

# IDNs, EPP for ENUM and Registry Monitoring in NASK



## IDNS

- August the 11<sup>th</sup>, 2003: NASK's IETF draft
- September the 11<sup>th</sup>, 2003: (Polish script) .pl
- September the 18<sup>th</sup>, 2003: (Polish script) .com.pl / .net.pl
- October the 6<sup>th</sup>, 2003: +German umlauts
- October the 20<sup>th</sup>, 2003: +Latin
- November the 3<sup>rd</sup>, 2003: +Hebrew, Arabic, Greek

#### **IETF Internet Drafts**

- NASK's policy: to publish all the NASK's internal protocols & standards as the IETF Internet Drafts (i.e. IDNs, EPP for .PL, EPP for +48ENUM)
- The IDN registration rules are also available as I-D.
- Technical part of Registy-Registrar agreement refers to the IETF documents including the NASK's drafts, as the best source of the up-to-date information.

#### **IETF Internet Drafts**

#### Up-to-date:

draft-bartosiewicz-idn-pltld-04 (Latin+Hebrew+Greek+Arabic)

#### Obsolete:

- 1<sup>st</sup>: draft-bartosiewicz-idn-pltld-01 (Polish characters only)
- 2<sup>nd</sup>: draft-bartosiewicz-idn-pltld-02 (Polish+German)
- 3<sup>rd</sup>: draft-bartosiewicz-idn-pltld-03 (Latin 1 Supplement & Extended A)





- First Come, First Served method
- Big Bang, no sunrise period
- ACE version only (consistent with RFC 3490 & draft-bartosiewicz-idn-pltld-04) for input, output, processing
- "xn" is the only accepted prefix for ACE domain names
- No special rules for ACE domain names





- No variants, no bundling
- No association with languages (no "language tags")
- The object of the contract is the ACE form of the domain name
   The registration of domains with hypens on 3<sup>rd</sup>

The registration of domains with hypens on 3<sup>rd</sup> and 4<sup>th</sup> positions and other than 'xn' prefix remains prohibited.

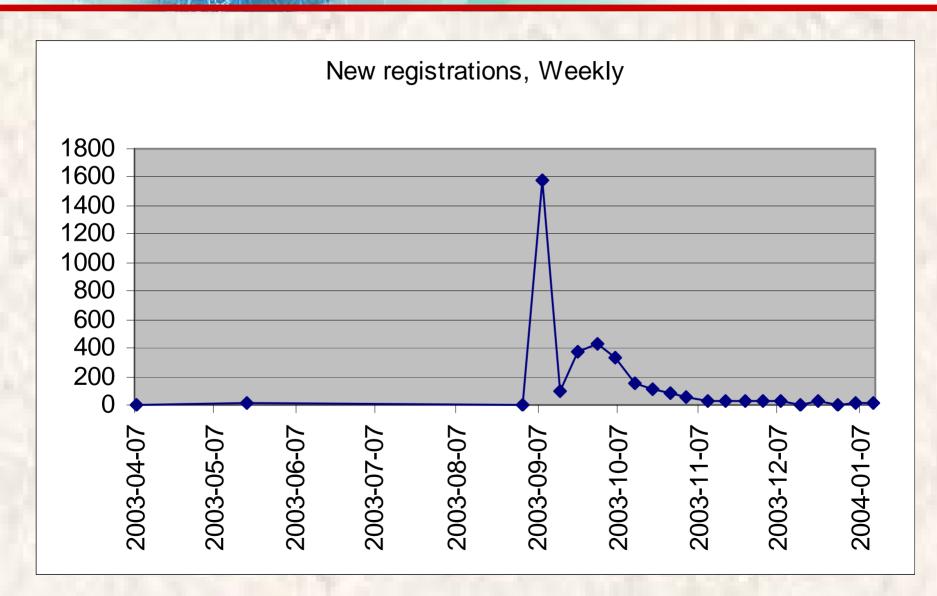




- Maximum length of domain name: 63
- Minimum length on domain name: 1
- Max & min length refers to ACE version







