

# Innovation and Regulatory Risk

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- Executive Board Chairman, ETNO



Presentation slides, not a full record of remarks made

European Telecommunications Network Operators' Association

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Regulatory framework allows for reduction in investment risk



## Introduction to ETNO

Innovation is driving force in telecoms sector

Innovation requires balance of risk and reward

Regulatory framework allows for reduction in investment risk



# ETNO comprises leading telecoms operators



European Telecommunications Network Operators' Association

# Telecoms sector and ETNO members are struggling to maintain growth and investment

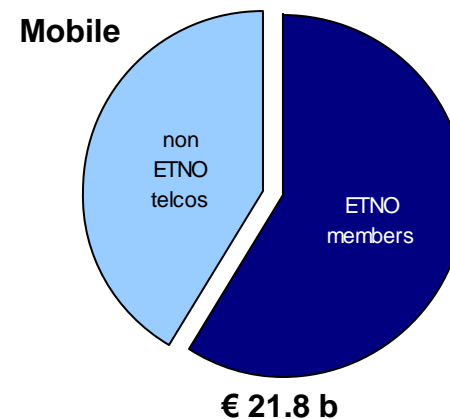
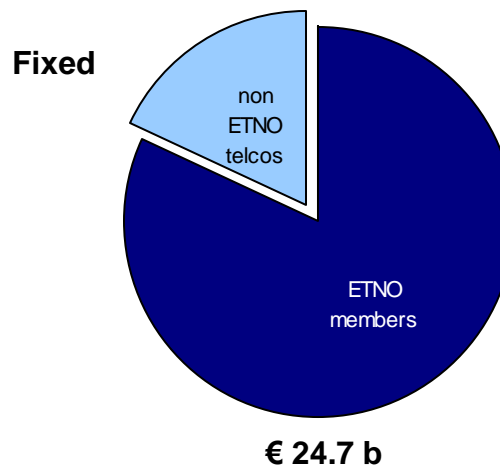
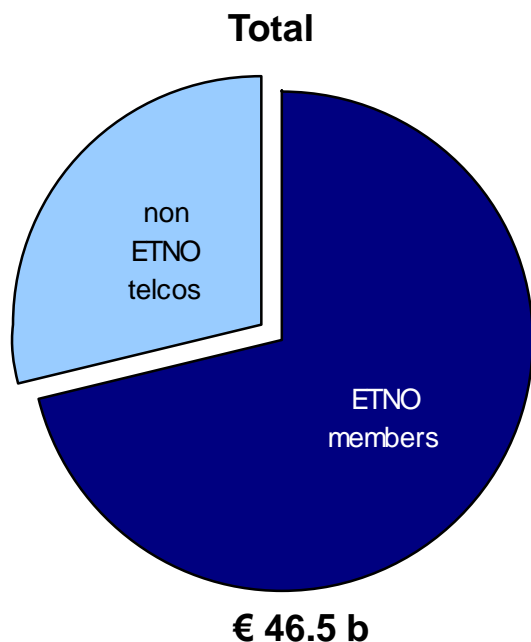
- In 2008, total turnover in the EU telecoms sector was €290.6 billion (0.8% growth year-on-year)
- ETNO members' revenue was €267.5 billion of this tally
- ETNO members devoted 12.4% of their revenues to investment, accounting for 71% of total sector investment
- Shrinking revenue growth, alongside with economic and regulatory uncertainty, has started impacting investment.
  - For the first time since 2003, negative investment growth (-1% in 2008)



Source: IDATE for ETNO "Facts & Figures" (2009)

# ETNO members continue to invest, accounting for 71% of sector CAPEX

2008 CAPEX in Europe



Source: IDATE for ETNO "Facts & Figures" (2009)

