

OECD - Telecommunications Policy for the Digital Economy



Regulation of Electronic Networks and Services in Europe

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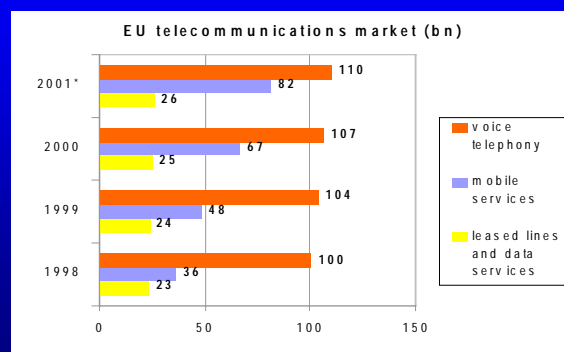


- 1. EU liberalisation - 4 years on**
 - ◆ Indicators
- 2. Key areas**
 - ◆ Licensing
 - ◆ Independent regulatory authority
 - ◆ Universal service and user interests
 - ◆ Interconnection and access
 - ◆ Numbering, naming and addressing
 - ◆ Rights of way, collocation
 - ◆ Spectrum

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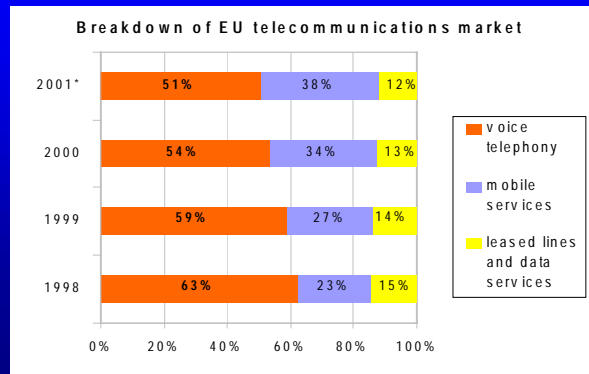
Market growth 1998-2001



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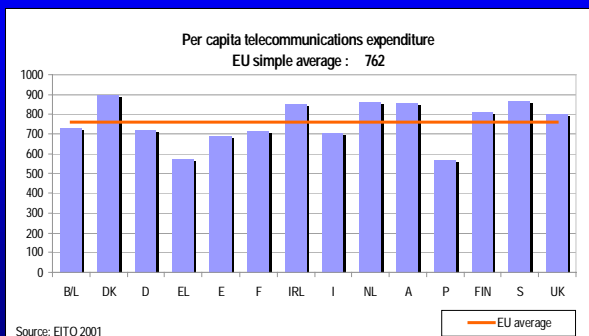
Market segmentation 1998-2001



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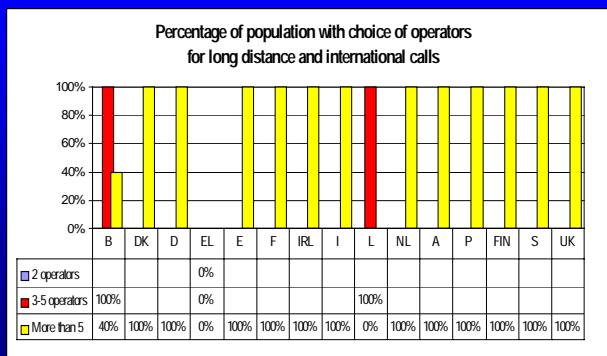
Per capita telecommunications expenditure in the EU in 2000



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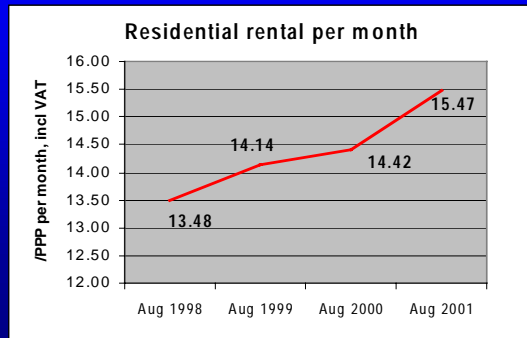
Consumer choice



