

EUROPEAN COMMISSION



Scope, funding mechanisms and challenges of universal service and access

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European Commission

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I The EU approach to universal service

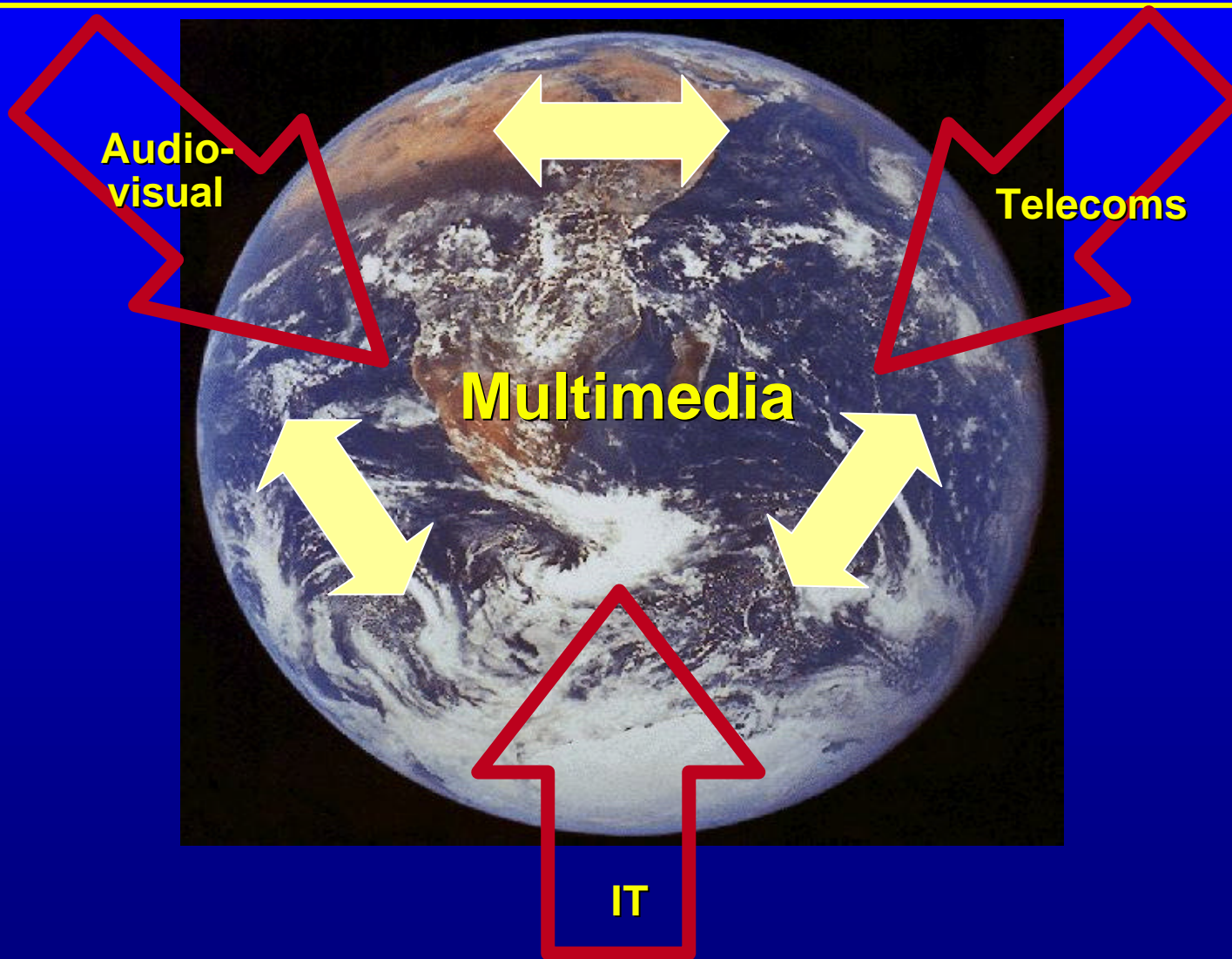
- The new EU regulatory framework
- Where are we today on US, and why change?
- What's in the US Directive?

II How will accession candidates (new EU Member States) deal with US?

