



ENUM deployment in Poland

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Agenda

- NASK: who we are?
- Deployment plan
- Administrative aspects of ENUM in Poland
- Role of the Telco Operators and NRA
- EPP Registry system for 8.4.e164.arpa
- Number Portability on Carrier ENUM



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)



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, extending from the bottom left towards the top left of the frame. The rest of the background is a dark, blurred gradient.

Background

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



Deployment plan



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



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.



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;

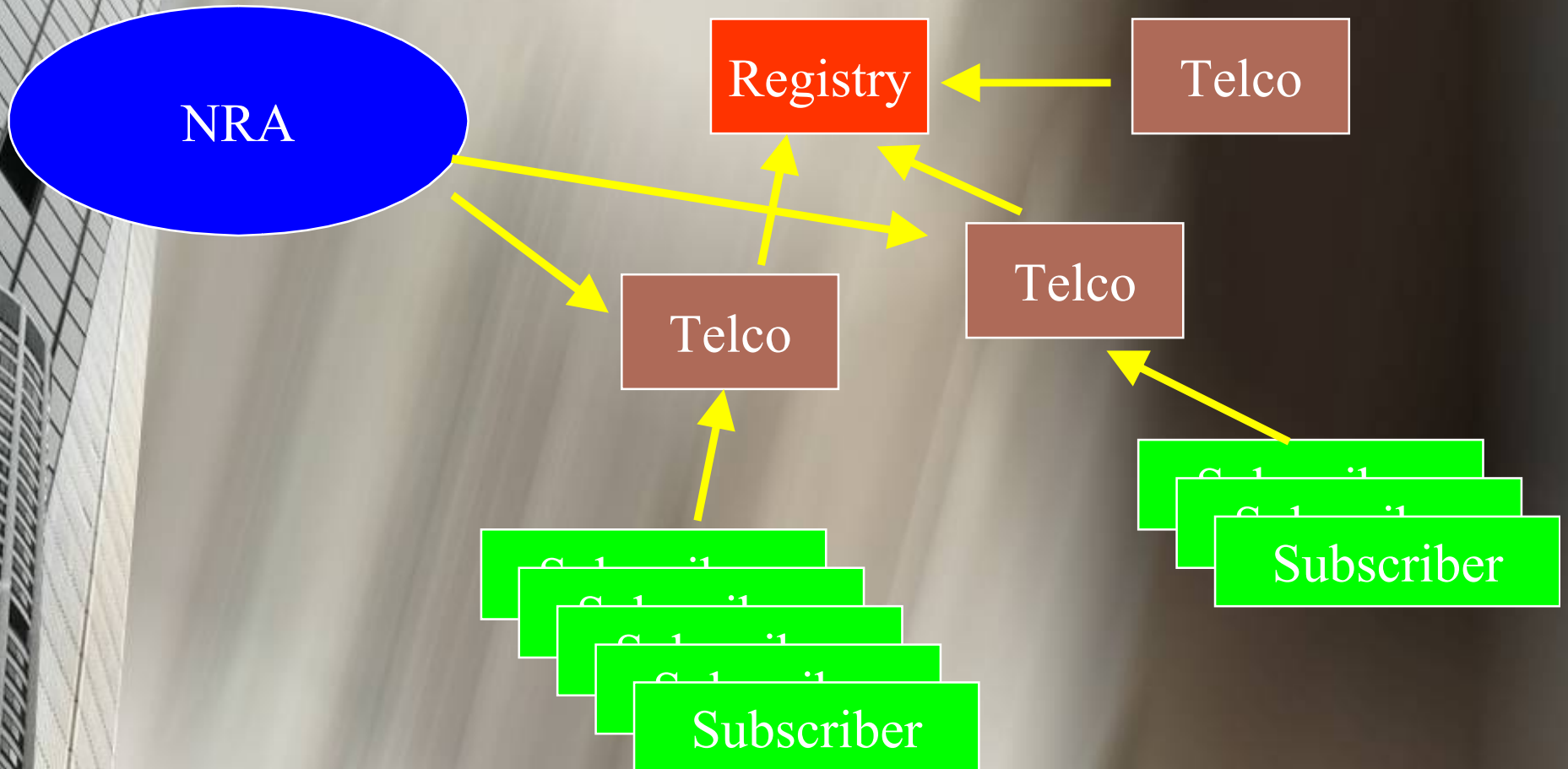
2. The provision of Paragraph 1 does not apply to porting numbers between fixed and mobile public telephone networks.