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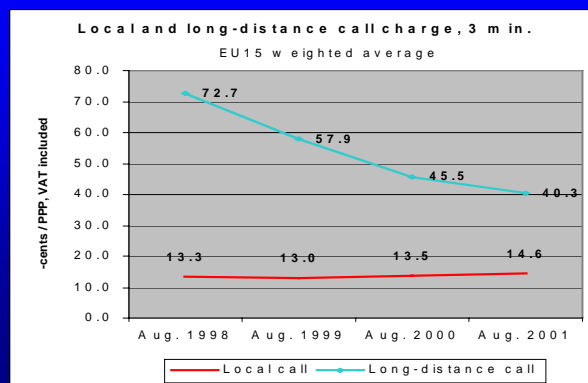
Tariff rebalancing: evolution of fixed charges



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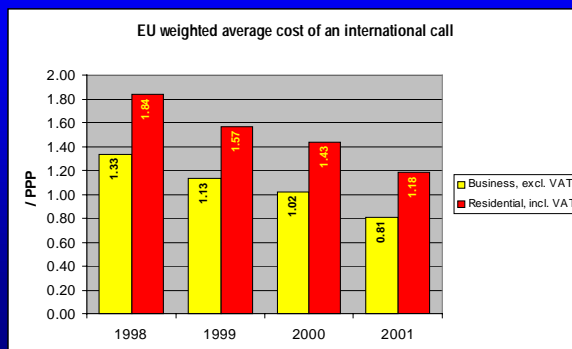
Tariff rebalancing : Charges for a 3 min call



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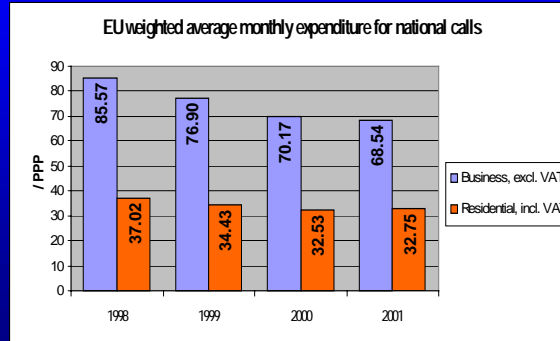
Cost of international calls



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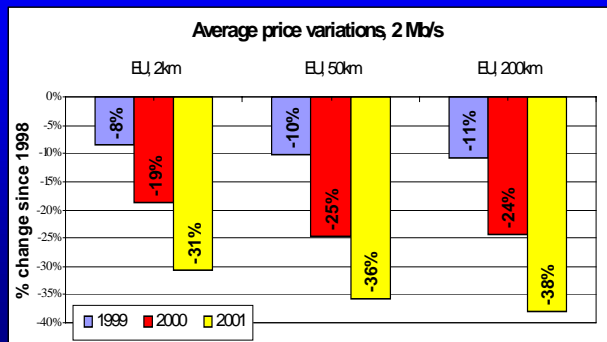
Average monthly expenditure



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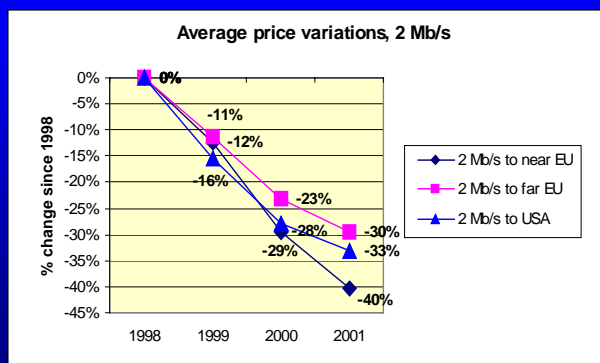
2Mbit/s national leased lines Price trends 1998-2001



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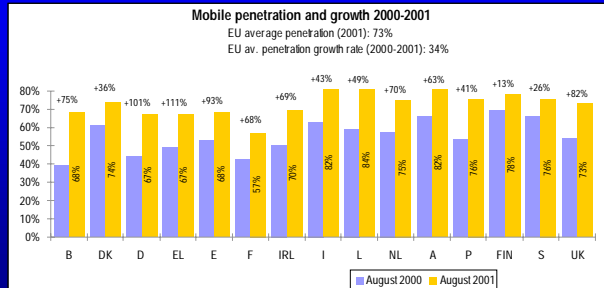
International Leased lines Price trends 1998 - 2001