III Universal service in emerging economies and developing countries

- Universal service or access?
- Policy options
- Issues

The Challenge of Convergence



Today - separate networks, separate rules

Service

Voice
telephony

Data

Broadcasting

Network

Fixed
Mobile

Fixed

Cable
Satellite
Terrestrial

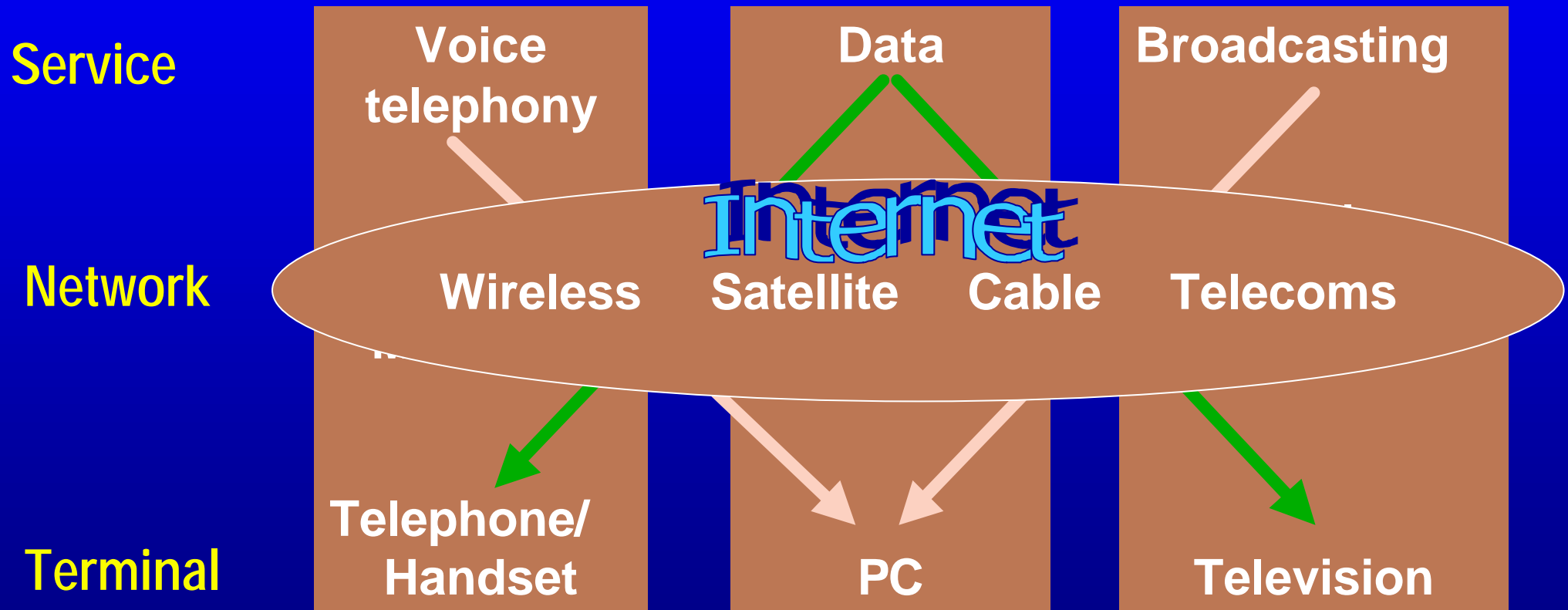
Terminal

Telephone/
Handset

PC

Television

Convergence is a reality



DEALING WITH CONVERGENCE



- 1. All content can be delivered over all networks; network-dependent rules are being overtaken by technology; markets are merging; so:**
 - coherent regulation of communications infrastructures and associated services

- 2. Content and transport are different, so:**
 - separate regulation for transport and for content, while recognising the links between them

- 3. Regulation should be kept to a minimum, so:**
 - only impose regulation where competition not effective and where competition law isn't enough

Electronic communications networks and services - Scope

Content Services

**- outside scope of new framework
(e.g. broadcast content, e-commerce services)**

**Communications services
(e.g. telephone, fax, e-mail)**

**Communications networks
(fixed, mobile, satellite, cable TV, powerline systems,
networks used for radio and television broadcasting)
and associated facilities (e.g. CAS)**

