note: Transitional Arrangement to be developed

1	The self-identified variants are included in the overview of IDNccTLD strings validated under the Fast Track Process, under
2	heading "desired variant string(s)". See: <u>https://www.icann.org/resources/pages/string-evaluation-completion-2014-02-</u>
3	<u>19-en</u>
4	
5	Question: did these "desired variant strings" pass all criteria under the Fast Track process?
6	
7	As a principle should the "desired variant strings" only be allocatable if they are generated through RZ-LGR?
8	See conclusion Item 2 above. Desired variant string only allocatable if generated through RZ-LGR
9	
10	Other specific issue to be addressed: should simplified and traditional IDNccTLD strings be considered variants or not?
11	If not, grandfathered?
12	
13	See Board resolution 2010: <u>https://www.icann.org/resources/board-material/resolutions-2010-04-22-en#synchronized</u>
14	and - related - the Board decision 12 March 2010 (Nairobi meeting)
15	https://www.icann.org/resources/board-material/resolutions-2010-03-12-en#13
16	
17	Board resolution 22 April 2010.
18	Whereas, there is general and wide community support for the notion of simultaneously delegating this particular requested pair of
19 20	IDN ccTLDs to meet the well understood needs of users of Chinese, namely that users accessing a domain expect that the traditional and simplified Chinese names have been assigned to the same registrant, and that such delegations would solve a
20 21	significant problem for the user communities;
22	
23	And the delegation of these IDN ccTLDs would be an extension to the current published IDN ccTLD Fast Track Process;
24 25	
25 26	Public comment makes it clear that the methodology for operation and management of IDN ccTLDs based on such parallel
20 27	strings can only be achieved today through operational and administrative procedures, as there are no DNS protocol
28	mechanisms yet that provide the desired behavior, which procedures must be handled by the local IDN ccTLD manager;

- 1 (emphasis added, note this was situation in 2010, also note the recent comment from SSAC members below and in context of the IDN EPDP) 2
- 3 The ICANN Board on 12 March 2010 resolved on a set of "Principles for Handling Synchronized IDN ccTLDs for the specific 4 requests related to the Fast Track Process";
- 5 This resolution (March 2010) includes description of synchronized IDNccTLD strings: requests are for multiple
- 6 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").
- 9
- 10 The (Board) ES-WG recommends that requests for synchronized IDN ccTLD strings must be accompanied by adequate and
- 11 verifiable procedures to enable convergence at every level of the domain named by the TLD following criteria established
- 12 in the ES Implementation Plan, and to take immediate steps to remove any divergence should it occur; and
- 13 The (Board) ES-WG recommended that if an improved technical standard for the delegation and management of
- 14 Synchronized IDN ccTLDs is arrived at, and is applicable for such delegations, IDN ccTLD managers should migrate to that
- 15 standard in a safe, stable and timely manner.
- 16 From the Board resolution <u>https://www.icann.org/resources/board-material/resolutions-2010-09-25-en#2.5</u> The recent
- 17 delegation of Chinese-language ccTLDs does not yet provide a generally workable approach for gTLDs; there are serious
- 18 limits to extending this approach at this time. ICANN will coordinate efforts to develop long-term policy and technical
- 19 development work on these issues.
- 20 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
- 22 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."

- 1 Staff note: this remark was made in the context of Item 6 below
- 2
- 3 Comments on question: should simplified and traditional IDNccTLD strings be considered variants or not?
- 4 If not, grandfathered?
- 5

1 Item 4. RZ-LGR Validation

2 **TSG Recommendation**

For an applied-for TLD label whose script(s) are supported by the applicable version of the RZ-LGR, the RZ-LGR will calculate either of two values: "valid" or "invalid". Consequently, an applied-for TLD that is determined "valid" may 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,

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

4.2. Conformance with LGR Procedure. Policy or procedure must not override the results of the RZ-LGR. That is, policy or
 procedure alone cannot turn an "invalid" label into a "valid" label, or vice-versa. Doing so would invalidate the entire

RZLGR. Any change to the RZ-LGR (e.g. repertoire, variant rules or WLEs) must be undertaken using the process stipulated

in the LGR Procedure.

1

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.

6

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.

- 9
- 10 GNSO SubPro Recommendation
- 11 [Regarding the remedy element]
- 12

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.