Introduction to ETNO

**Innovation is driving force in telecoms sector**

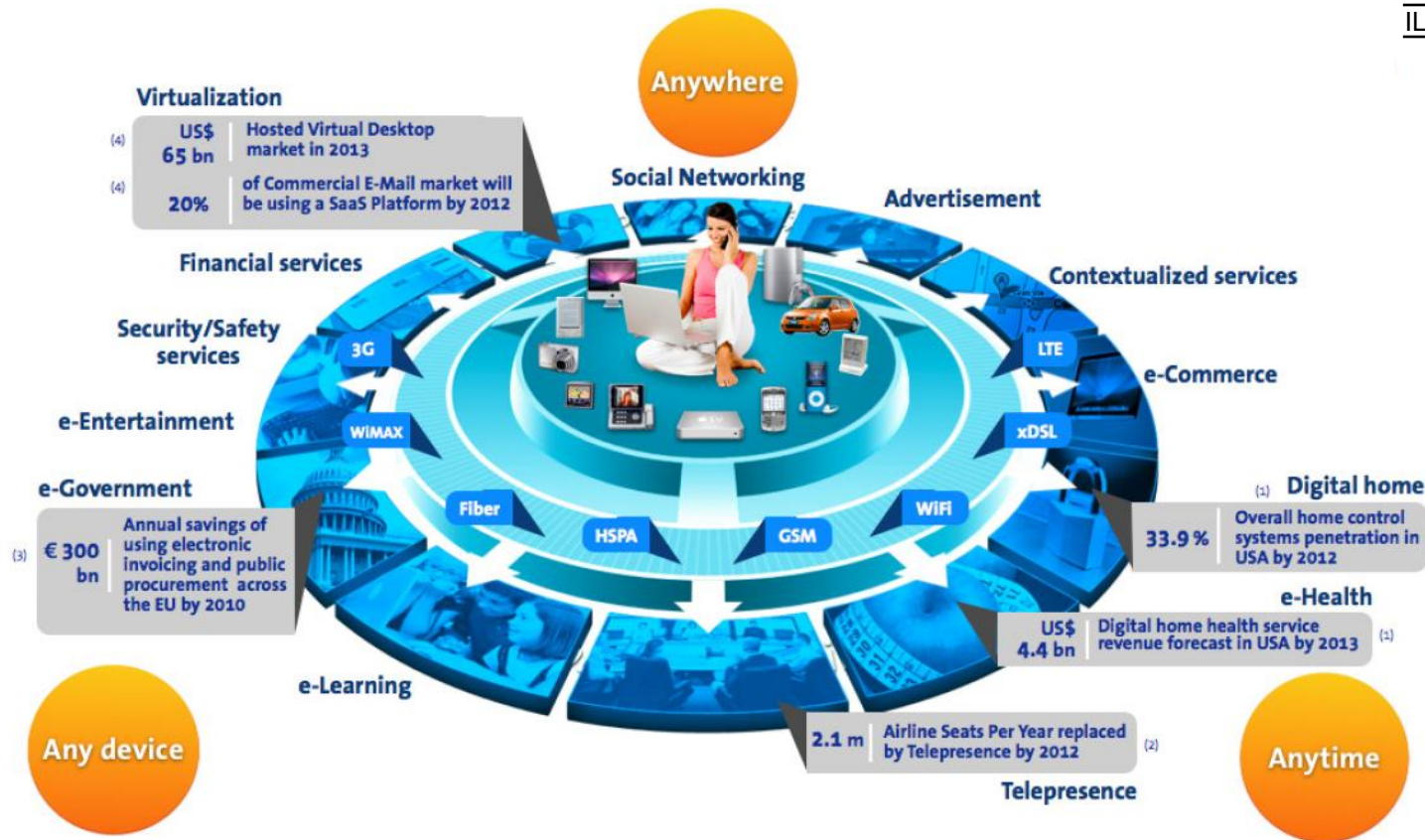
Innovation requires balance of risk and reward

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# Innovation is a driving force in the telecoms sector

ILLUSTRATIVE



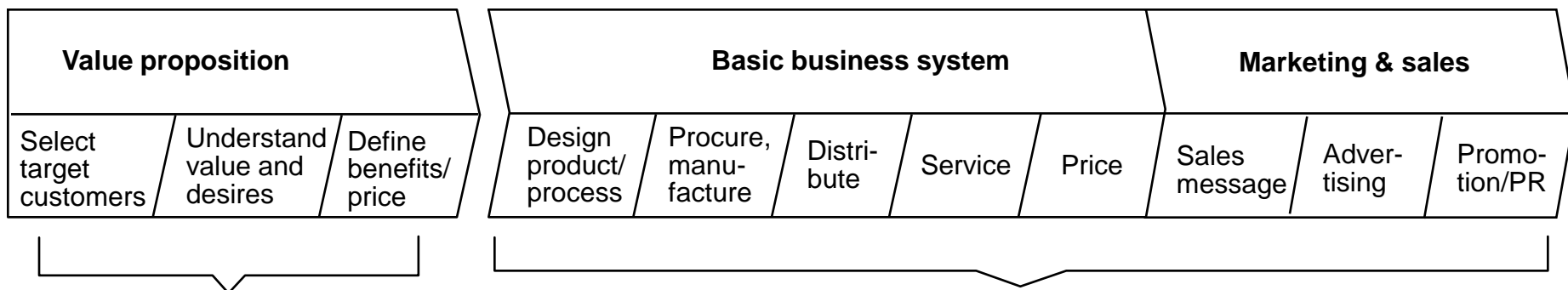
Source: Gartner (2009)





# ... across its business across as well as with its products and services

NON-EXHAUSTIVE



## Areas for innovation

- Customer segmentation
- Market research

## Areas for innovation

- Service delivery
- Business models
- Pricing models
- Point of sales
- Customer service

