

Universal Service of broadband and mobile services – Regulatory Aspects

Morten Falch

CMI, CIT, Aalborg University Copenhagen

USO

The Directive includes four specific elements in the scope of universal service:

- access at a fixed location for making and receiving local, national and international telephone calls and fax communications, and data communications at data rates that are sufficient to permit functional internet access;
- availability of at least one comprehensive directory and directory enquiry service comprising all fixed and mobile subscribers who wish to be included;
- availability of public payphones; and
- specific measures ensuring access and affordability of publicly available telephone services to users with disabilities or special needs, and those on low incomes.

Points raised in the 2nd periodic review Sept. 2008

- What level of “majority” take-up would be needed before a USO can be invoked?
- Definition groups of consumers and geographic zones
- Appropriate approach to ensure access to and usability of ecommunications for vulnerable persons (such as disabled and older users)
- Is there still a need to keep the provisions of directories and public pay telephones within the USO?
- What would be the likely costs of universal service obligations and who should pay for them?

The need to review the definition of **Universal Service**

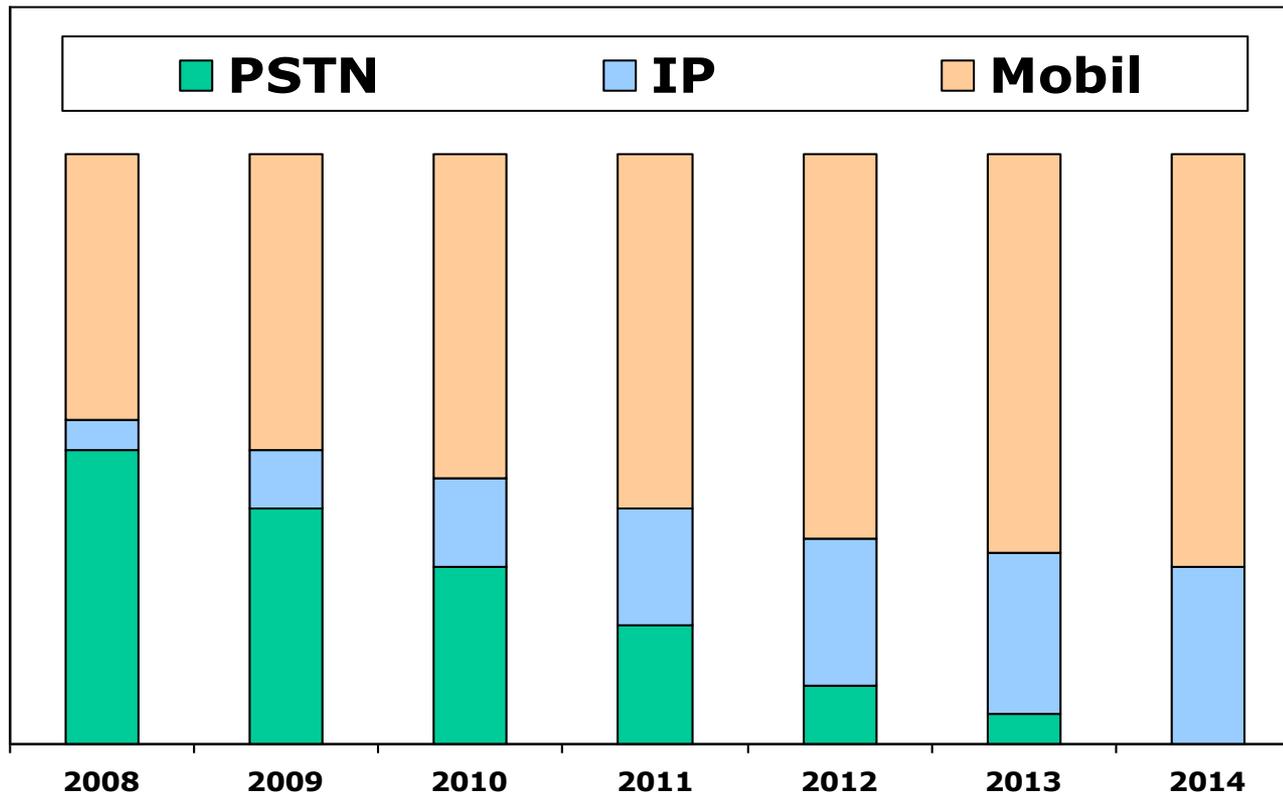
- **New services:**
 - New services such as mobile and broadband becoming at least as important as PSTN
- **New infrastructures:**
 - NGN leads to a separation of services and infrastructure

The importance of broadband

- Internet is used to provide citizen services such as
 - Directory services
 - Public information
 - Banking
 - Salary statements
 - Taxation
- Without Internet the citizens do not have access to these services

The importance of Mobile vs. PSTN

(source: TDC)



NGN: Separation of infrastructure and services

- Formerly, silos of vertically integrated networks and services: telephony on PSTN and TV on cable
- Presently, horizontal convergence and vertical divergence
- TCP/IP is the most important example
- NGN:
 - Includes a wide range of network technologies
 - Is offered by several different types of actors
 - Is basis for different modes of organisation and business models

Is USO becoming obsolete? What are the alternatives?

