



Current ENUM implementations: Poland

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*Number Portability
For Fixed, Mobile, FMC and VoIP Networks
21st - 22nd March 2006, London*



NASK: who we are?



Background

- Established in 1991
- Research & Development public entity
- Supervised by Ministry of Science and Information Society Technologies
- Registry for .PL
- Registry for +48 (ENUM project)

A low-angle photograph of a modern skyscraper with a grid-like facade, viewed from the side. The building is partially obscured by a dark horizontal band at the top of the frame.

Background

- 280 employees (total) including 40 employees in DNS Division
- Member of ITU, CENTR, RIPE, etc.
- Collaboration with ICANN, ENISA etc.

A low-angle photograph of a modern skyscraper with a grid-like facade, viewed from the ground looking up. The building is partially obscured by a dark horizontal band at the top of the frame.

Background

- Business activity:
 - domains' registation
 - hosting,
 - Internet acces (including 3,6 – 3,8 GHz radio)
 - IP Transit,
 - corporate networks,
 - videoconference,
 - VoIP services,
 - biometrics.



[first attempt]



Schedule

- Delegated: July 18, 2002,
- Trial started: July 2002
 - Consultations with NRA, TSPs and ISPs
 - EPP system implementation
- Production registry launch: May 19, 2004.



Production?

From technical and administrative side it's production stage:

- Registration system is ready
- Protocol definition available
- DNS servers up and running
- Registration rules defined
- Can be used both for Carrier ENUM and separately for User ENUM



Do we register domains?

We do not register ENUM domain names. The „only“ problem is that Telco operators are not interested in registrations.

NASK has to reject all requests from Subscribers and suggest them to contact TSPs.



[first attempt]

Administrative aspects of ENUM in Poland

Registration rules

- No direct registrations.
- Registration through the Telco operators only (see next two slides)
- TSP can register the numbers belonging to his Subscriber only
NASK delegates ENUM domain names to NS only (no NAPTR records in NASK's zone files)
- Only valid E164 numbers assigned by Office of Telecommunications and Post Regulation (URTIP) can be registered.
- Annual fee: 5 EURO / domain name



Telecommunications Law

Telecommunications Law (Act of July 16, 2004) enumerates Subscribers' rights (Article 69. – 72.) – see next slide.

Subscribers have rights to port the number or change the number only.

These provisions make impossible NRA to allow Subscribers to register ENUM domain names without consent of the TSP.

Telecommunication Law – cont.

Article 69. A subscriber of a public telephone network may demand a change to the assigned number, in the event of proving that using the assigned number is burdensome.

Article 70. In the event of a change in the place of residence, seat or place of activity, the subscriber being a party to an agreement with the service provider which ensures connection to the public telephone network may demand to port the assigned number within the confines of an existing network of the same operator in the area of:

- 1) Numbering Plan Area – in the case of geographic numbers;
- 2) The entire country – in the case of non-geographic numbers;

Article 71. 1. A subscriber being a party to an agreement with a service provider which ensures connection to the public telephone network may demand, when changing operators, to port the assigned number to an existing network of another operator in the area of:

- 1) Numbering Plan Area – in the case of geographic numbers;
- 2) The entire country – in the case of non-geographic numbers;

2. The provision of Paragraph 1 does not apply to porting numbers between fixed and mobile public telephone networks.

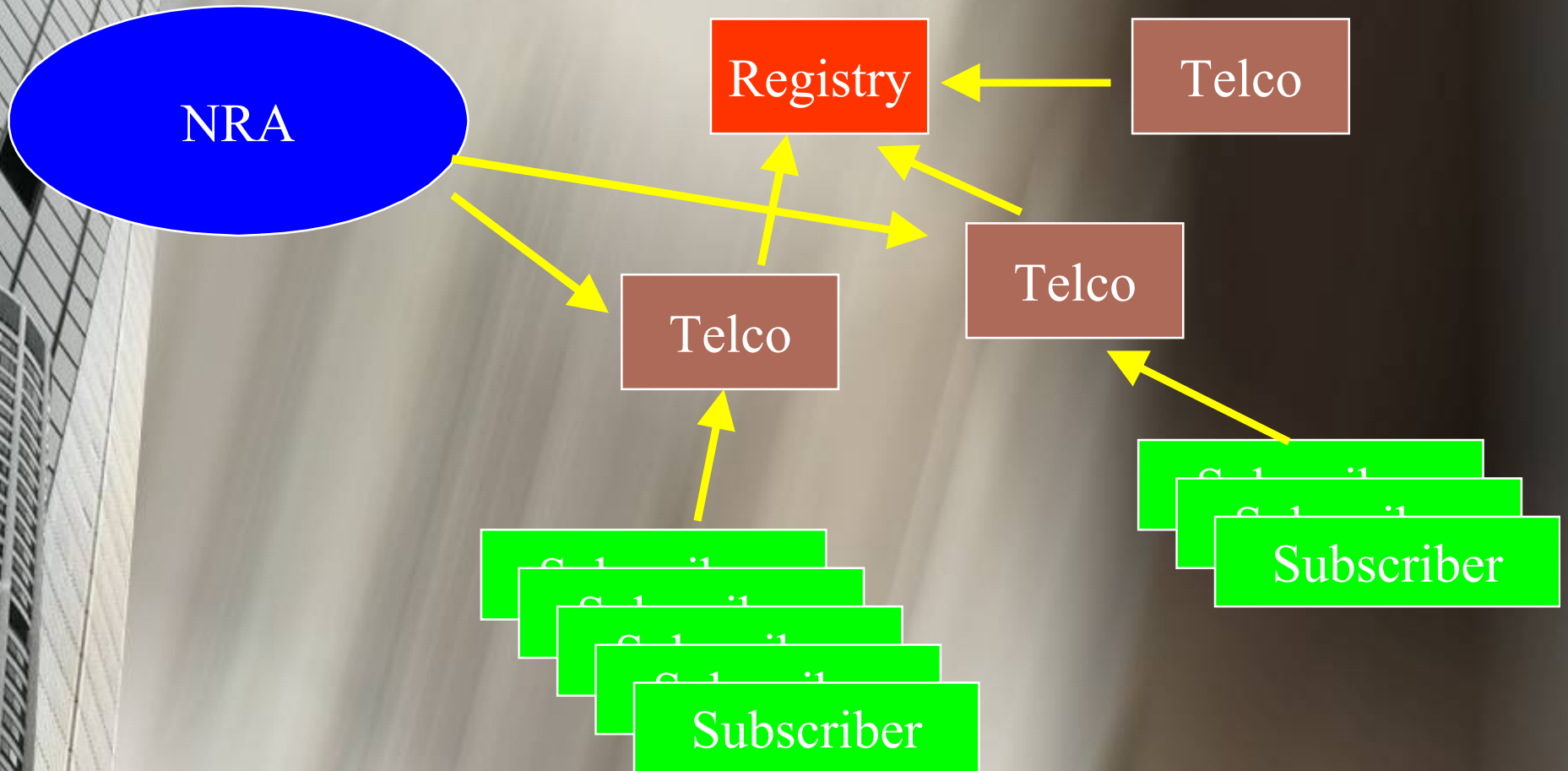
3. A single fee defined in the price list may be charged from the subscriber by the previous operator for porting the assigned number. The fee amount should not discourage the subscriber from exercising this right.