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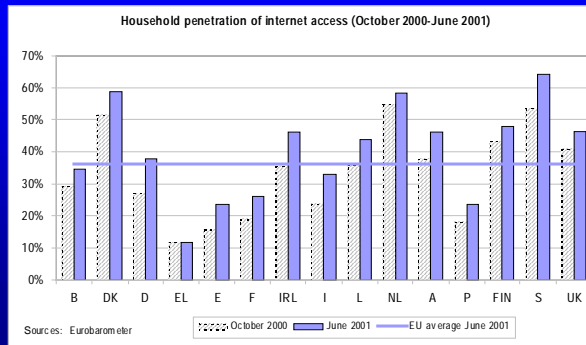
Mobile penetration and growth



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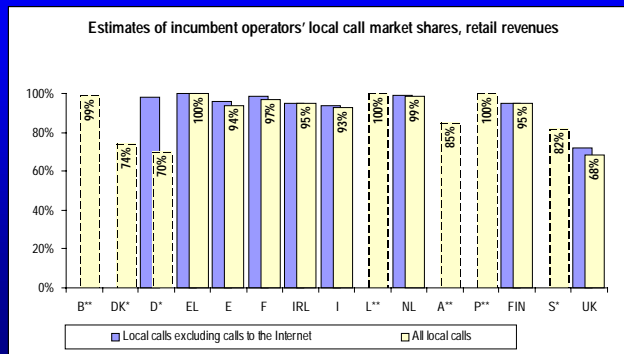
Internet access



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Incumbent's market share local call market



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Data sources



◆ European Commission 7th implementation report

see

http://europa.eu.int/information_society/topics/telecoms/implementation/annual_report/7report/index_en.htm

Creating the “right” legislative framework



A successful legal framework will:

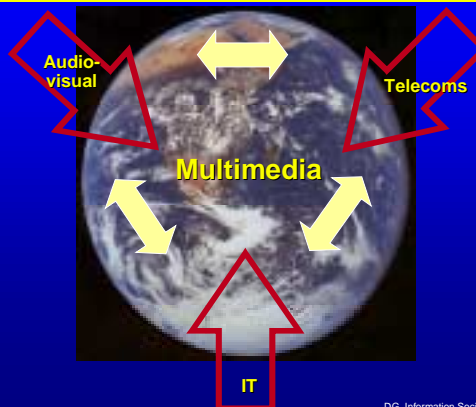
◆ Attract investment, by

- encouraging market entry
- providing legal certainty
- restraining firms with undue market power
- keeping regulation to the minimum necessary

◆ Promote choice and competition

◆ Safeguard users interests, where market forces do not

The Challenge of Convergence



GLOBALISATION

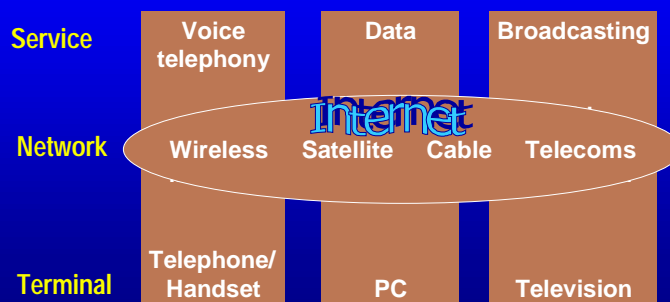


- ◆ Regulators around the world face similar problems
- ◆ Regulatory principles may be agreed globally, regionally or nationally
- ◆ Regulation should be enforced as closely as practicable to the activities being regulated
- ◆ Transparency, fairness and proportionality in rules and rule-making are essential

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Convergence is a reality



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DEALING WITH CONVERGENCE



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

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Communications services, networks and associated facilities



Services provided over networks
(outside scope of Communications regulation)

Communications services
(eg transmission of voice, data, text, image)

Communications networks and
associated facilities (eg conditional access facilities)

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Problems and Solutions



- ◆ Unpredictability of markets
- ◆ Need for legal certainty
- ◆ Differing degrees of competition in different markets
- Flexibility for regulators
- Strict procedures for regulators
- Regulation to be linked to degree of competition

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Keeping regulation to the minimum necessary




- ◆ Which markets are subject to sector-specific regulation ?
- ◆ Which companies are regulated on those markets ?
- ◆ What obligations do they face ?

