# CS sub-group meeting

19 July 2022

# Defining the scope of Base of Comparison Why is it needed ?

Impact on purpose of Confusing Similarity review

Unforeseen side-effects

Scaling

- foreseeable future confusing similarity review manual process.
  - Depending on methodology, very resource intense
  - Depending on methodology: currently duration varies from month to half a year per requested string

  - The larger the number to be checked the more resources are needed and the longer it takes

# Purpose Confusing Similarity Review

Minimize **the risk to the stability and security of the DNS due to user confusion by exploiting potential visual confusing similarity between domain names (eg. .PY in Latin script vs РУ in Cyrillic).**

As such confusing similarity should therefore be minimized and mitigated. The risk of visual confusing similarity is not a technical DNS issue, but can have an adverse impact on the security and stability of the domain name system.

# What risk does confusing similarity address?

## Denial of Service   <->   Misconnection

SAC 060: Denial of Service ( or no connection)

*The user attempts to visit http://example.Y, reading it as being the same Uniform Resource Identifier (URI) as the http://example.X, but the connection does not work (lookup fails)*

Various reasons why it  fails (typo, misread)


SAC 060: Misconnection

*the user attempts to visit http://example.Y, reading it as being the same URI as the http://example.X, but arrives at a site controlled by a registrant different to that of example.X.*

Various reasons of failure, among others confusing similarity "Y" and "X"

# Base for comparison: request side

Proposed policy

- At time of request (T=1)  Selected string + requested delegatable variants (whereby delegatable variants are strings that are allocatable variants and a meaningful representation of the name of the territory in the designated script)


- At later time (T=2): delegatable variants of the selected delegated IDNccTLD
    - Example: variant of IDNccTLD delegated under the Fast Track Process

Inclusion of variants:
Which set of variants should be taken into account from a requesting point of view at the time that the selected string is requested (T1)?

- Only the selected string and the **requested delegatable** variants?
- The selected string and **all delegatable** variants?
- The selected string and **all allocatable variants** of the selected string?, or
- The selected string and **all variants (allocatable and blocked)?**

# Base for comparison: Comparison Side

Currently minimum level of the Comparison Side is (Fast Track Process):

- Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (letter [a-z] codes), nor
- Existing TLDs or reserved names.
- Proposed TLDs which are in process of string validation.

# Inclusion of variants:
## Which set of variants should be taken into account at the time that the selected string is requested (T1)? Version 1

- Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (letter [a-z] codes),

- Existing TLDs, which includes the already delegated variants or reserved names.

- Proposed TLDs which are in process of string validation and their requested delegatable variants (however defined under the gTLD and ccTLD processes)

# Inclusion of variants:
# Which set of variants should be taken into account at the time that the selected string is requested (T1)? Version 2

- Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (letter [a-z] codes),

- Existing TLDs, and their allocatable variants.

- Proposed TLDs which are in process of string validation and their allocatable variants?

# Inclusion of variants: Which set of variants should be taken into account at the time that the selected string is requested (T1)? Version 3

- Any combination of two ISO 646 Basic Version (ISO 646-BV) characters (letter [a-z] codes),

- Existing TLDs, and all their variants (allocatable and blocked).

- Proposed TLDs which are in process of string validation and all variants (allocatable and blocked)

# Questions

What is purpose of  Confsuing Similarity review

* Denial of Service or Misconnection?

What should be base for comparison

* Request side: which variants should be included in review?
  * Requested variants?
  * All delegatable?
  * All allocatable variants?
  * All blocked variants?
* Comparison side: which variants to include?
  * Delegated variants (requested delelagatable)?
  * All allocatable variants?
  * All blocked variants?