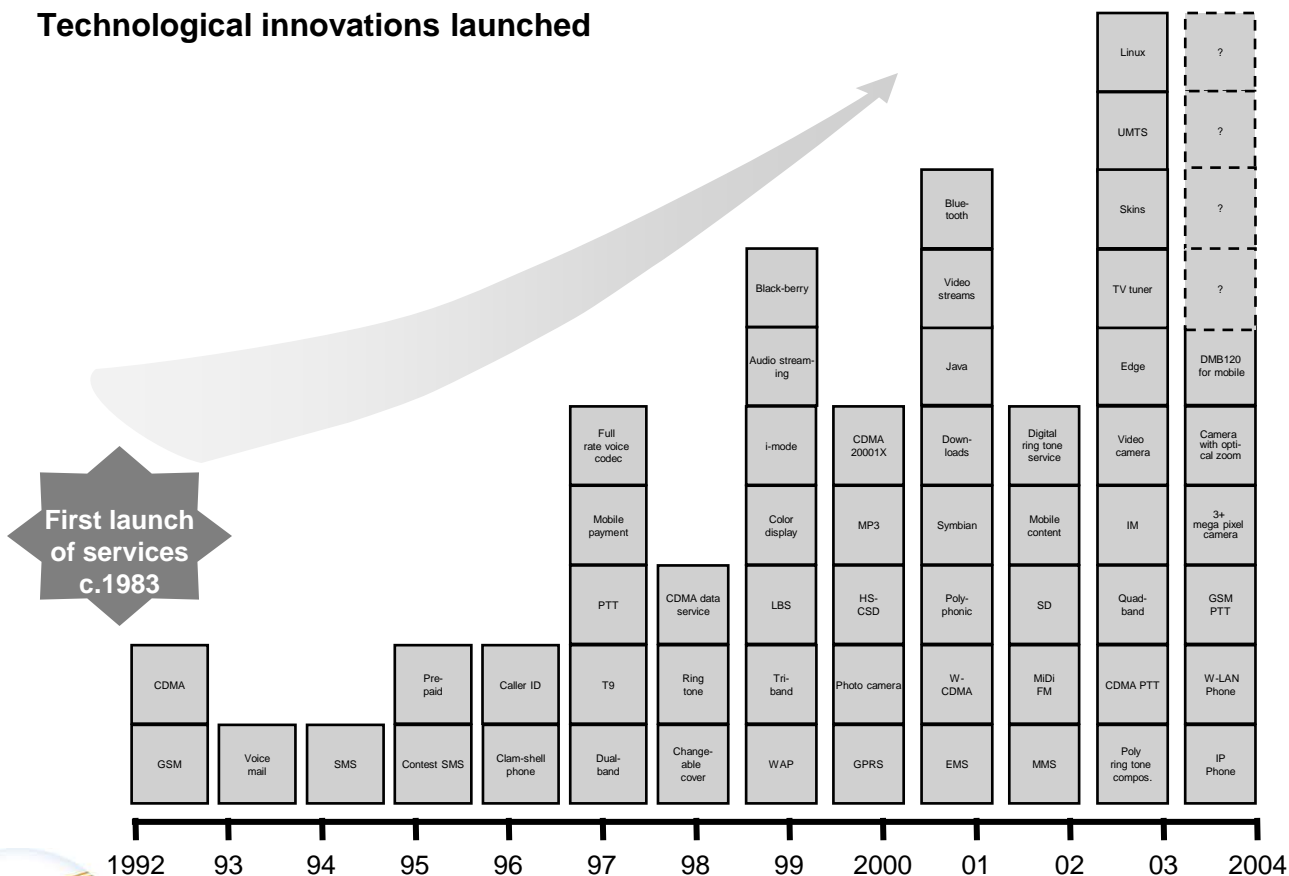


Source: McKinsey; ETNO analysis

# Mobile industry has produced a large number of innovations

Technological innovations launched

NON-EXHAUSTIVE

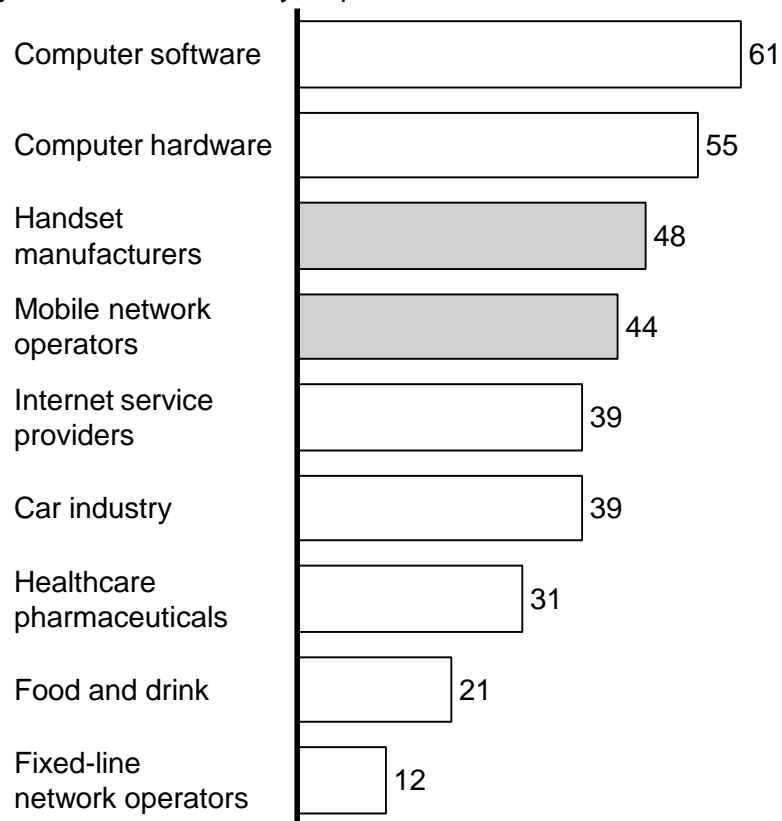


Source: McKinsey (2006)

