

*Includes details from the recommendations from [Phase 1 report of IDN EPDP](#). The recommendations are still being finalized by the IDN EPDP team and not yet approved by GNSO or the ICANN Board. Does not incorporate the recommendations on singular/plural, as, following the recent [Board Resolution](#), the GNSO Council may decide to issue supplemental recommendations as per [Bylaws Annex A](#) or [PDP Manual Section 16](#).*

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# 1. String Similarity Review

## 1.1. What Is the String Similarity Review?

The objective of the String Similarity Review is to prevent user confusion and loss of confidence in the DNS resulting from delegation of visually similar strings. Strings or their variant strings must not be confusingly similar to an existing top-level domain or a Reserved Name or their variant strings. The variant strings are calculated using the applicable version of Root Zone Label Generation Rules (see [Section x: RZ-LGR](#)).

A gTLD application is based on the primary (applied-for or existing) gTLD string. Each primary gTLD

string is a member of and creates a variant-strings-set<sup>1</sup>. A gTLD application may contain one or more strings from the same variant-strings-set [Section x: IDN Variant TLDs], based on the choice of the applicant and with other applicable constraints<sup>2</sup>. For any gTLD application, the String Similarity Review is conducted using all the strings in the variant-strings-set even if many of these strings are not being applied for by the applicant, as per the details below.

“Similar” means “strings so visually similar that they create a probability of user confusion if more than one of the strings is delegated into the root zone.”<sup>3</sup> The String Similarity Review will be conducted by an independent String Similarity Review Panel. In case strings or their variant strings are determined as similar by the String Similarity Review Panel, these will be marked and may not be able to proceed or put in contention sets. The String Similarity Review that occurs during Initial Evaluation complements the string confusion objection process (see [Module X, Objections]).

## 1.2. Scope Of String Similarity Review

String Similarity Review involves a preliminary comparison of each applied-for gTLD string and its variant strings (if any), against the strings and their variant strings (if any) of the following categories of comparisons. Review is conducted using all the strings in the variant-strings-set even if many of these strings are not being applied for by the applicant, as per the details below. The comparisons are done to determine whether the strings are visually similar to the extent that it creates a probability of user confusion following [the String Similarity Review Guidelines].

For each gTLD application, the primary gTLD label (if not already delegated) and all allocatable variant string(s) in its variant-strings-set will be compared with the following:

- a. Existing delegated gTLDs and all of their allocatable and blocked variant strings.
- b. The gTLD strings which were applied for in the previous gTLD round(s) and that are still in the process<sup>4</sup>, and all of their allocatable and blocked variant strings.
- c. Existing successfully evaluated<sup>5</sup> or delegated<sup>6</sup> ccTLDs and all of their allocatable and blocked variant strings

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<sup>1</sup> For any variant gTLD string, its primary gTLD string is used to determine its variant-strings-set by Root Zone Label Generation Rules. The set contains the primary gTLD string, any allocatable variant strings, and any blocked variants strings.

<sup>2</sup> For example, an applicant can only apply for allocatable variant strings but cannot apply for blocked variant strings, as calculated by Root Zone Label Generation Rules. See the [Section x: Internationalized Domain Names] for more details.

<sup>3</sup> Affirmation 24.2, New gTLD Subsequent Procedures Final Report, pg. 108.

<sup>4</sup> These are strings which are not of the following status: 'Withdrawn', 'RA Terminated', or 'Delegated'. All strings in process from the 2012 new gTLD round are published at: [link].

<sup>5</sup> For a list of all successfully evaluated IDN ccTLDs, see <https://www.icann.org/resources/pages/string-evaluation-completion-2014-02-19-en>.

<sup>6</sup> All top-level domains currently in the root zone can be found at <https://data.iana.org/TLD/tlds-alpha-by-domain.txt> (the list is updated regularly).

- d. Strings currently requested as IDN ccTLDs<sup>7</sup> (see [Section 1.4.3 below] for details) and all of their allocatable and blocked variant strings
- e. Other applied-for gTLD strings in the current application round and all of their allocatable and blocked variant strings
- f. All strings on the Reserved Names list<sup>8</sup> and all of their allocatable and blocked variant strings
- g. All other two-letter ASCII strings<sup>9</sup> and all of their allocatable and blocked variant strings [if the applied-for gTLD string is a two-character string]

In addition, for each gTLD application, all its blocked variant string(s) in its variant-strings-set will be compared against the following:

- a. Existing delegated gTLDs and all of their allocatable variant strings.
- b. The gTLD strings which were applied for in the previous gTLD round(s) and that are still in the process, and all of their allocatable variant strings.
- c. Existing successfully evaluated or delegated ccTLDs and all of their allocatable variant strings
- d. Strings currently requested as IDN ccTLDs (see [Section 1.4.3 below] for details) and all of their allocatable variant strings
- e. Other applied-for gTLD strings in the current application round and all of their allocatable variant strings
- f. All strings on the Reserved Names list and all of their allocatable variant strings
- g. All other two-letter ASCII strings and all of their allocatable variant strings [if the applied-for gTLD string is a two-character string].