Regulatory approach of the package

◆ Identify markets

- ◆ product markets (eg call termination)
- ◆ geographical markets (eg local, national, global)

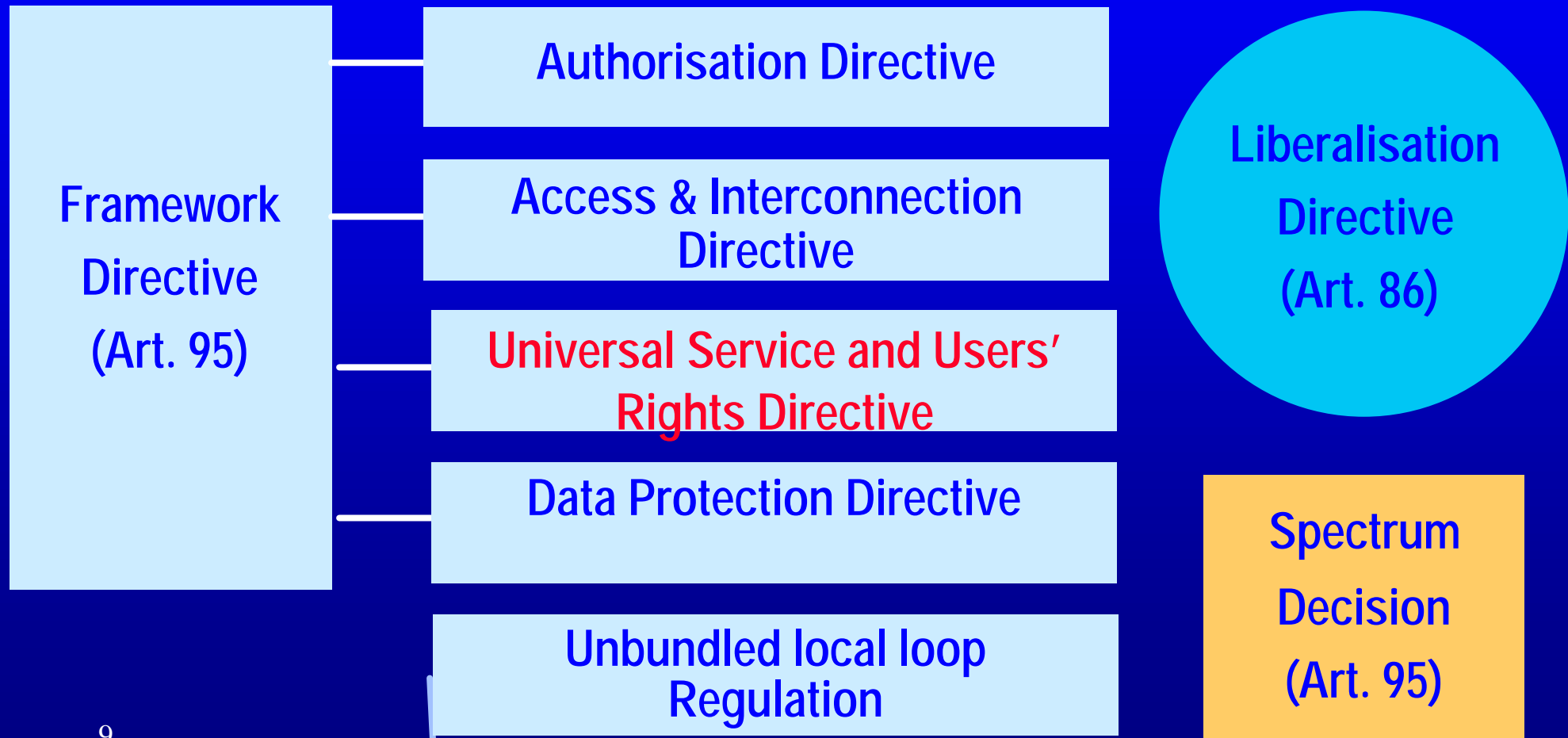
◆ See whether there are dominant operators on those markets (Significant Market Power)

- ◆ minimal and linked to degree of competition
- ◆ flexible BUT harmonised at a European level
- ◆ technologically neutral

◆ Regulate only where an operator has a dominant position in an identified market where competition is not effective