15

16 The new substantive challenge/appeal mechanism is not a substitute or replacement for the accountability mechanisms in

17 the ICANN Bylaws that may be invoked to determine whether ICANN staff or Board violated the Bylaws by making or not

18 making a certain decision. Implementation of this mechanism must not conflict with, be inconsistent with, or impinge

- 19 access to accountability mechanisms under the ICANN Bylaws.
- 20

21 The Working Group recommends that the limited challenge/appeal mechanism applies to the following types of

- 22 evaluations and formal objections decisions:
- 23

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

- 25
- 26 ccPDP4 VM Subgroup recommendation

1

3

4

2 Subgroup Findings and Discussion

In the last call (16 November 20210) the subgroup members discussed whether or not a process needs to be in place to review the outcome of the RZ-LGR validation process of the selected IDNccTLD string, specifically if a requestor should be

- 5 able to request a review if the outcome of the validation process 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 8 time during which the IDNccTLD has to be applied for. Hence if the selected string is considered "invalid" the request may 9 be "cured"

10

11 Secondly, and related, the RZ-LGR is the result of extensive community consultation in which the users of the script in the 12 relevant territory, could (and most likely) have participated. Hence the outcome should and could have anticipated and

- 13 not come as a surprise.
- 14

15 Thirdly, during the internal phase of the string selection process, the RZ-LGR is available, and information will be provided 16 when requested to alert the requesting parties of potential risks. Hence, selecting a potential "invalid" string should 17 remain at the risk of the selecting parties.

18

19 Conclusion: the risk of selecting a potential "invalid" string should remain with the selecting parties and hence no review

20 mechanism is necessary for this aspect of the process. Therefore, if a selected IDN ccTLD string - of which the script is

supported by the RZ-LGR - is determined to be "invalid" according to the RZ-LGR, it shall not pass the string evaluation
 phase.

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

24 **TSG Recommendation**

1 For an applied-for TLD label whose script is not yet supported by the applicable version of the RZ-LGR, the application

2 should not proceed until the relevant script is integrated into the RZ-LGR. It is implied that the application should remain

3 on-hold (or other appropriate status) until the relevant script is integrated into the RZ-LGR.

4

5 **GNSO SubPro Recommendation**

6 Implementation Guidance 25.3: If a script is not yet integrated into the RZ-LGR, applicants should be able to apply for a 7 string in that script, and it should be processed up to but not including contracting. Applicants under such circumstances 8 should be warned of the possibility that the applied-for string may never be delegated and they will be responsible for any 9 additional evaluation costs

10

11 ccPDP4 VM Subgroup recommendation

12

13 **Subgroup Findings and Discussion**

14 See question on Recommendation 1 staff paper. Under the Fast Track process an application for a string could be

15 submitted and ultimately be delegated without requirement that relevant script is integrated into the RZ-LGR. Note that

16 the issue of variants or variant management was not addressed for the Fast Track. For this reason a reference to

17 IDNA2008, needs to remain in place. At the same time, variants of the selected IDNccTLD string shall not be evaluated up

¹⁸ and to the point the relevant RZ-LGR has become operational and can be applied.

19

20

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	
11	Subgroup Findings and Discussion
12	Additional Explanatory note:
13	SSAC member on the VM Subgroup indicated that SSAC wishes to emphasize that currently there is no DNS protocol
14	solution that enforces equivalence (or the same behavior) of variants in the DNS. Policy makers need to understand
15	this crucial limitation, so as not to design policies that attempt to force such equivalence. So in essence, although
16	administratively these domains are considered a package, technically speaking, they are different domain names."
17	
18	Does this imply that variants are not equivalents and should not be considered as such, nor can equivalence be forced
19	technically?
20	
21	Related, the policy applies to TLD selection, however the concerns raised by SSAC are not limited to the Top Level, but also
22	apply to lower level (SLD and third level). Should the policy include a policy rule pertaining to lower levels or include a
23	strong statement and reference to the issues identified?
24	

1 Staff question: Should the number of variants be limited? Do the (de-)selection criteria also apply for the variants i.e

2 feasibility of variants to be delegated? (For example: the selected IDNccTLD string MUST be a meaningful representation

- 3 of the name of the Territory in a designated language of the Territory (as expressed in the related script). Does this criteria
- 4 apply.
- 5
- 6 If the selected string is s1s2 and s1v1-5 are all variants of or include a variant of s1s2, should s1v1-5 meet all
- 7 meaningfulness criteria to be eligible for delegation? What happens if only v1 and v2 meet meaningfulness criteria and
- 8 the other don't?
- 9
- 10

