ITU Seminar for CIS Countries
Chisinau, Moldova, 19-20 May 2011

Number Portability
Regulatory Issues and
Implementation Impacts

European Communications Office
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Introduction
European Communications Office (ECO)

- The European Communications Office (ECO)
  - The permanent office supporting the CEPT located in Copenhagen, Denmark

- History
  - European NRAs needed permanent assistance
    - European Radiocommunications Office (ERO) was opened in Copenhagen 1991
    - European Telecommunications Office (ETO) was opened in Copenhagen 1994
  - ERO and ETO were merged to ERO in 2001
  - ERO changed names to ECO in 2009
CEPT vs. EU

• European Conference on Postal and Telecommunications Administrations (CEPT)
  – A group of 48 European countries

• European Union (EU)
  – A group of 27 countries
European Union

1. Austria
2. Belgium
3. Bulgaria
4. Cyprus
5. Czech Republic
6. Denmark
7. Estonia
8. Finland
9. France
10. Germany
11. Greece
12. Hungary
13. Italy
14. Ireland
15. Latvia
16. Lithuania
17. Luxembourg
18. Malta
19. Netherlands
20. Poland
21. Portugal
22. Romania
23. Spain
24. Slovak Republic
25. Slovenia
26. Sweden
27. United Kingdom

CEPT = European Union +

28. Albania
29. Andorra
30. Azerbaijan
31. Belarus
32. Bosnia and Herzegovina
33. Croatia
34. Georgia
35. Iceland
36. Liechtenstein
37. Macedonia (FYROM)
38. Moldova
39. Monaco
40. Montenegro
41. Norway
42. Russia
43. San Marino
44. Serbia
45. Switzerland
46. Turkey
47. Ukraine
48. Vatican
CEPT vs. EU (European Commission)
Numbering related issues

- European Commission (EC) drives harmonisation within the area of telecommunication
  - Telecommunication policy matters
  - Harmonised numbers
    - Single European emergency number: 112
    - Harmonised Services for Social Value: 116
  - ETNS v2 +3883??

- CEPT carries out the implementation work
  - Technical regulations in telecommunication
  - Enlargement of EC’s harmonization work to the whole CEPT
Number Portability Legislation in Europe
Division of European regulations

- EU Directives and Commission Decisions
- CEPT Decisions and Recommendations
- National legislations, decrees and other regulations
European Union

- In general, EU Directives obligate EU Member States
- EU Directives are guidelines to national legislation
  - EU Member States must implement these in to their national legislation
  - Some other countries (European Economic Area – EEA) have chosen to implement Directives
  - Some CEPT countries have chosen to implement Directives in order to prepare EU membership
- Commission Decisions act like Directives
CEPT

• CEPT Decisions/Recommendations are ‘voluntary’ measures
  – Comparable with ITU Recommendations
• These shall not be in contradiction with EU Directives, but may extend them to the CEPT countries outside the EU
  – Voluntary implementation
• CEPT Decisions/Recommendations outside the EU scope
  – E.g. on SMS numbering plans
Universal Service Directive
Current NP Regulation

Directive 2009/136/EC
of the European Parliament and of the Council
of 25 November 2009

amending Directive 2002/22/EC on universal service […]

Article 30: FACILITATING CHANGE OF PROVIDER
Article 30 par 1

Member States shall ensure that all subscribers with numbers from the national telephone numbering plan who so request can retain their number(s) independently of the undertaking providing the service in accordance with the provisions of Part C of Annex I.
Article 30 Annex I part C

Implementation of the number portability provisions referred to in Article 30

The requirement that all subscribers with numbers from the national numbering plan, who so request can retain their number(s) independently of the undertaking providing the service shall apply:

a) in the case of geographic numbers, at a specific location;

and

b) in the case of non-geographic numbers, at any location.

This Part does not apply to the porting of numbers between networks providing services at a fixed location and mobile networks.
Scope of portability

• Service provider portability
  – Retain the number and change service provider
  – Applicable with both fixed and mobile numbers
  – The *typical mode* of portability

• Location portability
  – Retain the number with the same service provider, but move the location of the fixed telephone subscription
  – A matter of service provisioning with a service provider

• Service portability
  – E.g. between fixed and mobile
  – Not implemented in Europe
Article 30 par 2

National regulatory authorities shall ensure that pricing between operators and/or service providers related to the provision of number portability is cost-oriented, and that direct charges to subscribers, if any, do not act as a disincentive for subscribers against changing service provider.
Article 30 par 3

National regulatory authorities shall not impose retail tariffs for the porting of numbers in a manner that would distort competition, such as by setting specific or common retail tariffs.
Article 30 par 4

Porting of numbers and their subsequent activation shall be carried out within the shortest possible time. In any case, subscribers who have concluded an agreement to port a number to a new undertaking shall have that number activated within one working day.