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Keeping regulation to the minimum necessary



- ◆ Not all markets within scope of new framework will be regulated ex-ante
- ◆ No ex-ante intervention when there is effective competition in a specific market
 - ◆ except for general obligations arising from public policy reasons eg consumer protection
- ◆ No ex-ante intervention where competition law remedies would suffice and market entry barriers are low

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Asymmetric regulation



- ◆ Asymmetric regulation needed for as long as some players have 'significant' market power, and competition is not effective
- ◆ Obligations on operators with significant market power may include cost orientation, transparency, non discrimination, mandatory provision of - or access to - specified facilities

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Critical areas



- ◆ **Licensing**
- ◆ Independent regulatory authority
- ◆ Universal service and user interests
- ◆ Interconnection and access
- ◆ Numbering, naming and addressing
- ◆ Rights of way, collocation
- ◆ Spectrum

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Licensing and market entry



- ◆ **Today**
 - mainly individual licences, in particular for voice telephony services
- ◆ **From 2003**
 - no prior permission for market entry
 - obligations set out in general authorisations
 - individual licences only for rights-of-use of frequencies or numbers

Critical areas



- ◆ Licensing
- ◆ **Independent regulatory authority**
- ◆ Universal service and user interests
- ◆ Interconnection and access
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Independence of Regulatory Authority



- ◆ **Independent of any operator or service provider**
- ◆ **Independent of any government department that is a shareholder in an operator or service provider**
- ◆ **Independent of political interference with regard to individual decisions**

Independent Regulatory Authority



- ◆ The Regulatory Authority is the guardian of effective competition and user rights ...



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Independent Regulatory Authority



- ◆ The Regulatory Authority is the guardian of effective competition and user rights ...
- ◆ but watchdogs need teeth !



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Ensuring effectiveness of the regulatory authority



- ◆ Regulator needs to have the legal powers to impose obligations on operators (eg in resolving disputes)
- ◆ Staff need to be equipped with the necessary technical, economic and legal expertise
- ◆ Decision-making processes need to be impartial and transparent, and subject to an appeal procedure

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Critical areas



- ◆ Licensing
- ◆ Independent regulatory authority
- ◆ **Universal service and user interests**
- ◆ Interconnection and access
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- ◆ Rights of way, collocation
- ◆ Spectrum

Universal service



- ◆ **Scope - what services are included?**
- ◆ **Costing - how much does it cost to provide ?**
- ◆ **Funding - who pays for it ?**

Universal service in the EU



Scope

- ◆ **connection to the public telephone network at a fixed location, suitable for voice and data transmission**
- ◆ **access to, and use of, the public telephone service**
- ◆ **provision of pay-phones, public telephone directories, directory enquiry services**
- ◆ **specific facilities for disabled users**

Universal service in the EU



Costing

- ◆ **Cost of Universal service obligation (USO) based on 'avoidable cost' principle**
- ◆ **calculation of cost of USO to be transparent and independently audited**
- ◆ **non-tangible benefits to be taken into account in calculating the net cost**

Universal service in the EU



Funding

- ◆ **Only allowed where USO is seen as an undue burden**
- ◆ **Most EU States have not set up USO funding schemes**

Protecting Users Interests



- ◆ **Priority given to market solutions in first instance**
eg standardisation seen as market- led process;
markets determine winners
- ◆ **Regulators have reserve powers to intervene where necessary to protect user interests**
eg quality of service, information for users
- ◆ **Existing rules for data protection, privacy and confidentiality extended to new services**
eg email

Critical areas



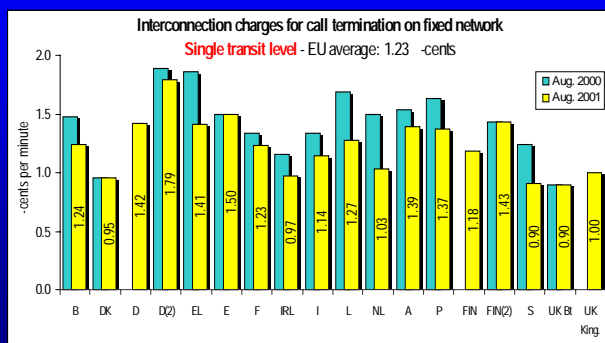
- ◆ Licensing
- ◆ Independent regulatory authority
- ◆ Universal service and user interests
- ◆ **Interconnection and access**
- ◆ Rights of way, collocation
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- ◆ Spectrum

Why regulate interconnection ?