The new package



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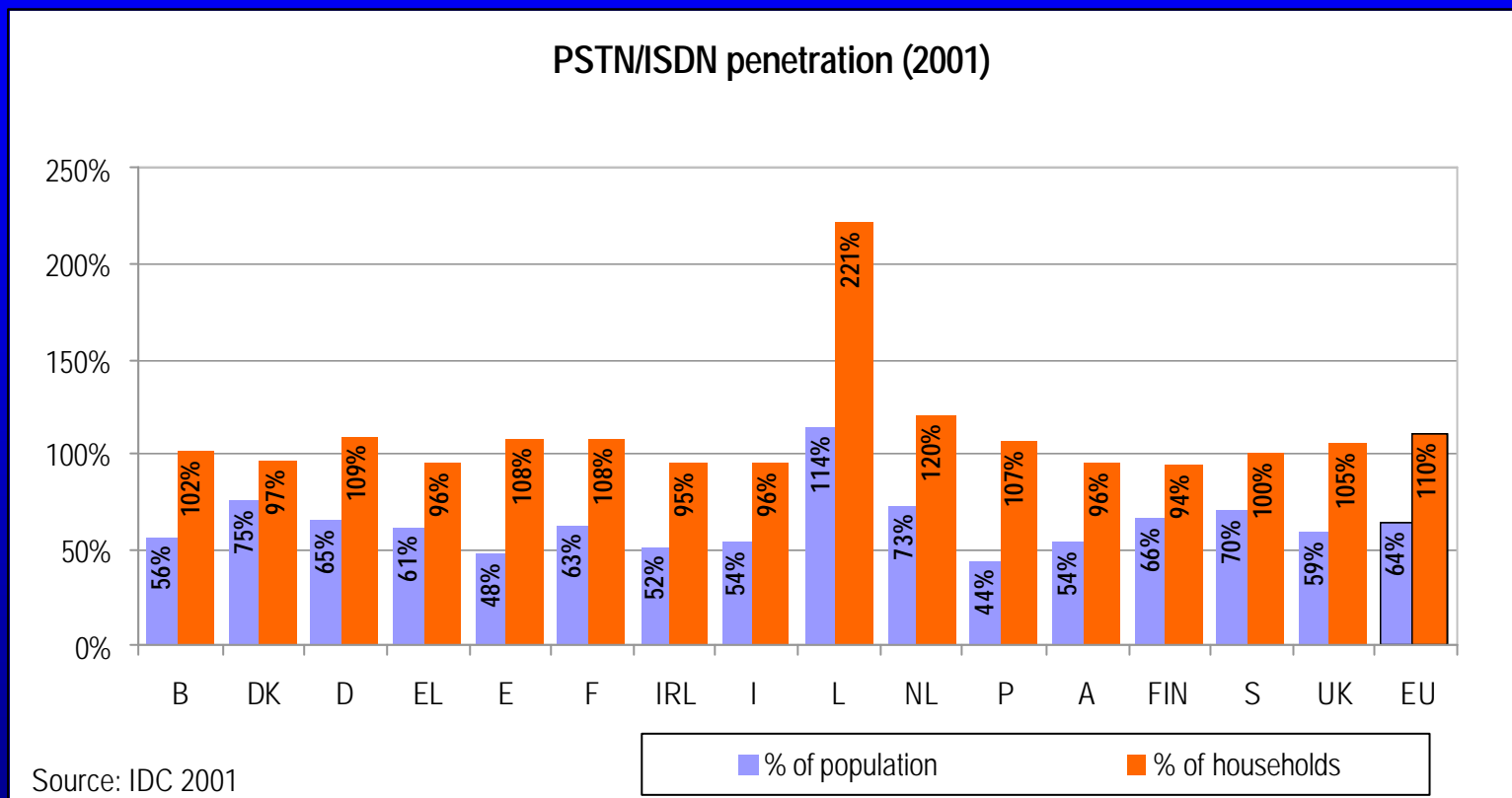