Without prejudice to the first subparagraph, competent national authorities may establish the global process of porting of numbers, taking into account national provisions on contracts, technical feasibility and the need to maintain continuity of service to the subscriber. In any event, loss of service during the process of porting shall not exceed one working day. Competent national authorities shall also take into account, where necessary, measures ensuring that subscribers are protected throughout the switching process and are not switched to another provider against their will.

Member States shall ensure that appropriate sanctions on undertakings are provided for, including an obligation to compensate subscribers in case of delay in porting or abuse of porting by them or on their behalf.
Understanding Art. 30 par 4

• “shortest possible time”
  – Technical porting is not a problem, a validation process before that may take time

• “one working day”
  – “number activated within one working day”
  – “loss of service [...] shall not exceed one working day”

• Questions
  – Where does counting for one working day start?
    ▪ …”concluded an agreement”…
  – Long loss of service…?
    ▪ Current implementations are able to cut the service only for few minutes
  – In case of delay or abuse
    ▪ No guidelines for compensations
Essential Porting Times

ECC Report 155:
Number Portability Efficiency: Impact and Analysis of
Certain Aspects in Article 30.4 of the Universal Service
Directive and General Remarks on NP Efficiency

START of the porting process

Porting request from subscriber to Recipient

Porting request from Recipient to CRDB

Acceptance by Donor

Validation by Donor

Subscriber’s wish on execution date

Subscriber (S)

CRDB = Central Reference Database

Time

Validation (V)

Scheduled time of porting

Acknowledgement by Donor

New subscription activated by Recipient

Execution, i.e. potential downtime

New routing data broadcasted to operators by the CRDB and operators acknowledge back

Essential time frames:

Horizontal lines are expected to take "zero" time

May be "zero" time

Potential down time (D)
Member States shall ensure that contracts concluded between consumers and undertakings providing electronic communications services do not mandate an initial commitment period that exceeds 24 months. Member States shall also ensure that undertakings offer customers the possibility to subscribe to a contract with a maximum duration of 12 months.
Article 30 par 6

Without prejudice to any minimum contractual period,

Member States shall ensure that conditions and procedures for contract termination do not act as a disincentive against changing service provider.
Number Portability Implementation in Europe
ECC Report 155

Number Portability Efficiency:
Impact and Analysis of Certain Aspects in Article 30.4 of the Universal Service Directive and General Remarks on NP Efficiency (Luxembourg, November 2010)

• The aim of this report is to promote discussions on some number portability provisions laid down by the new provisions in the Universal Service Directive (USD) and to promote discussion on possible ways to improve NP efficiency.
• The ECC Report 155 lists 23 NP parameters (both for mobile and fixed) for 21 CEPT countries in its Annex 2
• Download the report at http://www.erodocdb.dk/Docs/doc98/official/pdf/ECCREP155.PDF
Mobile Number Portability Implementation Time Scale

- 1999: United Kingdom
- 2000: Switzerland
- 2001: Denmark, Norway, Sweden
- 2002: Belgium, Germany, Italy
- 2003: Finland, France
- 2004: Austria, Hungary, Lithuania
- 2005: Malta, Slovak Republic
- 2006: Croatia, Czech Republic
- 2008: Bulgaria, Macedonia, Romania, Turkey
- 2009
- 2010
Fixed Number Portability Implementation Time Scale

- 1997: United Kingdom
- 1999: Norway, Sweden
- 2001: Denmark
- 2004: Hungary
- 2006: Malta
- 2009: Bulgaria, Turkey


- 1998: Germany, Finland, France
- 2000: Belgium, Italy, Switzerland
- 2002: Austria, Czech Republic
- 2005: Croatia, Slovak Republic
- 2008: Macedonia

Number Portability in Europe
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Regulated downtime in mobiles

- Downtime in NP process:
  - Time during which the subscriber does not have communications services either from the donor nor the recipient operator

- 12 CEPT countries have explicit maximum downtime within the portability process in their regulations
  - Many others just say “as short time as possible”
  - Regulated average downtime: 2.5 hours
  - Regulated shortest downtime: 10 min (BEL, FIN)
  - Regulated longest downtime: 7 hours
Future work by CEPT NP project team

- Compensation Mechanisms in Number Portability
  - USD Art 30 par 4:
    "Member States shall ensure that appropriate sanctions on undertakings are provided for, including an obligation to compensate subscribers in case of delay in porting or abuse of porting by them or on their behalf."

- Best Practices in Number Portability
  - A draft recommendation – based on CEPT countries’ experience – on best NP practices

- Impact Assessment on Service Portability between Fixed and Mobile Numbers
  - Study to assess whether service portability is viable
Thank you for your attention!