- ◆ **to ensure 'any-to-any' communication**
 - organisations that control the means of access to customers have rights and obligations to negotiate interconnect
- ◆ **to compensate for imbalance of negotiating power between incumbents and new entrants**
 - operators with market power have obligations for transparency, cost orientation, and non-discrimination

Interconnection charges in EU



Interconnection in the EU



◆ For details of interconnection in each Member State, see the

'Interconnection Atlas'

at

<http://www.analysys.com/atlas/>

Regulating interconnection and access



◆ *Today*
- legislation pre-defines markets where access / interconnection obligations apply

Access - a generic issue



- access to the local loop (local loop unbundling)
- access to cable TV networks or satellite systems,
- access to mobile network infrastructures (MVNOs)
- access to IN functionality of fixed and mobile networks
- access to broadband networks
- access for ISPs to cable TV networks
- access to submarine cables
- access to set-top boxes, EPGs and APIs
- access to ? ? ? ? ?

Regulating interconnection and access



- ◆ **Today**
 - legislation pre-defines markets where access / interconnection obligations apply
- ◆ **From 2003**
 - 'any to any' interconnection rule retained
 - more NRA flexibility in defining markets
 - obligations to provide access only where competition is not effective and operator has significant market power

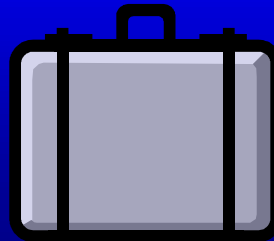
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Regulating Access and Interconnection



- ◆ A "tool box" of possible obligations for NRAs to use, (transparency, non-discrimination, accounting separation, mandated access, price regulation)



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Regulating Access and Interconnection



- ◆ to fix specific types of problem ...



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Regulating Access and Interconnection



- ◆ ... following a common set of objectives and guidelines

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Critical areas



- ◆ Licensing
- ◆ Independent regulatory authority
- ◆ Universal service and user interests
- ◆ Interconnection and access
- ◆ **Numbering, naming and addressing**
- ◆ Rights of way, collocation
- ◆ Spectrum

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Role of regulatory authority in numbering, naming & addressing



- ◆ **Numbering:**
 - ◆ control the national numbering plan
 - ◆ ensure non-discrimination and equality in assignment of numbers
- ◆ **Numbering, naming and addressing**
 - ◆ co-ordination of positions in international forums

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Number Portability



◆ *Today:*

- subscribers on fixed networks can retain their number (at a fixed location) when changing operator

◆ *From 2003:*

- this facility extended to subscribers on mobile networks

Critical areas



- ◆ Licensing
- ◆ Independent regulatory authority
- ◆ Universal service and user interests
- ◆ Interconnection and access
- ◆ Numbering, naming and addressing
- ◆ Rights of way, collocation
- ◆ Spectrum

Treatment of Rights of way (RoW)



◆ *Today:*

- ◆ no discrimination over RoW between incumbents and new entrants

◆ *From 2003:*

- ◆ procedures, terms and conditions for RoW to be more transparent
- ◆ procedures to be applied without discrimination and without delay
- ◆ local authorities must separate regulatory functions for RoW from any network operation or ownership functions

Collocation and facility sharing



- ◆ Collocation normally a matter of commercial negotiation
- ◆ NRA may impose collocation or facility sharing after public consultation

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Critical areas



- ◆ Licensing
- ◆ Independent regulatory authority
- ◆ Universal service and user interests
- ◆ Interconnection and access
- ◆ Numbering, naming and addressing
- ◆ Rights of way, collocation
- ◆ **Spectrum**

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RADIO SPECTRUM in EU



- ◆ Radio spectrum policy making is evolving, both at national, Community and international level:

- ◆ increased demand
- ◆ global services
- ◆ spectrum pricing



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New approach to Radio Spectrum in EU



◆ Policy framework will:

- ◆ address the strategic planning and harmonisation of the use of ALL radio spectrum in the Community (broadcasting, transport, communications etc)
- ◆ take into account economic, health, public policy, cultural, scientific, social and technical aspects
- ◆ seek to balance the various interests of different spectrum users

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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

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European Heads of State and Government



**A new strategic goal for Europe in
the next decade:**

**“to become the most competitive
and dynamic knowledge-based
economy in the world”**

March 2000

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