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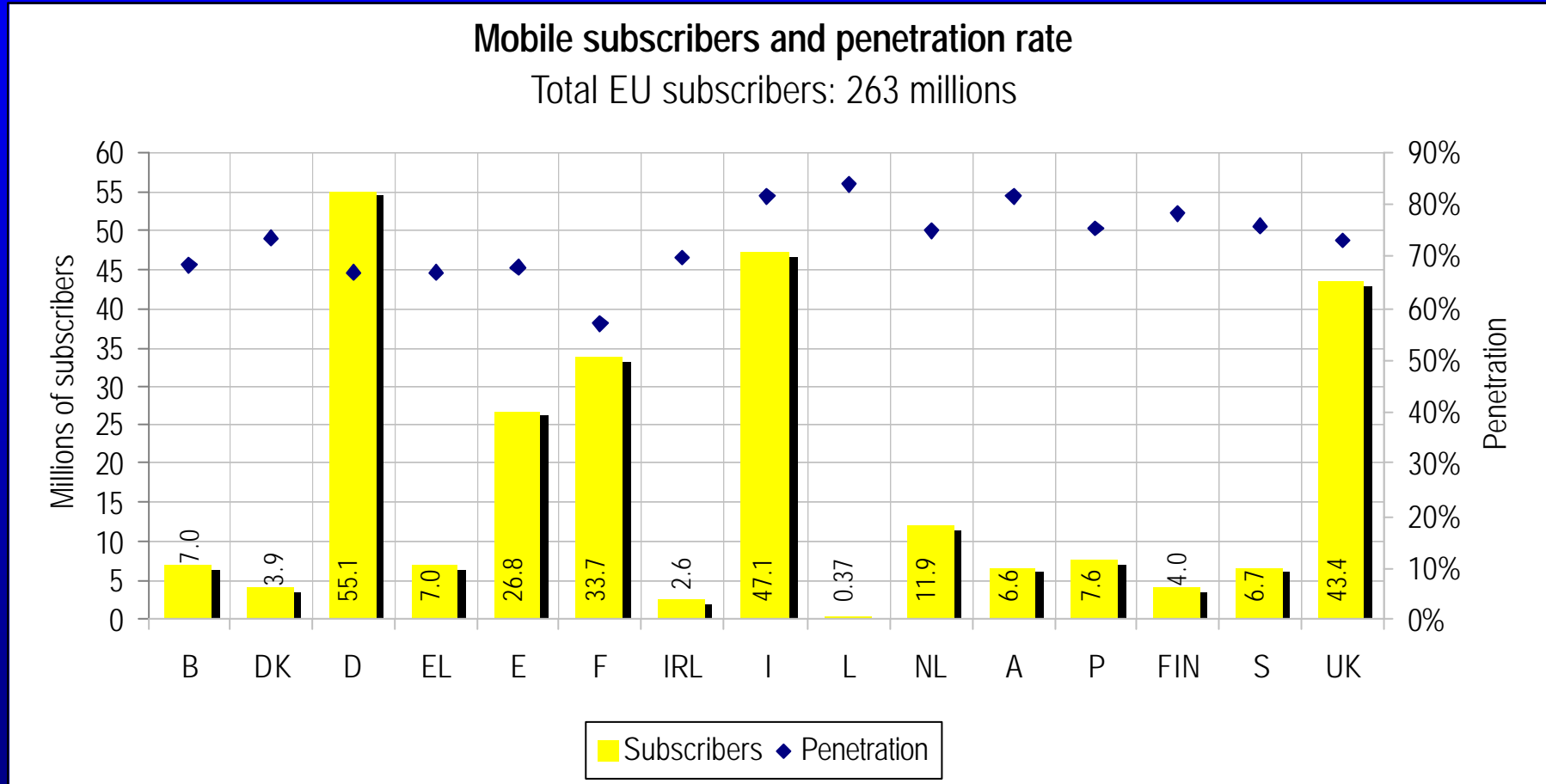