- In Europe there are two different approaches
 - Universal service obligation
 - Implemented for PSTN and telephony at the time of liberalisation
 - Considered extended to mobile and broadband
 - Lisbon process
 - Focus on the broader context
 - Focus on supply and demand for broadband access and services

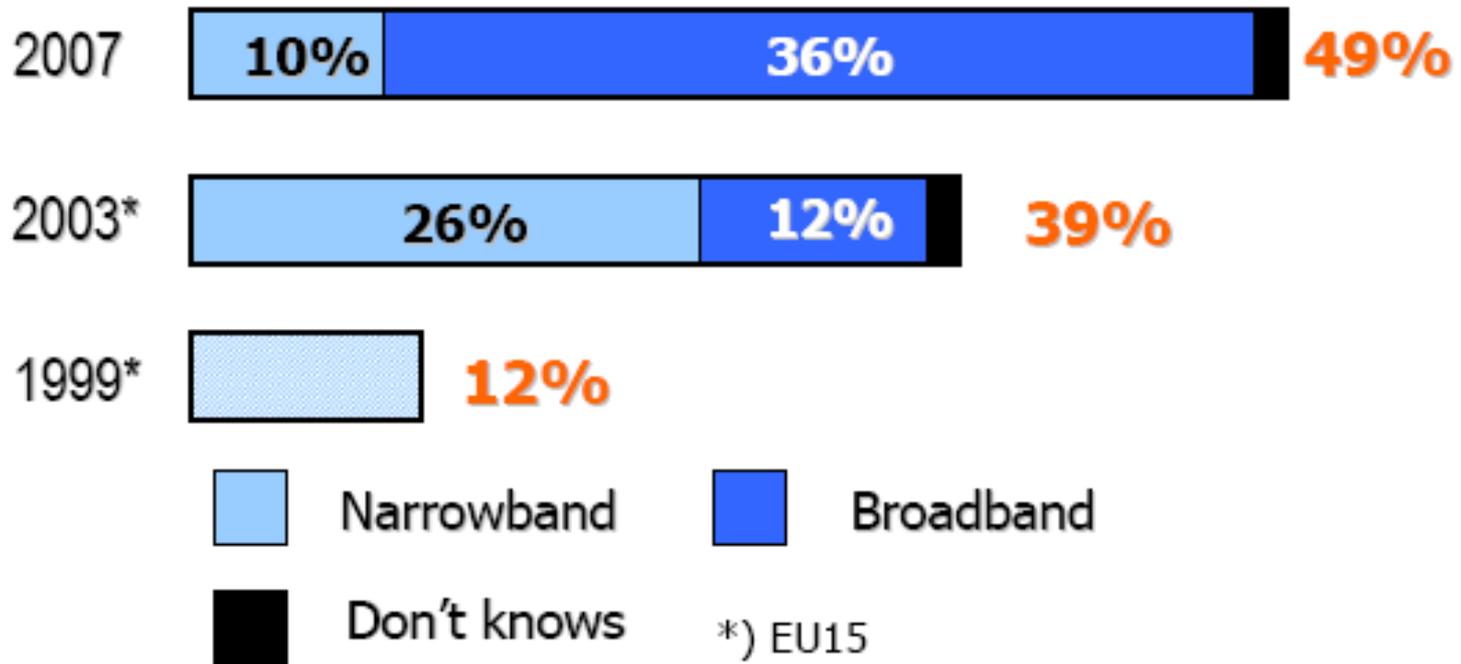
USO – key points

- Accessibility (Universal coverage)
- Affordability
- The first one has been the most important

USO for mobile services?