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.



Role of the Telco Operators and NRA

Roles...

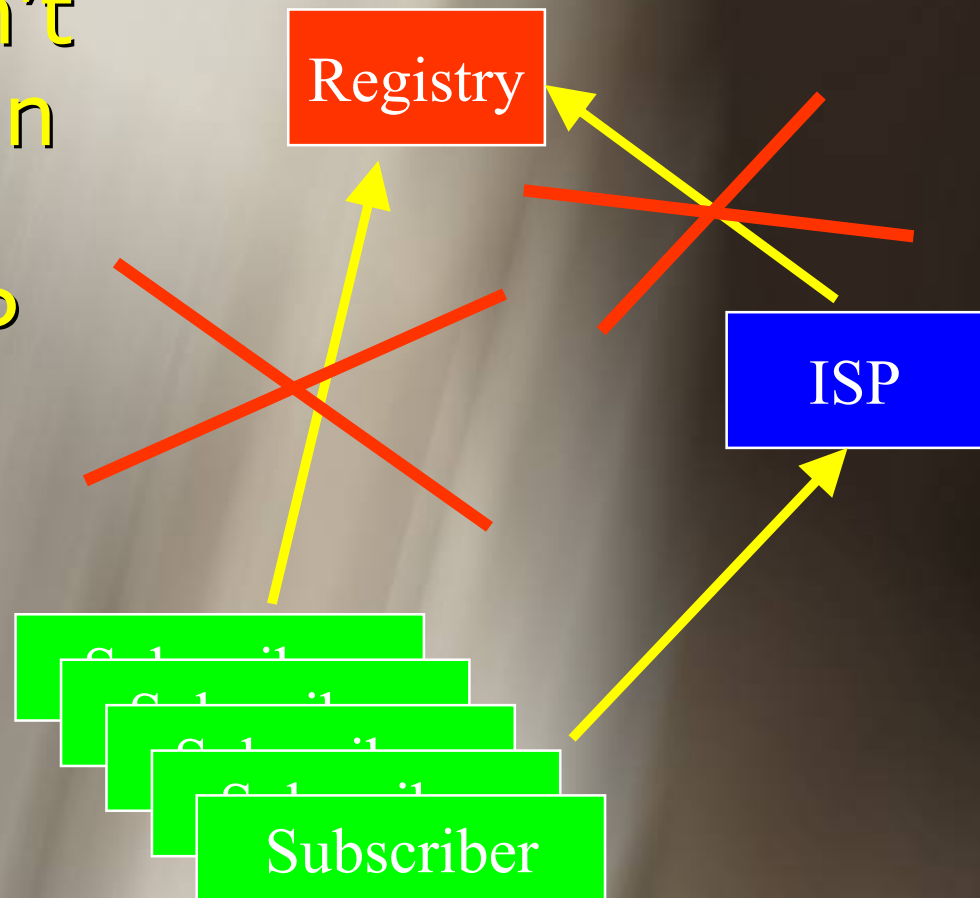


Roles...

- 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





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.



Number Portability on Carrier ENUM



Number Portability

- NASK has offered to NRA and Telcos the possibility to implement NP in Poland based on Carrier ENUM solution
- Presentations/discussions for NRA and Telcos
- There is still no NP in Poland as of November 2005 and no decision on the model (OR or ACQ?)!



Number Portability

- NASK has developed the system for Number Portability Centralized Database (database + application for administration of NP entries for Telcos and NRA).
- System fully scalable (flexible workflow, J2EE technology, strong authentication)
- Cost < 3 EUR per ported number



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