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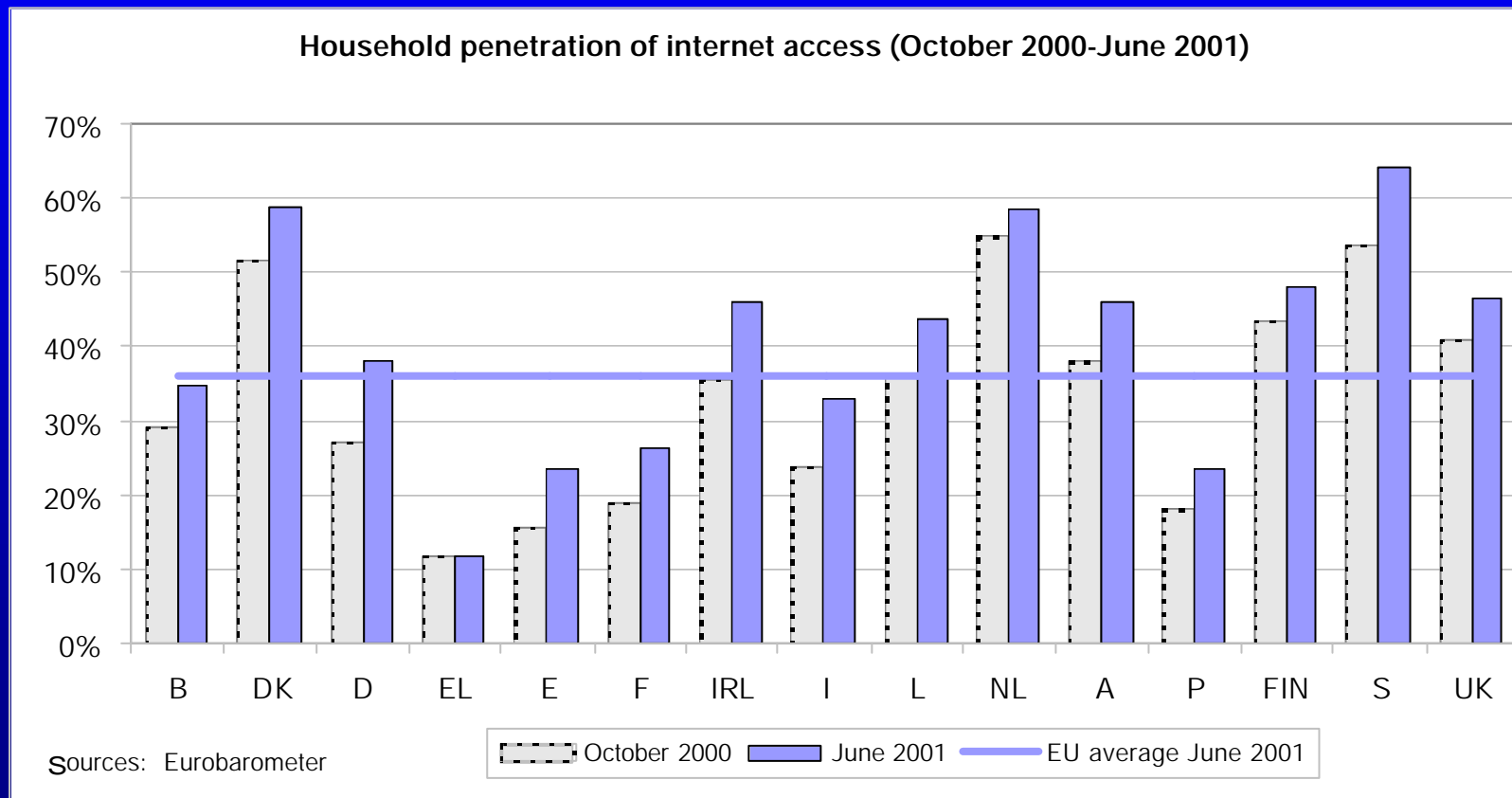
PSTN/ISDN Penetration