[first attempt]

Role of the Telco Operators and NRA

Roles...

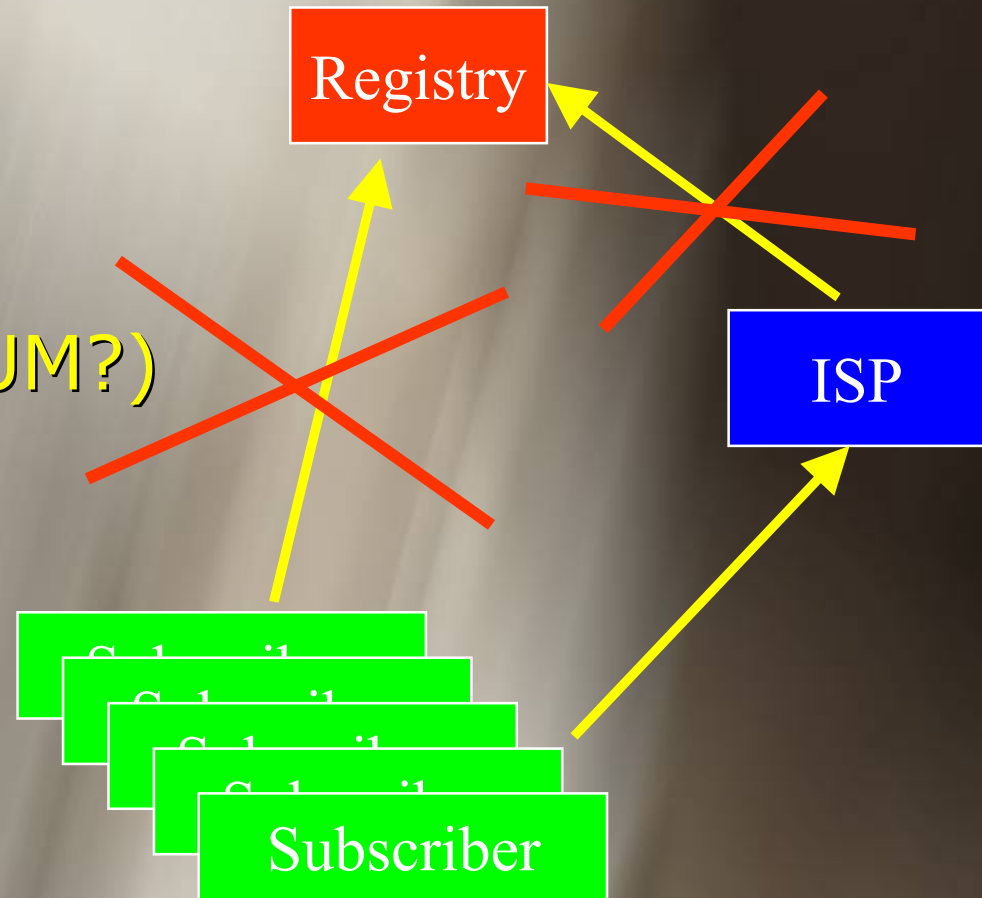


Roles...

- NRA: executes rules defined in Telecommunication Act (+dependent decrees including National Numbering Plan)
- Telcos: acting as Registrars; responsible for domains registrations; nobody can force Telcos to register ENUM domain names
- NASK: registry of 8.4.e164.arpa

Roles...

Subscriber can't register domain name without consent of TSP (is this User ENUM?)



Role of NRA

- Theoretically, if Telco registers domain name without consent of a Subscriber or provides false/wrong personal details of a Subscriber, NRA has the power to penalize Telcos.



Is this right approach?

- No business for Telcos
- Users prefer to avoid Telco's consent
- It's neither User ENUM nor Carrier ENUM:
 - Carriers not interested in this form of ENUM
 - NRA not interested in allowing Users to register ENUM domains directly


Stalemate.

Do not follow this way.



[second attempt]

What next in 2006?



„carrier.8.4.e164.arpa“?

- Carrier ENUM:
 - Registry system is ready
 - Protocols defined and implemented
 - DNS Infrastructure ready
- Internal discussion in Poland started
- Waiting for IETF



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