As an exception to the comparisons listed above, during the String Similarity Review, the String Similarity Review Panel may decide to omit some comparisons with the blocked variant strings. Any such decision to not perform comparisons with blocked variant strings by the String Similarity Review Panel must be based on [the String Similarity Review Guidelines] that justify such an omission on the basis of a low level of confusability between the scripts of strings being compared.

The table below summarizes the comparisons which will be done by the String Similarity Review Panel based on the categories provided above, marked as “Yes”. As discussed above, the comparisons for gray shaded cells marked “Yes\*” may be omitted by the String Similarity Review Panel if it determines low level of confusability between the scripts of the strings being compared, following [the String Similarity Review Guidelines]. The comparisons listed as “No” will not be performed.

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<sup>7</sup> Strings currently requested in the IDN ccTLD Fast Track process (see <https://www.icann.org/resources/pages/fast-track-2012-02-25-en>) or an IDN ccTLD policy, which may replace the IDN ccTLD Fast Track process. There may be a period where both IDN ccTLD Fast Track Process and an IDN ccTLD Policy may be running concurrently. In such a case, prospective IDN ccTLD strings from both these processes will be considered in scope.

<sup>8</sup> The Reserved Names are provided in [Section X].

<sup>9</sup> All two-letter ASCII codes are reserved for country code assignment by the independent ISO 3166 Management Agency.

**Table X:** Scope of String Similarity Review Comparisons Performed by the Panel

Categories for Comparison:		The applied-for gTLD string		
		Primary gTLD string	All allocatable variant string(s)	All blocked variant string(s)
<ul style="list-style-type: none"> <li>• Existing gTLD</li> <li>• The gTLD string applied-for in the previous round(s) still in the process</li> <li>• Existing ccTLD</li> <li>• Requested IDN ccTLD</li> <li>• Other Applied-for gTLD</li> <li>• Reserved Name</li> <li>• Any two-Character ASCII</li> </ul>	Primary String	Yes	Yes	Yes*
	All allocatable variant string(s)	Yes	Yes	Yes*
	All blocked variant string(s)	Yes*	Yes*	No

## 1.3. Methodology Of String Similarity Review

### 1.3.1. Same or variant strings

Both uppercase forms and lower case forms of ASCII letters are considered, and any permutation of the casing in a string may be used for String Similarity Review, e.g., “EXAMPLE”, “Example” or “example”.

The gTLD applications from different applicants with strings from the same variant-strings-set will be marked as the same by the String Similarity Review Panel.

### 1.3.2. Batching of strings

If batching is required, the String Similarity review will be completed on all applied-for strings prior to the establishment of evaluation priority batches. For applications identified as part of a contention set, ICANN org will put the entire contention set in the same batch as the highest priority string in the contention set.

### 1.3.3. String Similarity Review Guidelines

The String Similarity Review Panel will conduct the review as per the [\[String Similarity Review Guidelines\]](#).

### 1.3.4. Process for String Similarity Review Panel

The String Similarity Review will be conducted by an independent String Similarity Review Panel. All applied-for gTLD strings and their variant strings will be reviewed against strings and variants for other applied-for strings, existing TLDs and reserved names, as detailed in the [Section 1.2 on Scope of the String Similarity Review].

The String Similarity Review Panel will conduct the String Similarity Review in the following steps:

1. Compile the lists of strings for comparison:
  - i. Existing gTLDs
  - ii. The gTLD strings applied-for in the previous round(s) and still in the process
  - iii. Existing ccTLDs
  - iv. Requested IDN ccTLDs
  - v. Other applied-for gTLDs
  - vi. Reserved Names
  - vii. Two-character ASCII strings
2. Compile the lists of all allocatable variant strings of the above strings using RZ-LGR
3. Compile the lists of all blocked variant strings of the above strings using RZ-LGR which are in the same script (mixed script strings allowed for Kana and Han as allowed by RZ-LGR)
4. Decide which blocked variant strings to omit, if any, and document the rationale for the decision. Any such decision by the Panel must be based on [the String Similarity Review Guidelines] on the basis of a low level of confusability between the scripts of strings being compared
5. Identify strings in different applications but in the same variant-strings-set to determine contention sets caused by same strings or variant strings
6. Conduct the comparison of the strings to identify any pairs of similar strings based on [the String Similarity Review Guidelines], and document the analysis. Visual similarity tools are not used as input for this process but the String Similarity Review Panel may use automation to make the manual comparison process efficient
7. Determine and document (along with rationale) the outcome of the String Similarity Review.