# ... and is considered as one of the most innovative industries

## Percent ranking in top two of industry choices

web-based primary survey research in Germany, Japan



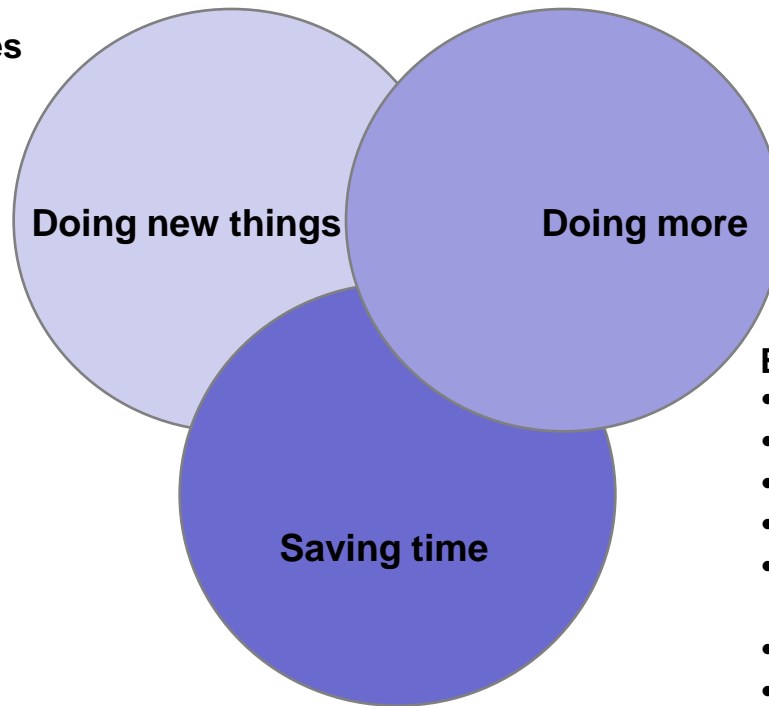
Source: McKinsey (2006)



# NGA – and the services they support – represent a major innovation in the industry

## Consumer opportunities

- Video calling
- HD video
- HiFi voice
- Video presence
- Multiple video streams
- Games libraries
- Video blogging and messaging
- Download-and-go
- Upload-and-go
- Back-up services
- Network storage



## Business opportunities

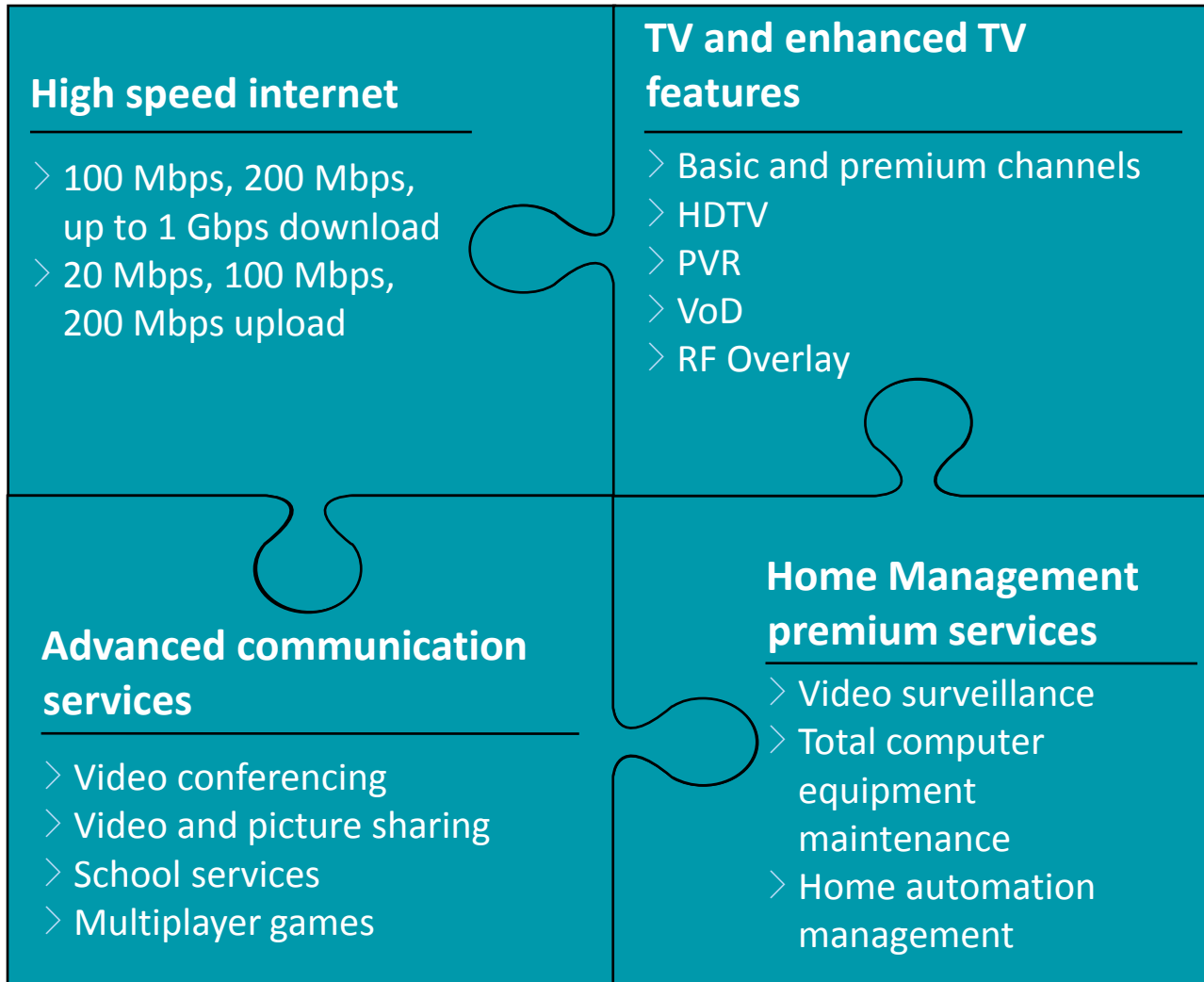
- Video conferencing
- HD video conferencing
- Collaborative working
- More capable teleworking
- Network-hosted applications, e.g., 'cloud computing'
- Back up services
- Network storage



Source: Plum Consulting for Broadband Stakeholders Group



# For example, FTTH will enable Portugal Telecom to offer bundles of a wide range of advanced services



# ...but business case is plagued by risks

## Demand risk

- Which services will be accepted in the market?
- How will demand develop over time (stable, increasing, decreasing)?