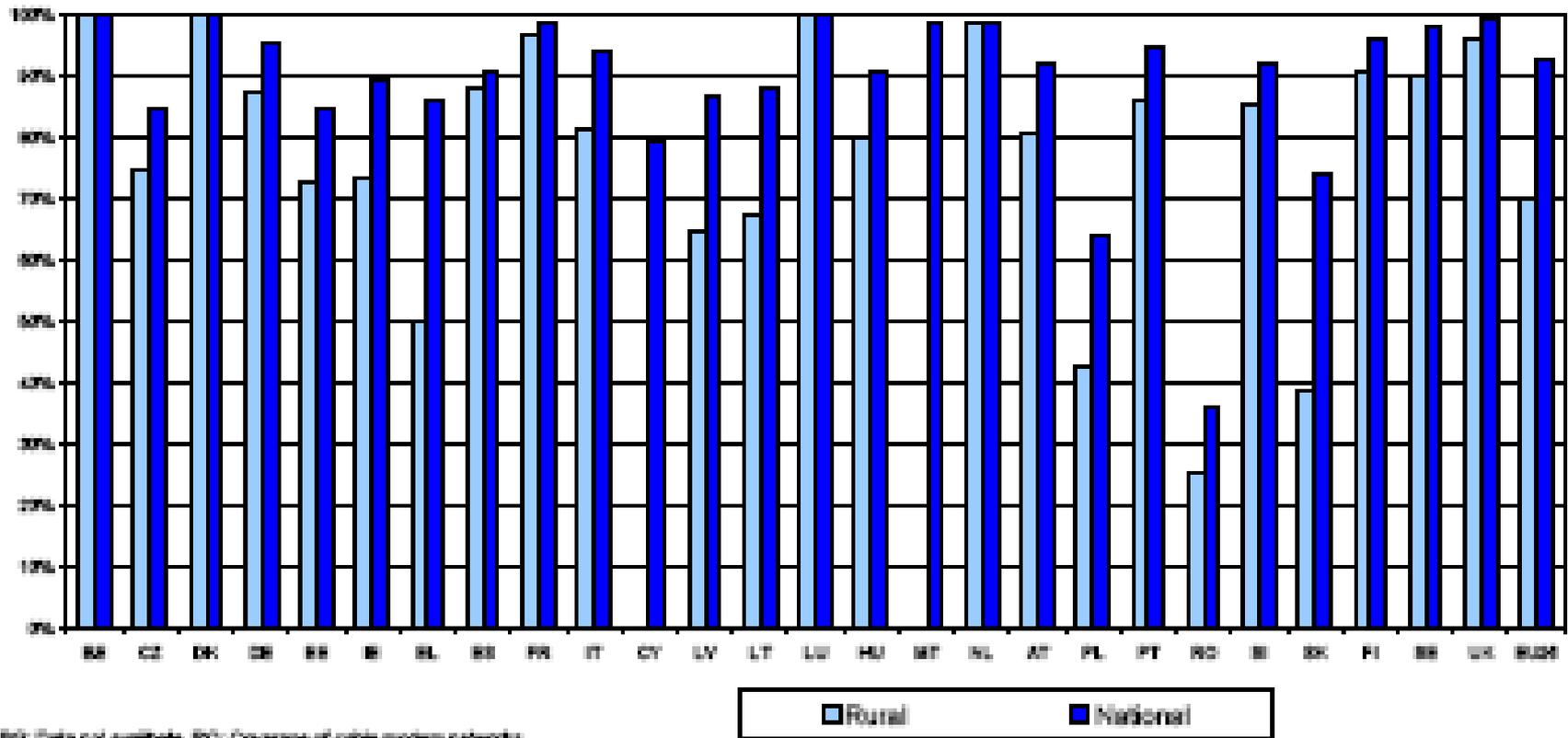
- USO exist already
- Coverage: demanded in spectrum licenses
- Affordability: Achieved through competition
 - ‘the competitive provision of mobile communications has resulted in consumers already having affordable access to mobile communications’ (COM(2005) 203, p. 7)

USO for broadband?



Broadband coverage (ADSL)

DSL rural and national coverage, December 2007



BE: Data not available. RO: Coverage of cable modem networks



Can the market do the job?

- Depends on the technologies
- Different network technologies imply very different cost structures.
- Will wired broadband access be crucial?

Lisbon process

- Promoting economic development in general in Europe
- Broadband access and use is a crucial element in the strategy
- Therefore, much focus on broadband

EU: Available instruments

- Communication from the Commission on ‘Bridging the Broadband Gap’ (COM(2006) 129 final) termed ‘available instruments’:
 - Implementation of the regulatory framework for electronic communications
 - Public funding
 - State aid and competition policy
 - EU funding: Structural Funds and Rural Development Fund
 - Demand aggregation and procurement
 - Fostering the creation of modern public services

Categories of policy initiatives

- Strengthening and harmonisation of internal use in public organisations
- Developing public communication networks and services relating to citizens and businesses
- Facilitation of the development of communication networks and services
- Regulation proper, setting the 'rules of the game'
- Support for demand
- Support for supply