## 1.4. Outcomes of String Similarity Review

The String Similarity Review Panel will do the analysis and determine the String Similarity Review outcomes. These outcomes (along with rationale) will be one of the following, based on the comparisons being conducted for all applied-for gTLD strings (including their variant-strings-set), as per the details in this section.

1. String similar to existing gTLDs
2. String similar to the gTLD strings applied-for in the previous round(s) and still in the process
3. String similar to existing ccTLDs
4. String similar to requested IDN ccTLDs
5. String same or similar to other applied-for gTLDs
6. String similar to Reserved Names

7. String similar to Two-character ASCII strings
8. String not similar to any of these categories listed

ICANN org will publish the outcomes of the String Similarity Review on its website.

All strings from a variant-string-set, comprising the primary gTLD string and all of its allocatable and blocked variant strings, will share the same outcome of the String Similarity Review:

- If any applied-for gTLD string or any of its variant strings is determined for an outcome (e.g. to be placed in a contention set), then the applied-for gTLD string and all of its variant strings (i.e. the entire variant-strings-set) will share the same outcome.
- In case the outcome for a string is resolved (e.g., a string in a contention set prevails), it applies to the entire variant-strings-set, and all strings in the application that prevails can proceed to the next stage of the application process (see details [\[section x: String Contention Resolution\]](#)).

#### 1.4.1. Strings Similar With Existing gTLDs or their Variant Strings

If any applied-for gTLD string or any of its variant strings is found to be confusingly similar to any of the existing gTLDs or any of their variant strings, the gTLD application will not be able to proceed. The exception is when the applied-for gTLD string is part of the same variant-strings-set as the existing gTLD it was found similar to, and the applicant is the same registry operator, then the application can proceed with evaluation (as a variant gTLD).

#### 1.4.2. Strings Similar With the gTLD String From the Previous Application Round(s) Still In Process or their Variant Strings

If any applied-for gTLD string or any of its variant strings is found to be confusingly similar to any gTLD string from the previous application round(s) still in process or any of their variant strings, the gTLD application will be put on hold until the outcome of the previous application has been determined. When the outcome of the previous application has been determined, if the previous string successfully completes the evaluation process and is contracted, then the applied-for gTLD string or any of its variant strings cannot proceed. If the previous string is withdrawn or is not successful in the evaluation process, then the applied-for gTLD string or any of its variant strings can proceed with remaining evaluation.

An applicant is not allowed to submit an application in a round for a gTLD string that is part of the same variant-strings-set as a gTLD string from the previous application round that is still in process.

#### 1.4.3. Strings Similar With Successfully Evaluated or Delegated ccTLDs or their Variant Strings

If any applied-for gTLD string or any of its variant strings is found to be confusingly similar to any of the successfully evaluated or delegated ccTLDs or any of their variant strings, the gTLD application will not proceed.

#### 1.4.4. Strings Similar To a Requested IDN ccTLD

An IDN ccTLD string can be requested through the IDN ccTLD Fast Track Process on a rolling basis<sup>10</sup>. The IDN ccTLD string application process is separate, and independent from, the gTLD application process. If an applied-for gTLD string is found similar to any of the requested IDN ccTLDs,<sup>11</sup> the String Similarity Review Panel will report it as a conflict with a requested IDN ccTLD, without forming a contention set (because contention sets are between applied-for gTLD strings). ICANN org will take the approach below to resolving the conflict.

If an applied-for gTLD string is found similar to a requested IDN ccTLD by the String Similarity Review Panel, then if either has completed its respective evaluation process before the other is lodged, that TLD will proceed to be delegated, and the other potential applicant will be informed.

- A gTLD application that has successfully completed all relevant evaluation stages, including dispute resolution and string contention, if applicable, and is eligible for entry into a registry agreement will be considered complete, and therefore would not be disqualified by a newly-filed IDN ccTLD request. The IDN ccTLD applicant will be informed accordingly.
- Similarly, an IDN ccTLD request that has successfully completed evaluation (i.e., is validated) will be considered complete and therefore would not be held or disqualified by a newly-filed gTLD application. The IDN gTLD applicant will be informed accordingly.

In the case where neither application has completed its respective evaluation process, the gTLD application will be put on hold while the IDN ccTLD request is undergoing evaluation. The hold could be for an undetermined period of time based on IDN ccTLD applicant providing sufficient documentation and input to complete its evaluation process, as solely governed by the IDN ccTLD application evaluation process. The IDN gTLD applicant will be informed accordingly.