I 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

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

1

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
- Recommendation 4 and 5 staff paper.
- 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 <u>https://www.iana.org/domains/idn-tables</u>
- 18 <u>https://www.iana.org/help/idn-repository-procedure</u>
- 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

1	
2	
3	Update policies and procedures to require harmonized IDN tables across IDN variant TLDs to produce a consistent set of second-level variant
4	labels. Also, require second level variant labels to be allocated to the same registrant under all variant TLDs.
5	Staff Note: This item will be addressed under section 4.
6	With respect to second point see Section 2 recommendations 3 and 4 & 4A
7	TWO TLDs variant harmonization, variants, creates variant in one, should be variants
8	Variant in Han traditional -and simplified
9	Ai-Chin: procedure IDN Tables harmonized tables, misunderstanding
10	RZ-LGR, only own IDNccTLD
11	Across IDNccTLD

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 Indentified issues to date
- 18
- The report on <u>IDN Variant TLD Implementation: Recommendations and Analysis</u> raises the following items for the consideration of ccNSO in
 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 g	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
2	come	up with recommendations where that proposed policy needs to change.
3		
4	Main t	asks 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 stop we see Million we discussed this in the main grown to include D7 LCD to well date the main string, it was suggested to take
7 8		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 by VM-subgroup. But this group focuses mainly on other aspects. Should we say something about the original string also
o 9		being validated through RZ-LGR
-		
10		Note section 3 item 1 still needs to be discussed.
11		Suppose there is no support for a particular script
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
14		item 1a. To be revisited. All IDN ccTLD strings should depend exclusively on RZ-LGR to be valid
1.5		
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
17		4. Use 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 ccnso 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 though 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. Conso 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>).</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
16		considering using the RZ-LGR as the one and only IDN Table used by every single applicant of an IDN ccTLD string. lifecycle of
17		domain names to 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
21		4.a.
22		However, note this is really looking at the policies of the ccTLD Managers. At a minimum suggest that it is advised.
23		To be agreed in second reading.
24		2nd level domains should be transferred as as package. Not move one of the variant TLDs separately from the rest.
25		What is included in the notes reflects that explanation. Result from the discussions at the previous meeting
26		Observation: this about the 2nd level.
27		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
28		into the policies of TLDs. if a ccTLD has to do this, it is advised to follow this recommendation as well.
29		Supported in second reading
30		

1		
2	6.	Update policies and procedures to allow the lists of reserved names and the strings for inappropriate delegation to reflect any variants.
3		Staff Note: To date there is no list of reserved names and strings for inappropriate delegation under a ccTLD policy.
4		From previous meeting. Note that from the ccNSO perspective, there are no reserved names or strings, under any policy. This question
5		is from that perspective not relevant. Any questions regarding the questions and observations? None.
6		Do you agree, that from a ccNSO policy perspective, this is not relevant?
7		No red marks.
8 9		Second reading 21 September 2021
10		Question: Is number 6 is now not relevant, but what about the future?
11		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
12		developed. 2 ways of dealing with this:
13		• Group could include a point of reference, if it ever is discussed that the ccnso is advised to look at it from a variant perspective
14		• Leave it up to council and those who deal with variants, to further discuss this, if the ccnso would ever go down the path of
15		reserved names
16		Either you suggest the action now, or you leave it up to the ccNSO to address this in future. Support for this particular section
17		understood as follows: it will not be further included.
18		Suggestion to add alternative option. Add a note.
19 20		Observation: note included that in case a policy will be developed around reserved names for ccTLD, variant management observations need to be included. Does the group agree?
20 21		2nd reading needed to confirm note is included.
22		
23		
24	7.	Update ccTLD redelegation policy to reflect "same entity" constraint on variant TLDs.
25		Staff Note: ccTLD transfer policy is based on RFC 1591 as interpreted by FoI. This particular point is addressed in Section 2 point 9.
26		Rationale again for inclusion: the Selected IDNccTLD string and its variants are one and the same.
27		Supported August 2021
28		
20 29	(pg. 14	.)
		,