Rules for state aid

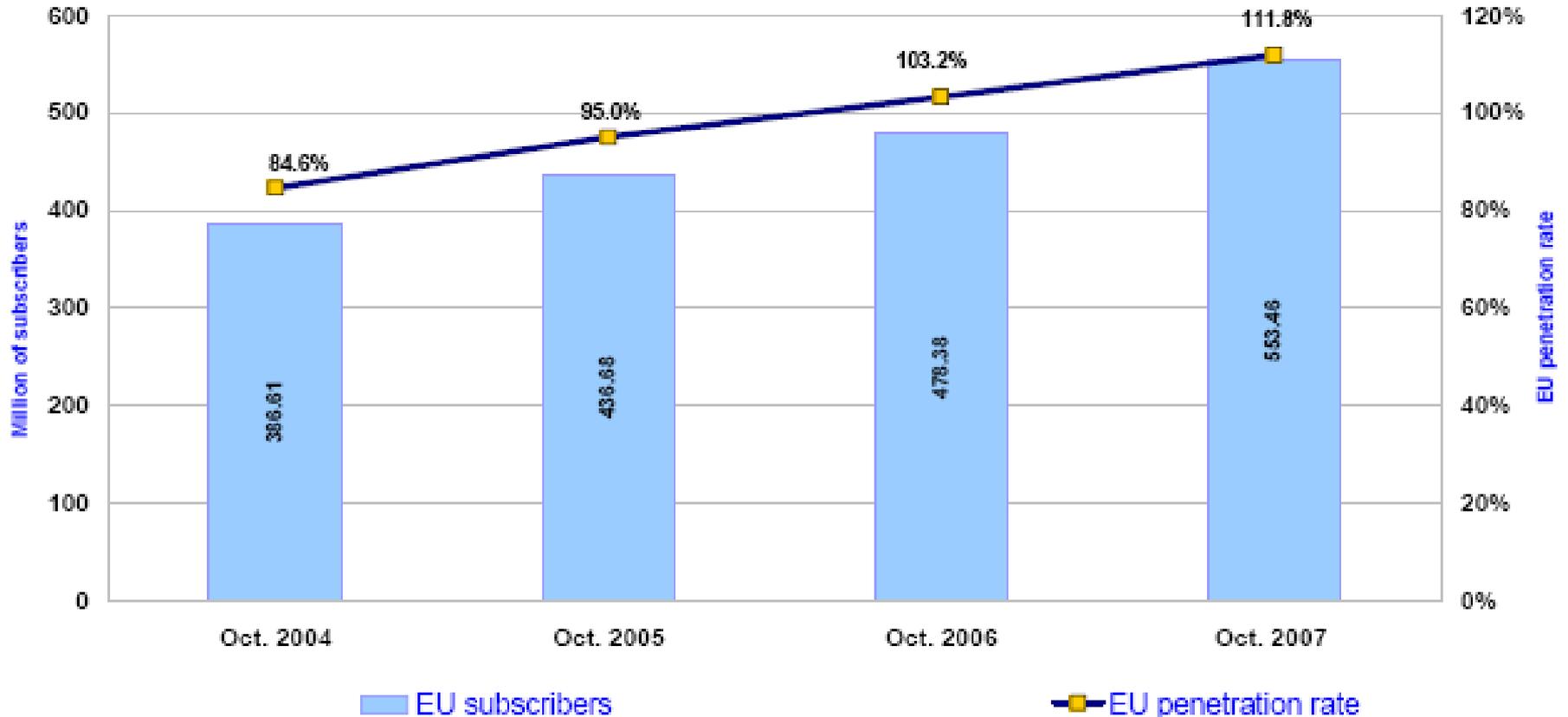
- EU Commission reviews national projects for state funding of broadband infrastructure
 - Infrastructure support must be given only to bridge the digital divide
 - Support should, therefore, be limited to areas where it is not commercially viable for private sector operators to establish adequate facilities
- EU Commission distinguishes in this context between white, grey and black areas
 - White areas are sparsely populated rural zones, where no broadband access except via satellite or leased lines is available. In such areas, state aid is in general allowed
 - Grey areas are areas where broadband is already provided. Here, permission for state aid demands a more detailed assessment
 - Black areas are those where at least two competing infrastructures exist, and where there will be a high risk for market distortion if state funding is allowed - in such areas state aid is generally not allowed

Alternative funding mechanisms

- Public funding programmes and investments, e.g. municipalities
- Investments by private companies other than telecoms operators
- Funding through non-profit organisations
- Public Private Partnerships (PPP)

Conclusion

- Two approaches:
 - USO
 - Broader policy measures
- Two issues regarding USO
 - Inclusion of broadband and mobile in present definition
 - NGN and the USO concept
- From universal telephone service to broadband access
- From USO policy to broader measures
- Alternative funding mechanisms – depending on effectiveness of the market



Implications for the scope of universal service

- Radical implications for the scope of universal service: From a set of services and their underlying dedicated networks towards focusing on the access issue
- Two ways to promote universal access:
 - Inclusion of broadband access into the universal service scope
 - Reliance on the many other policy measures?
- Competition may be the most important remedy as different access paths exist
- Policy goal in e.g. Denmark is to have 100% coverage