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Asociación Española de Operadores de Telecomunicaciones

Review of the Main Business Trends for Telecom Industry

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**COST
605**

**Econ@tel COST Action IS605
Zürich Meeting – September 24-26, 2008**

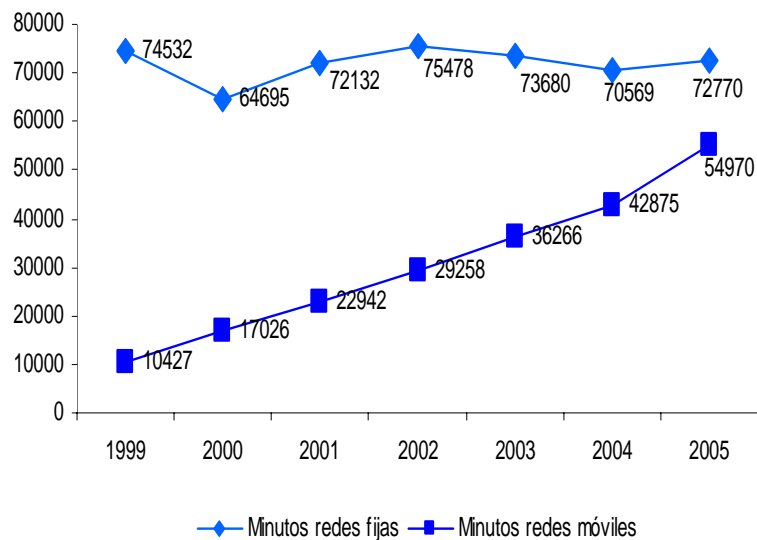
Hot Topics

- Need for investment (NGA regulatory framework).
- Barriers for network deployment.
- Taxation.
- Convergence: regulatory framework and access to contents.

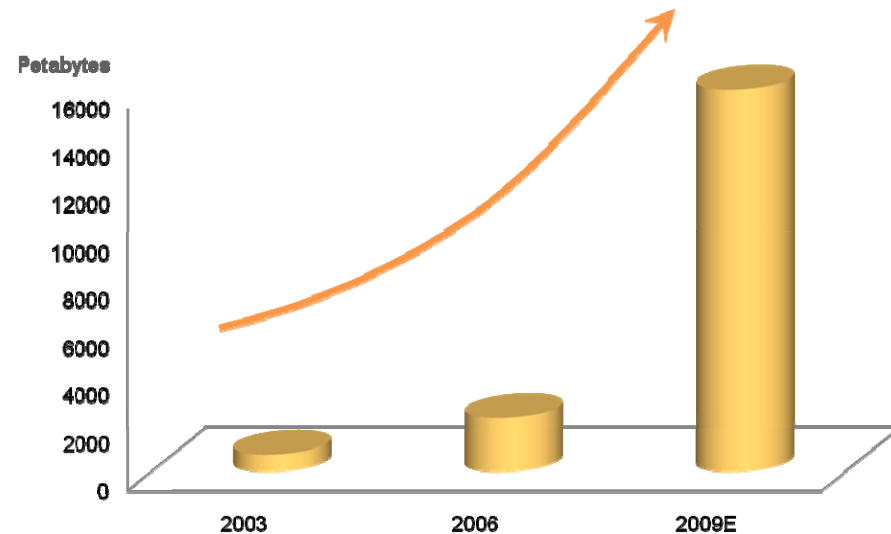
Need for investment (NGA regulatory framework)

- Traffic is rising very fast (both voice and data)
- Need for further capacity: NGAs

**Retail traffic fixed and mobile telephony
(millions of minutes per year)**



Total IP traffic demand in Spain



Source: Ovum, IDC

Need for investment (NGA regulatory framework)

EUROLAND MODEL

- Required investment on new access infrastructures both fixed and mobile, with capacity from 50 to 100 Mbps.
- Many different possible technologies: cable, VDSL, fibra, HSxPA, LTE, etc.
- Model based in infrastructure competition.
- OPEX are considered (particularly for marketing and commercial launches)

