

# **Broadband growth and regulation**

## **Experiences from the 12<sup>th</sup>**

### **Implementation Report**

EETT International Conference

The Global Dynamics of Broadband Internet

Lagonissi, Athens, 1-3 June 2007

*George Papapavlou, European Commission*



# Outline

- The electronic communications sector
- The role of broadband
- EU broadband performance
- What kind of broadband
- Broadband regulation
- The ladder of investment-examples from Member States
- Conclusions



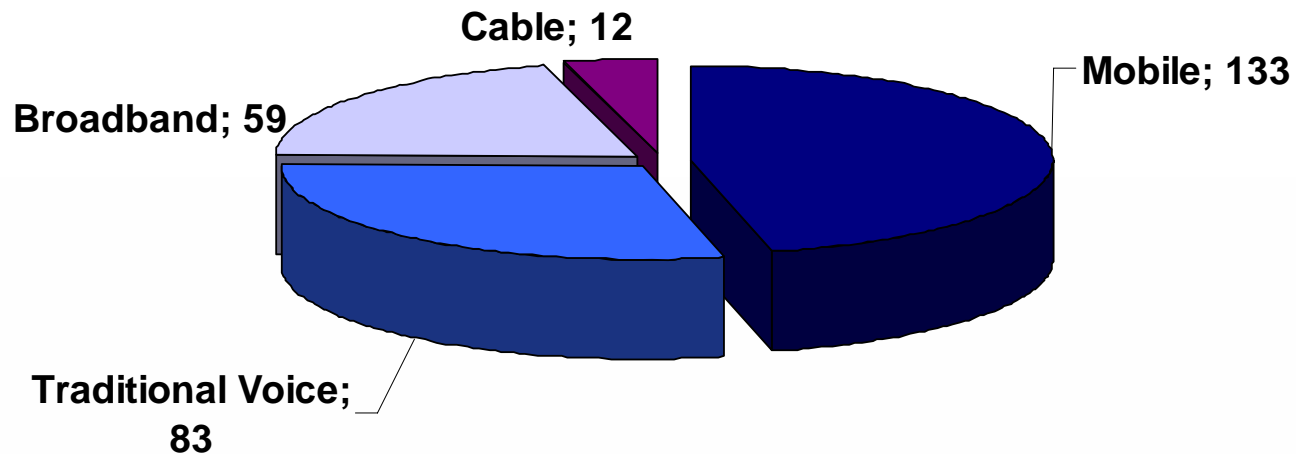
# A large and dynamic sector

- Electronic communications services in 2006:
  - More than 2% of EU economy
  - Worth €289 billion
  - Increased traffic volumes in all segments
  - Dynamic – new players, new strategies



