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”
- 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, ἔλθέτω ἡ βασιλεία σου, γενηθήτω τὸ θέλημά σου, ὡς ἐν οὐρανῷ καὶ ἐπὶ τῆς γῆς
  - Πάτερ ἡμῶν ὁ ἐν τοῖς οὐρανοῖς, ἁγιασθήτω τὸ ὄνομά σου, ἔλθέτω ἡ βασιλεία σου, γενηθήτω τὸ θέλημά σου, ὡς ἐν οὐρανῷ καὶ ἐπὶ τῆς γῆς
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

- σ (small, U+03C3) e.g. ασπίδα (shield)
- Σ (capital, U+03A3) e.g. Σοφία (female name)
- ç (small final, U+03C2) e.g. τέλος (end)

but...

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

The IDNA approach of translating Greek words into domain names

- \( .\epsilon\lambda\lambda\acute{\alpha} \) (\text{n--hxarsa0b}) small letters form
- \( .\epsilon\lambda\lambda\alpha \) (\text{n--mxahsa0b}) misspelled without the tonos
- \( .\text{ΕΛΛΑΣ (Ελλάς)} \) (\text{n--mxahsa5b}) capital letters form

- in IDNA2008 uppercase letters are disallowed - however an application may map them to allowed characters 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
Issues Concerned, Cont.

- **Homographs**
  - ΕΕΤΤ (greek/capital) - EETT (latin/capital)
  - εεττ (greek/small) - eett (latin/small)
  - Αθήνα - Αθηνά → ΑΘΗΝΑ

- **Homophones**
  - lotto - λοττο (or λοτο)

- **Greeklish**
  - Αθήνα → Athina / A8ina / A8hna
Issues Concerned, Cont.

- 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 (ς) is replaced by the middle sigma (σ), 
✓ 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 ?