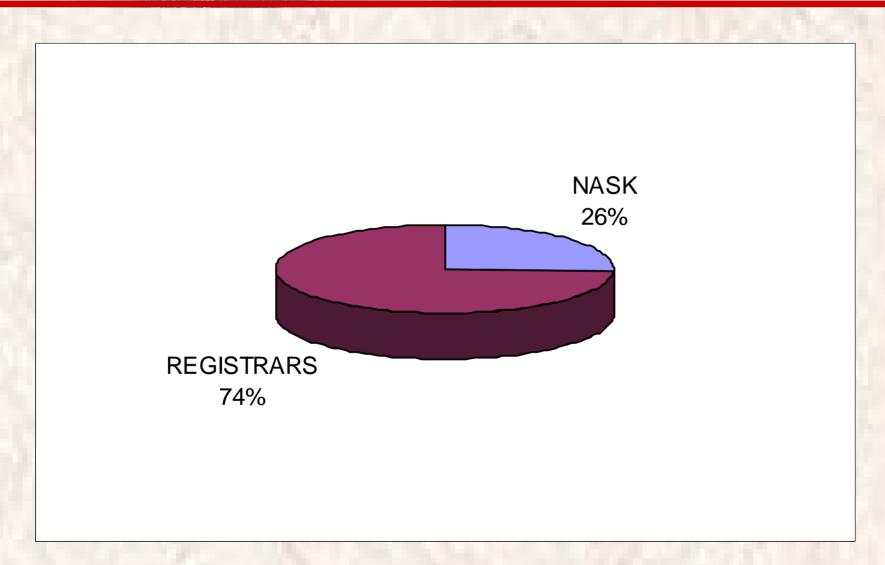
















# www.idn.pl



### **EPP for ENUM**





- NASK is the admin & tech contact for 8.4.e164.arpa
- R&D unit
- State organization
- NASK follows the guidelines raised by the Office of Telecommunications and Post Regulation.





- It's the first attempt,
- Present registration policy is based on the administrative decisions:
  - Experience with "traditional" domain names (.PL)
  - Several implementations of Registrar software available
  - Guidelines from Office of Telecommunications and Post Regulation.

### ADMIN decisions

- No direct registrations.
- Registration via the Telecom Operators (officially approved by the Regulator) ONLY (REGISTRAR = OPERATOR)
- Registrar (Operator) MUST NOT register the numbers administered by the other Operators
- NASK DOES NOT verify the rights to the particular telephone number



#### ADMIN decisions cont.

- Transfer only if ported, but NASK does not verify whether the number is ported or not
- NASK delegates ONLY the ENUM domain names to Operators' NSs



#### http://www.ietf.org/internet-drafts/draft-bartosiewicz-enum-48tld-00.txt

Internet Draft
draft-bartosiewicz-enum-48tld-00.txt
October 17, 2003
Expires in six months
Intended status: Informational

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EPP parameters for 8.4.e164.arpa Registry

- A transfer of a domain or a contact does not require a confirmation of sponsoring client of that object.
- Options of the <domain:transfer> and <contact:transfer> commands other than request are not supported.



 It is possible to delete a host using the <host:delete> command, even if there are domains delegated to that host, on the condition that the host is not configured for any domain which is delegated to this host. A side effect of a removal of a host is removal of all delegations to that host.



- A change of a host's name is forbidden.
- A providing of the <host:chg> element in the <host:update> element causes failure of the <host:update> command.

- The <domain:info> command returns full set of information only for sponsoring client of a domain and client which provided a correct authorization information in the <domain:authInfo> element.
- In other cases command fails.

- The <contact:info> command returns full set of information only to sponsoring client of a domain and to client who provided a correct authorization information of domain in the <contact:authInfo> element.
- Furthermore, if contact represents a private person who consents to publish his/her personal details (consentForPublishing=1) then information is returned to the others clients. In other cases command fails





### www.dns.pl/ENUM



# Monitoring





- a need for DNS monitoring
- confined possibilities
- subjects under supervision
- instant log delivery
- zone signing
- future plans



- complex zone file testing
- syntax check
- content analysis
- track of changes to a zone file
  - SOA parameters
  - delegations
- crucial domain list



- perl daemon
- variety of custom tests
  - EPP supervision
  - Whols supervision
  - System's logs analysis
- SMS and e-mail notification
- self testing
- configured within a XML file

- checking if zone files on secondaries are up to date
- extraction of a list of all zone's name servers and querying them for SOA record
- serial number verification against the one on the primary server





- primary name server logs
  - named
  - reload
- immediate delivery of crucial logs to administrators (SMS notification)



- free of charge service offered by SigNet.pl
- a time stamp guarantees the signed file had existed before was signed and since then has not been altered
- OpenTsa
  - a request to a certification centre
  - signing the request in the centre
  - checking the response status
  - local verification of the signature
- only the MD-5 digest is signed not the whole file
- zone files and EPP logs



- further development of the Sentinel
  - web access
  - one-click disaster recovery
- full control over all the secondaries
  - the only way to ensure a high QoS
  - zone files protection against unauthorised access



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