## Technological risk

- Which investment will be 'future proof'?
- Which services will be accepted in the market?
- How will demand develop over time (stable, increasing, decreasing)?

## Uncertain price development

- Will end-users be willing to pay a premium for higher bandwidths offered by fibre?
- Will value-based pricing be feasible in market and allowed by regulator?

## Regulatory risk

- What access will be imposed?
- Will network security & safety be preserved?
- Will regulated prices reflect risk and give fair return on investment?
- What will happen to pricing of legacy network if/when it becomes obsolete?

**NGA business case profitability?**



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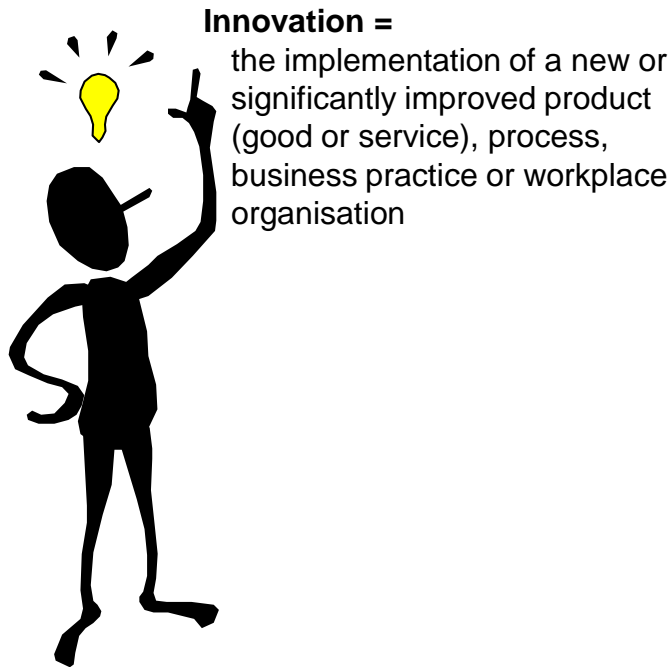
**Innovation requires balance of risk and reward**

Regulatory framework allows for reduction in investment risk



# Innovation is particularly challenging in telecoms sector

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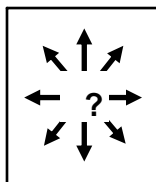
Source: OECD; ETNO analysis



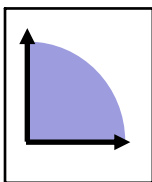
# Bringing an innovation to market depends on a risk/reward nexus

ILLUSTRATIVE

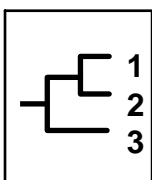
True ambiguity



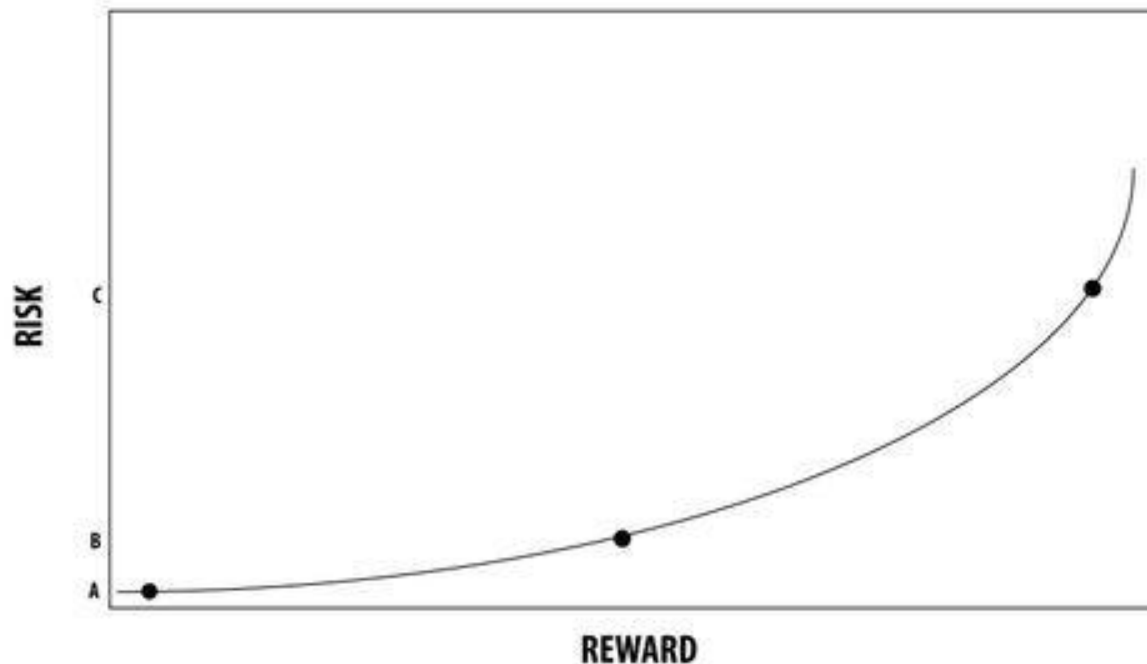
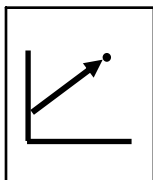
Range of futures