- Upon successful completion of its evaluation, the request for an IDN ccTLD will prevail and the gTLD application will not be approved.
- In case the requested IDN ccTLD is not successfully evaluated, or withdrawn by the IDN ccTLD applicant, then the IDN gTLD string may proceed with application evaluation.

In a case where gTLD applicant had obtained the support or non-objection of the relevant government or public authority, but the gTLD application is eventually eliminated due to similarity with a string requested in the IDN ccTLD application process, a full refund of the evaluation fee will be made to the gTLD applicant if the gTLD application was submitted prior to the publication of the successfully evaluated ccTLD.

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<sup>10</sup> ccNSO is currently working on IDN cc Policy Development Process (ccPDP4), which is intended to replace the IDN ccTLD Fast Track Process. Once the IDN ccPDP4 policy is approved and implemented, it will provide another mechanism for IDN ccTLD applicants and will also be applicable here.

<sup>11</sup> A requested IDN ccTLD string is one that has been submitted to ICANN through the IDN ccTLD application system and is undergoing string evaluation.

### 1.4.5. String Identical, Variant or Similar to Any Other Applied-For gTLD

If any applied-for gTLD string or any of its variant strings is found to be identical or similar to any other applied-for gTLD strings or any of their variant strings, the variant-strings-sets for these applications will be placed in a contention set by the String Similarity Review Panel. A contention set contains at least two applied-for strings identical, variant or similar to one another. Refer to [Module X, String Contention Procedures], for more information on contention sets and contention resolution.

These contention sets will also include information on direct contention (string A is confusable with string B) and/or indirect contention through string similarity transitivity (string A is confusable with string B and string B is confusable with string C but string A and string C are not confusable) or string-variant transitivity (string A is confusable with string B-variant-1 and string B-variant-2 is confusable with string C but string A and string C are not confusable). Indirect contention can be resolved to allow both string A and string C to proceed in case string B cannot proceed, but if string B proceeds, neither string A or string C can proceed.

### 1.4.6. String Similar To a Reserved Name

If any applied-for gTLD string or any of its variant strings is found to be similar to any Reserved Name or any of its variant strings, the application will not proceed.

### 1.4.7. String Similarity With a Two-Character ASCII String

If any applied-for [two-character] gTLD string or any of its variant strings is found to be similar to any two-character ASCII string or any of its variant strings, the applied-for gTLD string will not proceed.

### 1.4.8. Summary of Outcomes Of String Similarity Review

The outcomes discussed above are summarized in the Table below. If the string is deemed not visually similar to any of the strings from any of the categories, it can proceed to the next stage in the application evaluation process.

**Table X:** Outcomes for the gTLD Application Due to the String Similarity Review Performed by the Panel

	If the <b>applied-for gTLD string</b> or any member of its <b>variant-strings-set</b> is found to be		
	Same as	Variant of	Visually similar to (but not a variant of)
<b>Existing gTLD</b>	Application cannot proceed	Application can proceed if existing Registry Operator is also the applicant	Application cannot proceed
<b>The gTLD string from</b>	Application put on hold	Application cannot	Application put on hold



<b>the previous round(s) still in the process</b>	until the previous string completes evaluation. Application can proceed with evaluation if the gTLD string from the previous round is withdrawn or not successfully evaluated	proceed	until the previous string completes evaluation. Application can proceed with evaluation if the gTLD string from the previous round is withdrawn or not successfully evaluated
<b>Existing ccTLD</b>	Application cannot proceed	Application cannot proceed	Application cannot proceed
<b>Requested IDN ccTLD</b>	Application can proceed if it has successfully completed all relevant evaluation stages, and is eligible for entry into a registry agreement at the time of filing of the IDN ccTLD request. Else application put on hold until ccTLD evaluation is completed and application can proceed if Requested IDN ccTLD is withdrawn or not successfully evaluated	Application can proceed if it has successfully completed all relevant evaluation stages, and is eligible for entry into a registry agreement at the time of filing of the IDN ccTLD request. Else application put on hold until ccTLD evaluation is completed and application can proceed if Requested IDN ccTLD is withdrawn or not successfully evaluated	Application can proceed if it has successfully completed all relevant evaluation stages, and is eligible for entry into a registry agreement at the time of filing of the IDN ccTLD request. Else application put on hold until ccTLD evaluation is completed and application can proceed if Requested IDN ccTLD is withdrawn or not successfully evaluated
<b>Other Applied-for gTLD String</b>	Application put in contention set	Application put in contention set	Application put in contention set
<b>Reserved Name</b>	Application cannot proceed	Application cannot proceed	Application cannot proceed
<b>Two-Character ASCII String</b>	Application cannot proceed	Application cannot proceed	Application cannot proceed