Mobile Penetration



Internet Penetration



Need for change ?



- ◆ **Monitoring Reports**
- ◆ **Consultancy studies**
- ◆ **No need for substantial modifications, but need to simplify, clarify, and take into account convergence**
- ◆ **Scope is broadly the same**

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Scope of Universal Service: General



- ◆ **Set of services**
- ◆ **must be available under some conditions:**
 - ◆ affordability (type of users, and geographical locations)
 - ◆ quality
- ◆ **Scope linked to financing mechanism - Member States can go further with the general budget**
- ◆ **Possible review**

Scope of Universal Service: Different services



- ◆ **Provision of access at a fixed location**
 - ◆ sufficient for functional Internet access
 - ◆ technologically neutral (wire or wireless) on connection at fixed location
 - ◆ no extension to mobile
- ◆ **Directories and directory enquiry services**
- ◆ **Public pay telephones**
- ◆ **Special measures for disabled users**

Scope of Universal Service: Conditions



◆ Affordability of tariffs

- ◆ Low income or peripheral regions

◆ Facilities permitting control of expenditure

◆ Quality of services: Publication and performance targets

Means: Designation of USO providers



◆ If necessary, Member States may designate one or more USO providers

- ◆ Use of efficient, objective, transparent, and non-discriminatory mechanism
- ◆ to ensure that USO is provided in a cost-effective manner and may be used as a means of determining the net cost
- ◆ Designation for all or part of the different services, all or part of the territory

Means: Determination of the cost of USO



- ◆ **When representing an unfair burden, NRA shall calculate the net cost of USO**

- ◆ **Either calculation of the net cost**
 - ◆ **Avoidable cost - provision at non-commercial conditions - take into account intangible benefits**

- ◆ **Or, cost revealed during designation process (eg: auctions)**

Means: Financing the USO cost



- ◆ **The net cost of USO can be financed in two ways**
- ◆ **General government budget and/or**
- ◆ **Sectoral Fund**
 - ◆ Should respect principles of transparency, least possible market distortion, non-discrimination and proportionality
 - ◆ Contributors: providers of electronic communications networks and services
- ◆ **Transparency**

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Applicability to EU candidate countries



◆ Main lines per 100 population (1999, WIK)

- ◆ 35.4 average in candidate countries
- ◆ 54.9 average in EU15

◆ Availability of universal service

- ◆ Flexibility to permit use of lower data rates (eg to allow use of wireless technologies)

◆ Designation of undertakings to provide universal service

- ◆ designation methods do not exclude auctions or tenders

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Emerging economies and Developing countries (1)



◆ Universal service or universal access?

Emerging economies and Developing countries (2)



◆ Policy options

- ◆ Public access policies
- ◆ Universal service funds
- ◆ Competitive bidding systems
- ◆ Low interest loans and microcredit
- ◆ Use of service requirements

Emerging economies and Developing countries (3)



◆ Issues

- ◆ Sustainability
- ◆ Pricing
- ◆ Funding

Possible sources of revenues for Universal service/access funds (World Bank study)



Source of Revenues	Definition/Description	Characteristics/Examples
Interconnect levies	Incumbent operator carries a universal service or access obligation	Interconnection surcharge may be opaque and operator has no incentive to reduce costs. Example : US
Operator revenue contribution	All operators charged a percentage of revenue	Levy generally varies between 1-2%, eg Peru and Dominican Republic. In Guatemala, 70% of revenues from spectrum auctions go to the fund
Government budget	Funds for UA provided by treasury	Eg Chile
Seed finance by development bank or agency	Funds for UA come from international organisations	Eg WB recent project in Nicaragua includes a small portion of seed financing for the rural development fund. Similar schemes under discussion in Nepal and Nigeria.

Examples (1)



◆ Chile

- ◆ Universal service fund (national budget)
- ◆ Eligible projects (areas to be served) selected
- ◆ Public competitive bids invited
- ◆ Non-exclusive 30 year licences awarded to winners
- ◆ Licensees set retail prices of most services
- ◆ 1994 to 2002: reduction from 15% to 1% of proportion of population living in places without access to voice telephony

Examples (2)



◆ South Africa

- ◆ Network rollout obligations in licence
- ◆ Financed through cross-subsidy of incumbent during 5 year monopoly period
- ◆ Universal service fund (financed by telecom licensees)
- ◆ Establishment of telecentres
- ◆ Human resources fund (financed by telecom licensees)

Examples (3)



◆ China?

- ◆ Up to now: China Telecom cross-subsidies
- ◆ Now: break-up of China Telecom
- ◆ Soon: Universal service fund?
- ◆ Contributions from market participants?

For more information ...

On the European Commission:

<http://europa.eu.int/>

On DG Information Society:

http://europa.eu.int/information_society/topics/telecoms/index_en.htm

On the new legislation:

http://europa.eu.int/information_society/topics/telecoms/regulatory/new_rf/index_en.htm