Alternative futures



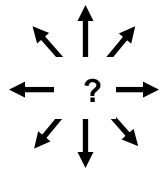
Clear enough future



Source: McKinsey, S.Godin, ETNO analysis

# Regulatory risk can easily undermine the investment equation

ILLUSTRATIVE



No legal/regulatory certainty →

no investment →

no innovation →

no increase in customer welfare



# For NGA, the investment calculus is straightforward

Fibre investment will take place\*, when

$$\begin{aligned} \text{Annualised costs of fibre} < & \text{operating cost of copper} \\ & + \\ & \text{incremental revenue from fibre} \\ & + \\ & \text{wholesale revenue gained from competitors} \\ & + \\ & \text{wholesale and retail revenue protected from} \\ & \text{competitors} \end{aligned}$$



\* In relation to the replacement of copper by fibre in an access network, this is a static-form formulation  
Source: Cave (2009)

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# In Portugal, the Government and regulator have worked to create legal and regulatory certainty

## Government

- Resolution of the Council of Ministers, defining **NGA as strategic priority** and establishing objectives for 2009 / 2010
- **Protocol signed** between the **Government and operators**, as a result of the Resolution, foresees the possibility of multiple NGA networks
- Decree-Law which **defines the legal regime governing the construction, access and installation of networks** and infrastructure of electronic communications, promoting the development of next generation networks

Clear political and regulatory environment for FTTH in Portugal

## Regulator (ANACOM)

- **Decision** on broadband markets, defining **geographical segmentation** of the wholesale market (bitstream)
- **ANACOM report** on the regulatory framework applicable to NGA
  - **Competitive areas**
    - Obligation to give access to ducts
    - Access to fibre (own or dark) only if there is no space in ducts
    - Virtual access to network as last resort (advanced bitstream)
  - **Non competitive areas**
    - Access to ducts
    - Access to fibre (own or dark)
    - Virtual access to network (advanced bitstream)

# Regulators across Europe are should follow suit and create incentives for private investment

- Applying state-aid rules rigorously, not allowing public funding to ‘crowd out’ private investment
- Allowing commercially-negotiated agreements to pre-empt economic regulation
- When finding ex ante regulation warranted,
  - Ensuring technological neutrality for network upgrades and new deployments
  - Taking into account varying competitive conditions in sub-national markets
  - Applying a graduated approach to access obligations
  - Allowing value-based pricing at retail level
  - Allowing differentiated wholesale access prices and conditions based on risk sharing (e.g., upfront payments, volume, length of contract)



# . . . giving priority to protecting innovation from regulatory risk, as done in the revised Framework

**DIRECTIVE 2009/140/EC** (amended Framework, Access and Authorisation Directives)

***- to be transposed by 25 May 2011***

## **Recital 8**

“In order to achieve the goals of the Lisbon Agenda, it is necessary to give **appropriate incentives for investment in new high-speed networks** that will support **innovation in content-rich Internet services** and strengthen the international competitiveness of the European Union. Such networks have enormous potential to deliver benefits to consumers and businesses across the European Union. It is therefore vital to promote sustainable investment in the development of these new networks, while safeguarding competition and boosting consumer choice **through regulatory predictability and consistency.**”



***Thank you for your attention***

**For any follow-up questions or other inquiries,  
please contact ETNO Communications Manager Thierry Dieu:**

**[dieu@etno.be](mailto:dieu@etno.be)**





# Annex

**Extracts from ETNO “Facts & Figures about European Telecoms Operators,” Oct. 2009**



# Selected data points for European telecoms sector

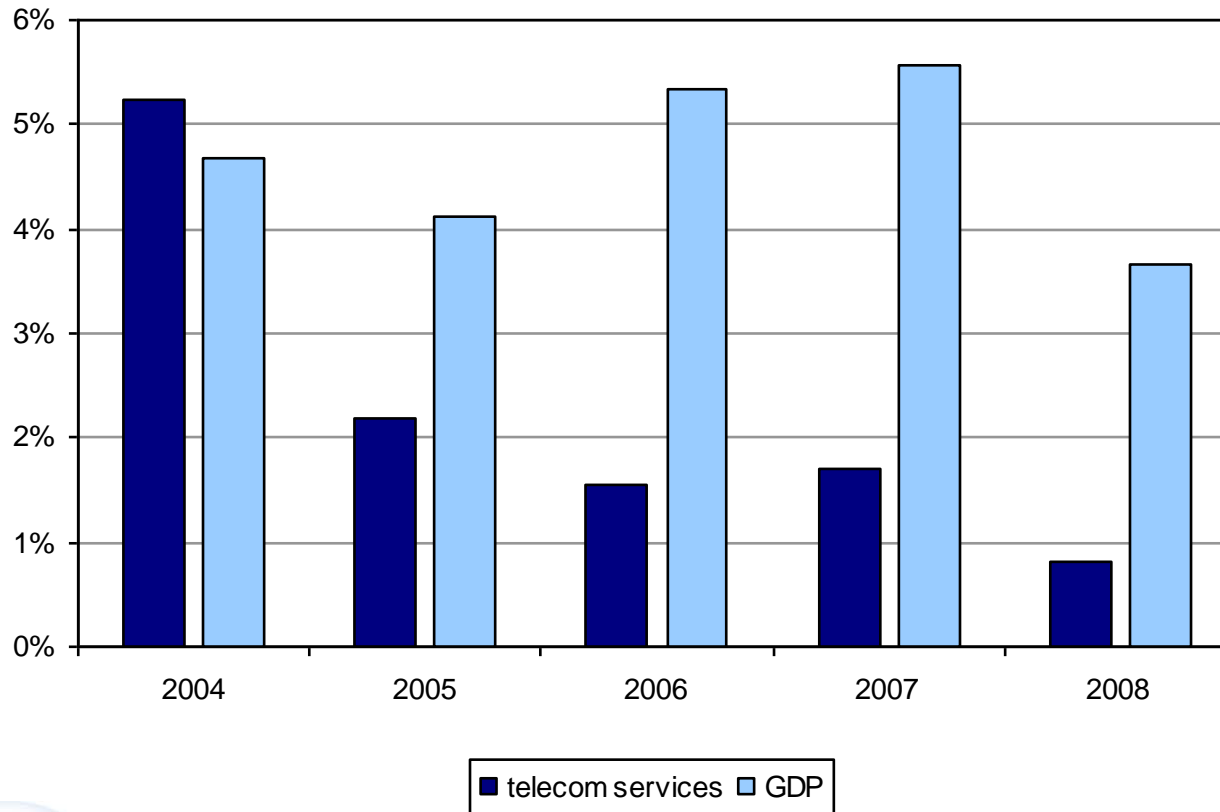
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Source: IDATE for ETNO "Facts & Figures" (2009)