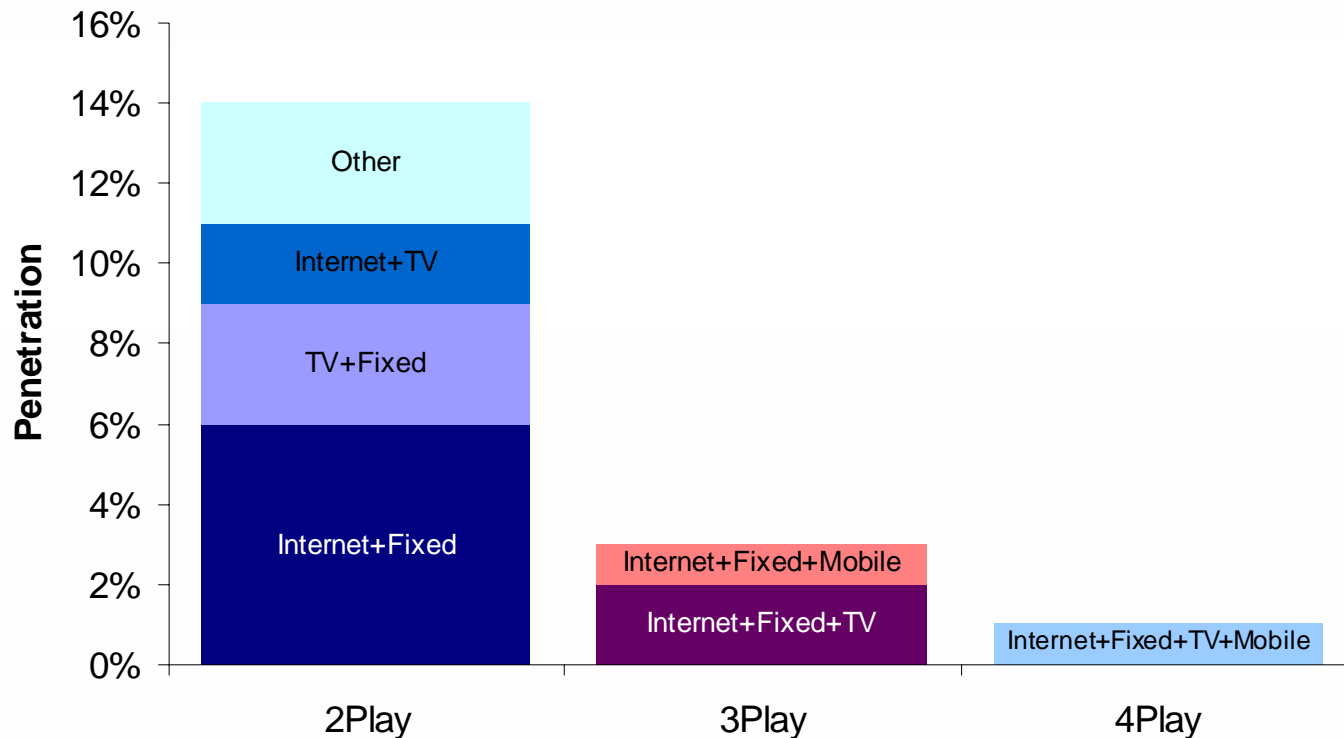
# Solid overall growth of 2.3%

## The EU Electronic Communications Sector 2006 (EURO billion) - 2.3% growth

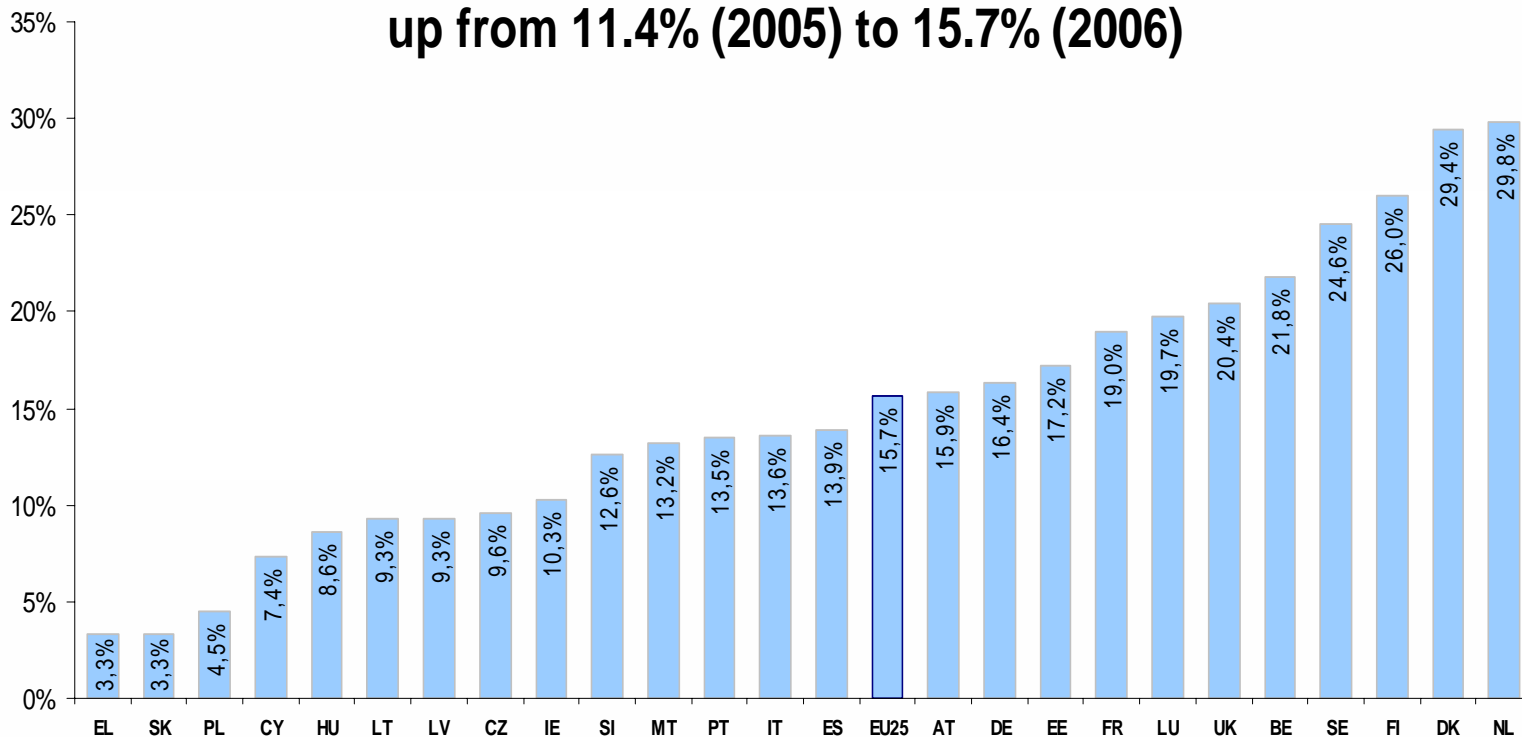


# Convergence: broadband key to new market opportunities

## EU household take-up of bundled offers



## EU broadband take-up rate - up from 11.4% (2005) to 15.7% (2006)



# Broadband – growth driver

- Broadband - fastest revenue growth – around 8%
- Member States world leaders  
Netherlands (29.8%), Denmark (29.4%)
- EU average still lagging behind US (19.2%), Japan (19%), Canada (22.4%), Korea (26.4%)
- Large divergence in penetration rates



# Broadband

- Take-up at 15.7% of EU population
- Up from 11.4% in 2005
- 20 million new lines in 2006
- Total 73 million lines





# What kind of broadband?

- What capacity?
- ADSL
- Cable
- The new paradigms (wireless, FTTH)
- The ladder of investment (resale, bitstream, shared and full LLU)



# Factors for broadband rollout

- Around 40% new entrant market share
- Platform competition key factor in Netherlands, Denmark, Belgium
- Unbundling in Denmark, Germany, Spain, France, Italy, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom



# Regulation necessary where there is no sufficient competition

- Market 11: Local loop unbundling – no competitive market in any MS – all but one (BE) have notified, some late, some no effective remedies yet
- Market 12: Whole sale broadband access (bitstream) – very similar as market 11