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

2 Staff note:

5

6 7

8

9 10

11

- 3 The label states that have been identified are:
- 4 Delegated
 - Withheld-same-entity: Withheld-same-entity: A Withheld label is set aside for possible allocation only to the same entity of the other labels in the variant set.
 - Blocked
 - Allocated
 - Rejected: A Rejected string is set aside on administrative grounds outside the ordinary LGR procedures. Other terms used "Not Approved" and "Will Not Proceed". Strings that cannot be allocated on visual confusability grounds, based on the string similarity review step in the TLD application process, are also Rejected.
- Question: are these the only relevant states with respect to variant IDNccTLD? Is selected IDNccTLD string relevant? How does selected 12 13 IDNccTLD string relate to its variants? See also questions section 3. 14 15 Proposed to include various definitions of states in glossary: agreed in first reading. Supported second reading 21 September 2021 16 17 18 (pg. 15) 19 9. Update policies and procedures for filing IDN tables using the LGR format specified in RFC 7940 as per IDN Guidelines 4.0. Staff Note: This item is addressed under section 4. 20 21 Agreed 22 23 10. Update policies and procedures to require harmonized IDN tables across IDN variant TLDs to produce a consistent set of second-level 24 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. 25 26 With respect to second point see Section 2 recommendations 3 and 4 & 4A 27 Two TLDs variant harmonization, variants, creates variant in one, should be variants

1	Variant in Han traditional -and simplified
2	Ai-Chin: procedure IDN Tables harmonized tables, misunderstanding
3	RZ-LGR, only own IDNccTLD
4	Across IDNccTLD
5	Agreed in 1 st reading
6	Second reading 21 September 2021: Agreed to discuss further under Section 4 IDN Tables
7	
8	11. Those TLDs using EPP may need to create an enhancement (either a protocol modification, a standard message, or a standard
9	extension) that permits expressing response messages for unavailability of an unallocated label due to variants. Work with the
10	technical community to make this enhancement.
11	Staff Note: Should this be a recommendation from the WG to IDNcTLD Managers?
12	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
13	manager. Recognising that it might be an issue, there could be an advise which is not a hard requirement, but use "may/should" type
14	of language.
15	Agreed 1 st reading
16	
17	Second reading 21 September
18	EPP. observation that it is into the remit of the ccTLD manager. Suggestion to include it as an advise, not as a hard requirement.
19	Question: what do we try to solve? Then we can discuss how to solve it.
20	Response: reading original notes from the staff paper. This is communicating or allowing for communicating, if someone is registering a
21	domain name, it allows to share additional domain names in the registration request. Names that are suggested as blocked or
22	allocatable. Epp request needs to be enhanced, not just limited to the original string.
23	Observation: sitting on the seat of the IDN ccTLD manager
24	Response: some managers do not use EPP. internal implementation. In case they use EPP. was rather targeted at gTLDs.
25	Observation: looks that signalling the availability of domain names is a commercial problem. Not sure how we want to prescribe this
26	from a policy standpoint.
27	Observation: This rfc is about variant EPP. <u>https://www.rfc-editor.org/rfc/rfc9095</u> [rfc-editor.org]
27 28 29	Observation: This rfc is about variant EPP. <u>https://www.rfc-editor.org/rfc/rfc9095 [rfc-editor.org]</u> third category. Available. Not available for 2 reasons: either already registered. Or not registered, because its variant is already registered.

1	
2	This goes at the heart of the role of the cctld manager and the SIP.
3	
4	Proposal following the discussion of section 5. The questions around VM shape the policy and originate from
5	staff papers. Going forward, the group should consider what is relevant for the policy, and should be adopted
6	therefore and what is relevant but is considered out of the policy scope and could be included as advise to cctld
7	managers, with a link background material regarding the topic. The proposal is to first decide whether a
8	topic/issue is a policy matter or not, if not, whether the WG should /could include a reference as responsibility
9	for the cctld manager. The goal is to ensure that a ccTLD Manager, involved in IDNs, is aware of issues, risks and
10	potential solutions to address the issues or mitigate the risks.
11	
12	
13	
14	(pg. 21)
15	12. Update the string similarity guidelines for TLDs and their variant labels.
16	Staff Note: Confusing Similarity of string is topic to be discussed and worked by 3 rd sub-group
17	Supported second reading
18	
19	
20	(pg. 23)
21	13. Review string similarity procedure to address decorated two-character Latin labels.
22	Staff Note: Confusing Similarity of string is topic to be discussed and worked by 3 rd sub-group
23	
24	Agreed 1 st reading
25	Supported second reading
26	

Section 6. Issues for discussion with full working group

- 2 Note: 2 issues
- 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 ccnso 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
- 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.