# Telcos facing an unprecedented (non-)growth challenge

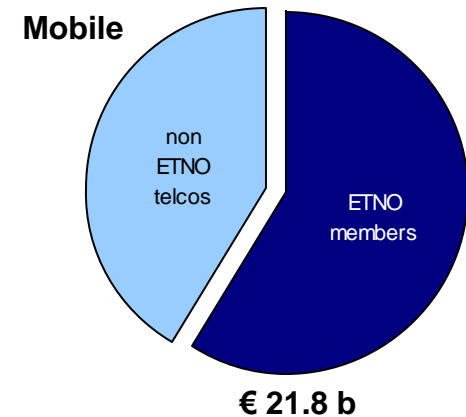
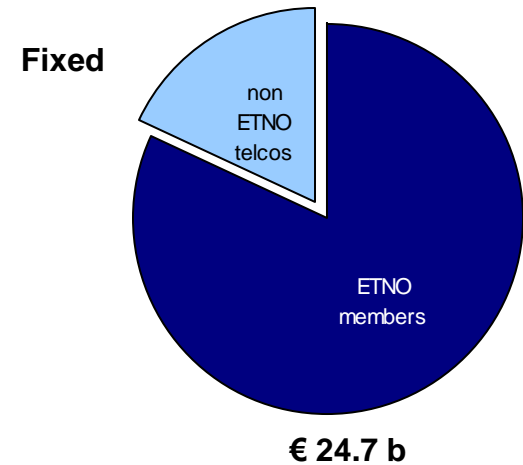
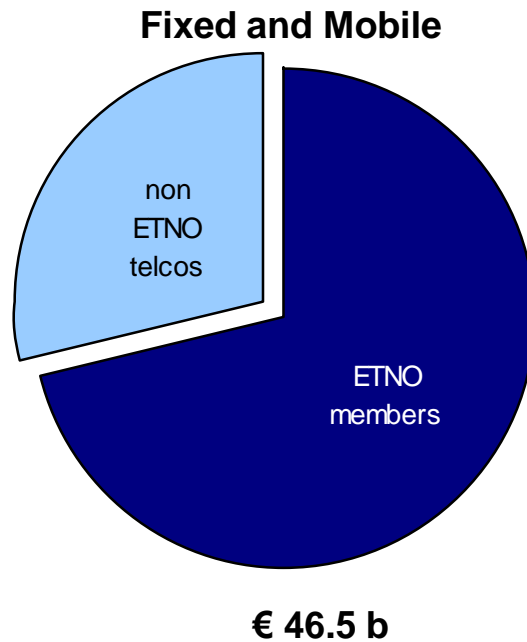
Growth of telecom services vs. GDP growth in EU27



Source: IDATE for ETNO "Facts & Figures" (2009)