# Regulatory remedies

- Access/Interconnection
- Non-discrimination
- Transparency
- Price control/Cost accounting
- Accounting separation



# Infrastructure competition - effective regulation

- Netherlands (29.8%)
  - Incumbent DSL 47%; NE cable 37%; NE full LLU 5%; NE shared access 11%; NE FTTH 2%



# Infrastructure competition - serious regulatory weaknesses

- Belgium (21.84%)
  - Incumbent DSL 47%; NE cable 37%; NE bitstream 12%; NE resale 2%; NE full and shared LLU 1%



# No infrastructure competition - effective regulation

- France (19.0%)
  - Incumbent DSL 48; NE shared 16%;  
NE bitstream 14%; NE full LLU 13%;  
NE cable 6%; NE resale 3%



# No infrastructure competition not yet effective regulation

- Greece (3.3%)
  - Incumbent DSL 63%; NE bitstream and resale 32%; NE full LLU 2%; NE shared 1.5%





# Infrastructure competition – interesting exception 1?

- UK (20.40%)
  - Incumbent DSL 25%; NE cable 24%; NE bitstream and resale 44%; NE shared LLU 5%; NE full LLU 1%



# Infrastructure competition - interesting exception 2?

- Estonia (17.2%)
  - Incumbent DSL 47%; NE cable 24%; NE FTTH 10%; NE LAN 7%; Inc. FTTH 7%; NE full LLU 1%



# Conclusions

- Infrastructure competition critical factor in broadband growth
- Regulation important especially where no infrastructure competition
- Some interesting exceptions



# The future

- NGNs
- State aids for WLANs and FTTH
- Functional separation
- The Internet

