# IDN Variant Issues Project Greek Case Study Team Update

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#### **Current Status**

- The Greek Case Study Team developed a Report: "Study of the issues present in the registration of IDN TLDs in GREEK characters"
- The report was posted for comment in the Public Forum on 07 October 2011. See: <a href="http://www.icann.org/en/public-comment/idn-vip-greek-07oct11-en.htm">http://www.icann.org/en/public-comment/idn-vip-greek-07oct11-en.htm</a>.
- Comments will be accepted in the Forum until 14 November 2011.



# Structure of the Report

- Introduction-Disclaimer
- Definitions
- Useful key points regarding the Greek language
- Proposed Characters for Registrations

- Issues concerned
- Proposed solutions
- Recommendations
- Appendix

   (table of proposed allowed characters for Greek TLD registrations)



#### **Definitions**

- Homograph
- Homophone
- Greeklish
- Aliased Name
- Name Aliasing

- Bundling Domain Names
- Tonos
- Dialytika
- Katharevousa
- Dimotiki



# **Useful Key Points**

#### The Greek Language Question

Diglossia: Katharevousa vs. Dimotiki

(e.g. Πειραιεύς - Πειραιάς)

#### The Greek Orthography

Polytonic vs. Monotonic (e.g. the Lord's Prayer)

- Πάτερ ἡμῶν ὁ ἐν τοῖς οὐρανοῖς, ἁγιασθήτω τὸ ὄνομά σου, ἐλθέτω ἡ βασιλεία σου, γενηθήτω τὸ θέλημά σου, ὡς ἐν οὐρανῷ καὶ ἐπὶ τῆς γῆς
- Πάτερ ημών ο εν τοις ουρανοίς, αγιασθήτω το όνομά σου, ελθέτω η βασιλεία σου, γενηθήτω το θέλημά σου, ως εν ουρανώ και επί της γης



## Proposed Characters for Registrations

#### Only Monotonic characters are allowed!

- Monotonic characters are used today in the spelling of Greek words.
- Polytonic characters for TLD registration offer no significant advantage for the average user.
- This recommendation stands only for the Greek TLDs; registries are encouraged to decide upon the use of the polytonic characters in their policy for the lower levels.



#### **Issues Concerned**

#### The sigma and final sigma

- $\sigma$  (small, U+03C3) e.g.  $\alpha \sigma \pi i \delta \alpha$  (shield)
- Σ (capital, U+03A3) e.g. Σοφία (female name)
- $\varsigma$  (small final, U+03C2) e.g.  $\tau \dot{\epsilon} \lambda o \varsigma$  (end)

#### but...

- IDNA2003: σ <-> Σ <-> ς (e.g. θησαυρός treasure)
   θησαυρός → ΘΗΣΑΥΡΟΣ → θησαυροσ → not correct Greek!
- IDNA2008: σ and ς are different accepted characters, treated separately reverse mapping no possible!



# The IDNA approach of translating Greek words into domain names

- .ελλάς (.xn--hxarsa0b) small letters form
- .ελλας (.xn--mxahsa0b) misspelled without the tonos
- .ΕΛΛΑΣ (.ελλασ) (.xn--mxahsa5b) capital letters form
- in IDNA2008 uppercase letters are disallowed <a href="https://www.nover.ncbe.new.noven.ncbe.new.ncbe.ncbe.new

#### but...

a typical user expects to type the domain name in uppercase and lowercase and end up at the same result, as it happens in ASCII

#### thus:

a word (or string) without a tonos should be addressed as variant



#### Homographs

- EETT (greek/capital) EETT (latin/capital)
   εεττ (greek/small) eett (latin/small)
- $Aθήνα Aθηνά \rightarrow AΘΗΝΑ$

#### Homophones

lotto - λοττο (or λοτο)

#### Greeklish

-  $A\theta\dot{\eta}v\alpha \rightarrow Athina / A8ina / A8hna$ 



#### Registrations containing the tonos accent

- the majority of the words in small letters have to have the tonos accent over one of the vowels to be spelled correctly
- ✓ a domain without the tonos is consisting of the letters of the upper case form of the domain name, if the final sigma is not present
- ✓ many domain names represent words and the user will expect
  them to have the tonos accent

#### Registrations containing the final sigma

✓ the use of the final sigma is essential for the correct spelling of the Greek words and male names



#### What should be considered as "variant"?

- ✓ a variant of a label representing a word (accented by tonos in small letters' form) could be the same word in capital letters, since the capital letters are not accented,
- ✓ the variation of a given word in Katharevousa and Dimotiki,
- ✓ the monotonic and the polytonic form of the word,
- ✓ accented and not-accented forms of a word/string,
- the variation of a word/string retaining the final sigma at the exact requested position between the one when the final sigma ( $\varsigma$ ) is replaced by the middle sigma ( $\sigma$ ),
- √ variations created by changing case a word/string from small to capital letters, according to the Greek grammar

#### **Proposed Solutions - The Variants Proposal**

- Accepted characters: small, monotonic, including characters with tonos, dialytika and their combination
- The domain name will be accepted at the exact requested form
- The same domain will be allocated to the registrant, stripped of the accent marks and final sigmas, if any (variant 1)
- The same domain will be allocated to the registrant, stripped of the accent marks, retaining the final sigmas, at their original positions (variant 2)

#### Proposed Solutions-The Variants Proposal, cont.

- Alternative positioning of the tonos accent is not allowed
- Alternative positioning of the final sigma is not allowed
- Alternative, same meaning words, are not allowed (if the domain name consists of words) - it is the "Katharevousa vs. Dimotiki" issue. The applicant will only choose to register one and the other should be excluded from registration
- Two options for handling the allocated variants:
  - they enter the root zone as DNAMEs
  - they are treated as FQDNs

#### Proposed Solutions - Small Characters Proposal

- Accepted characters: small, monotonic, including characters with tonos, dialytika and their combination
- The only accepted form of the domain name is the form that is originally submitted by the applicant, with the specific tonos' positions and the possible final sigmas
- The same form, stripped of accents is not allowed
- The same form, stripped of the accents and with any combination of sigma/ final sigma, is not allowed



#### Proposed Solutions-Small Characters Proposal, cont.

- Alternative positioning of the tonos accent is not allowed
- Alternative, same meaning words, are not allowed (if the domain name consists of words) - it is the "Katharevousa vs. Dimotiki" issue. The applicant will only choose to register one and the other should be excluded from registration



#### Recommendations

#### Taking into account:

- the advantages and disadvantages of each proposal
- the average internet user's experience, needs and expectations
- the current protocols' status and technology's limitations

The Greek Case Study Team recommends as the most appropriate solution the Variants proposal



## **Next Steps**

- The Public Comment Forum on the Greek Case Study Team report ends on 14 November 2011.
- The Greek Case Study Team will analyze the comments and determine how to address them and whether to revise the Report.
- The Greek, Cyrillic and Latin Study Teams must interact to identify cross-script issues that might be present between Latin, Greek and Cyrillic characters.



# Thank You



# Questions