# ETNO members account for 71% of CAPEX in European telecoms sector

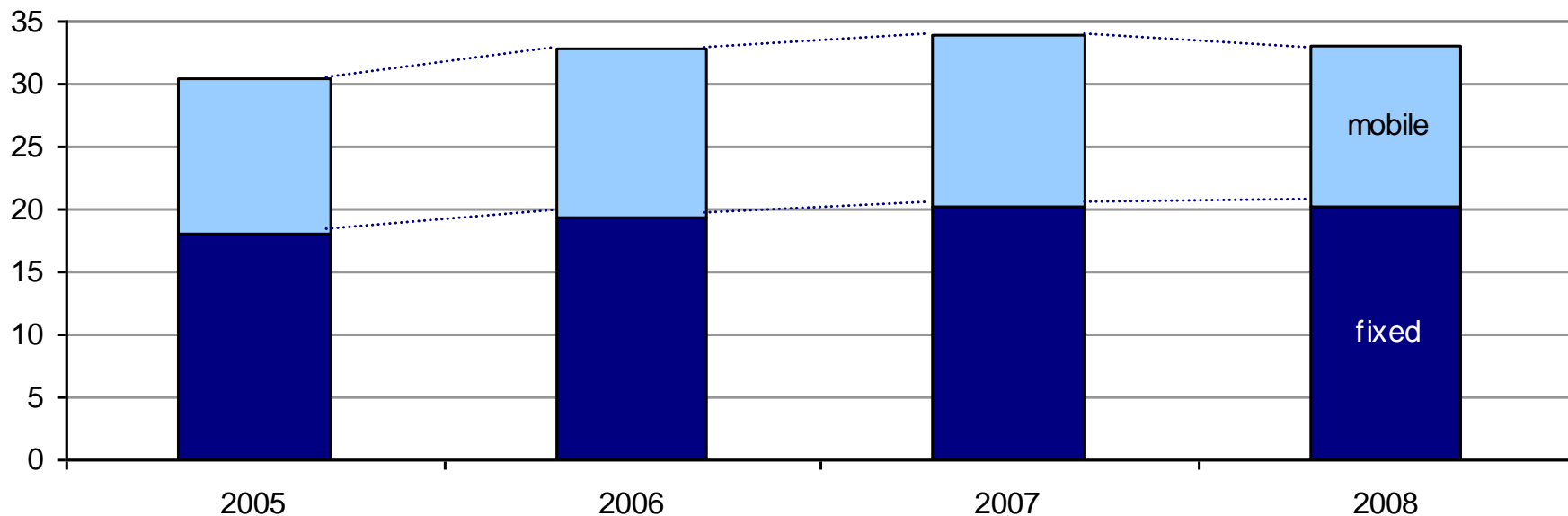
2008 CAPEX in Europe



Source: IDATE for ETNO "Facts & Figures" (2009)

# ETNO capex: first contraction since 2003

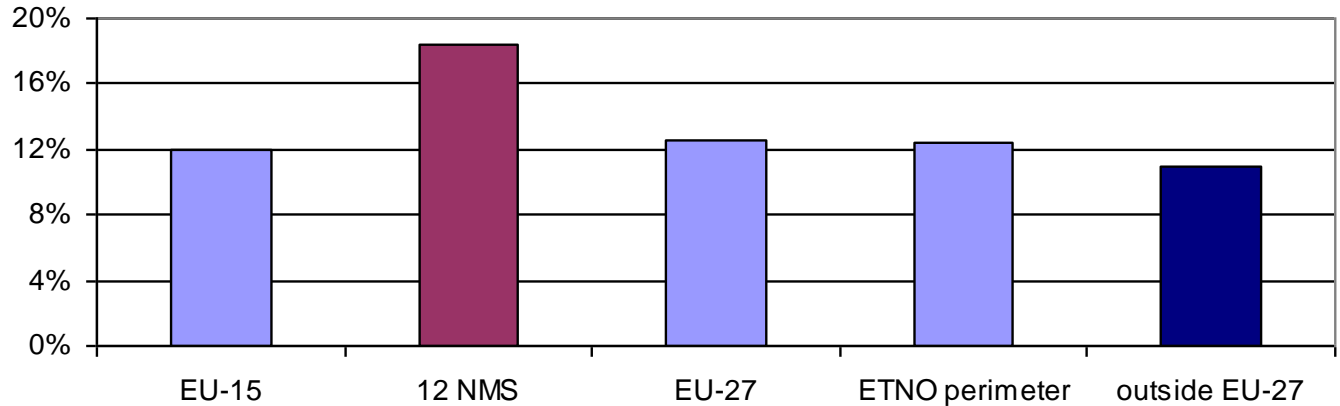
ETNO members' tangible CAPEX (EUR b)



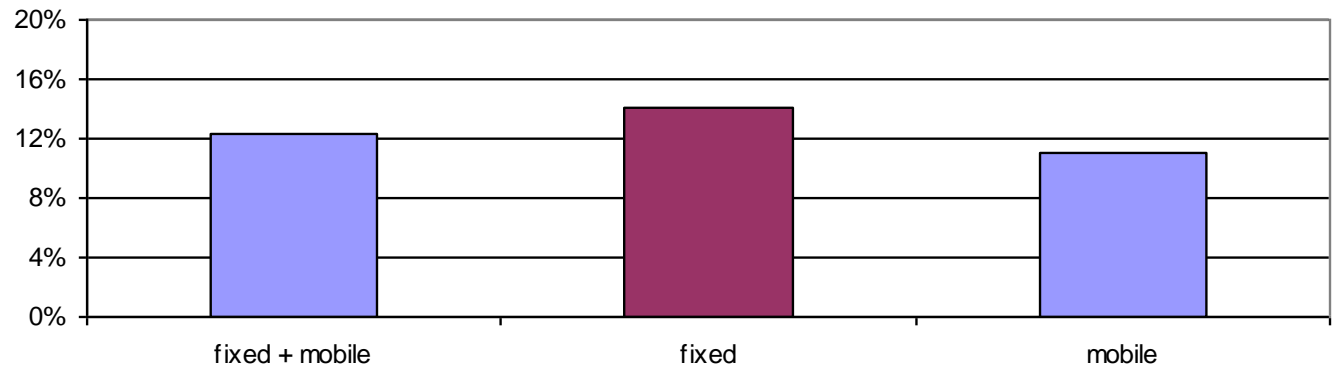
Source: IDATE for ETNO "Facts & Figures" (2009)

# ETNO capex: 12% revs on average

**CAPEX as percentage of revenue by geography**



**CAPEX as percentage of revenue by network type**



Source: IDATE for ETNO "Facts & Figures" (2009)





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