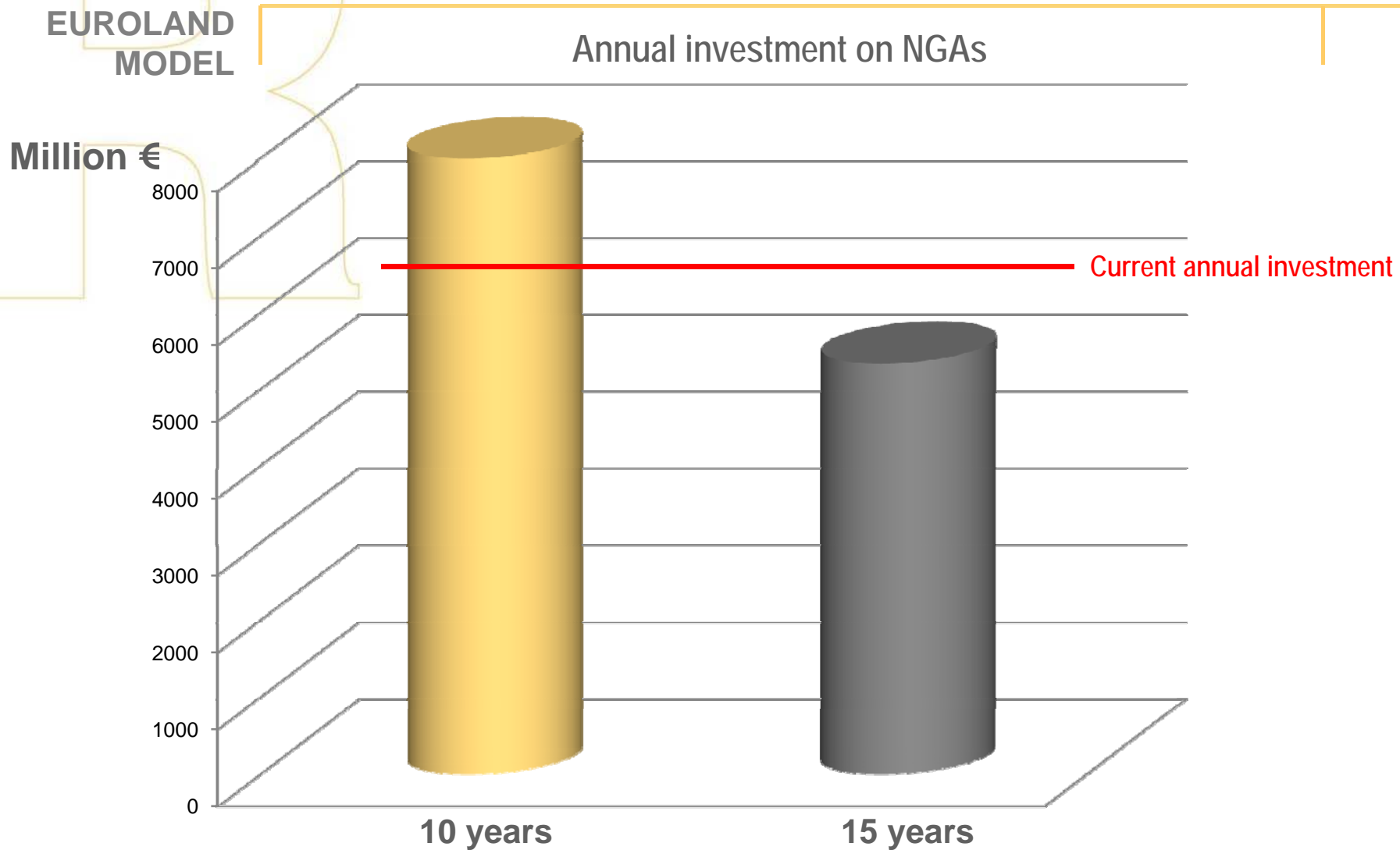
Investment effort estimated: 60.000 - 80.000 Million €

Model described by:

Feijóo, C., Gómez-Barroso, J.L., et al. (2006): "***A European Perspective on the Deployment of Next Generation Networks***".

The Journal of The Communications Network. Volume 5 Part 2. April–June 2006.

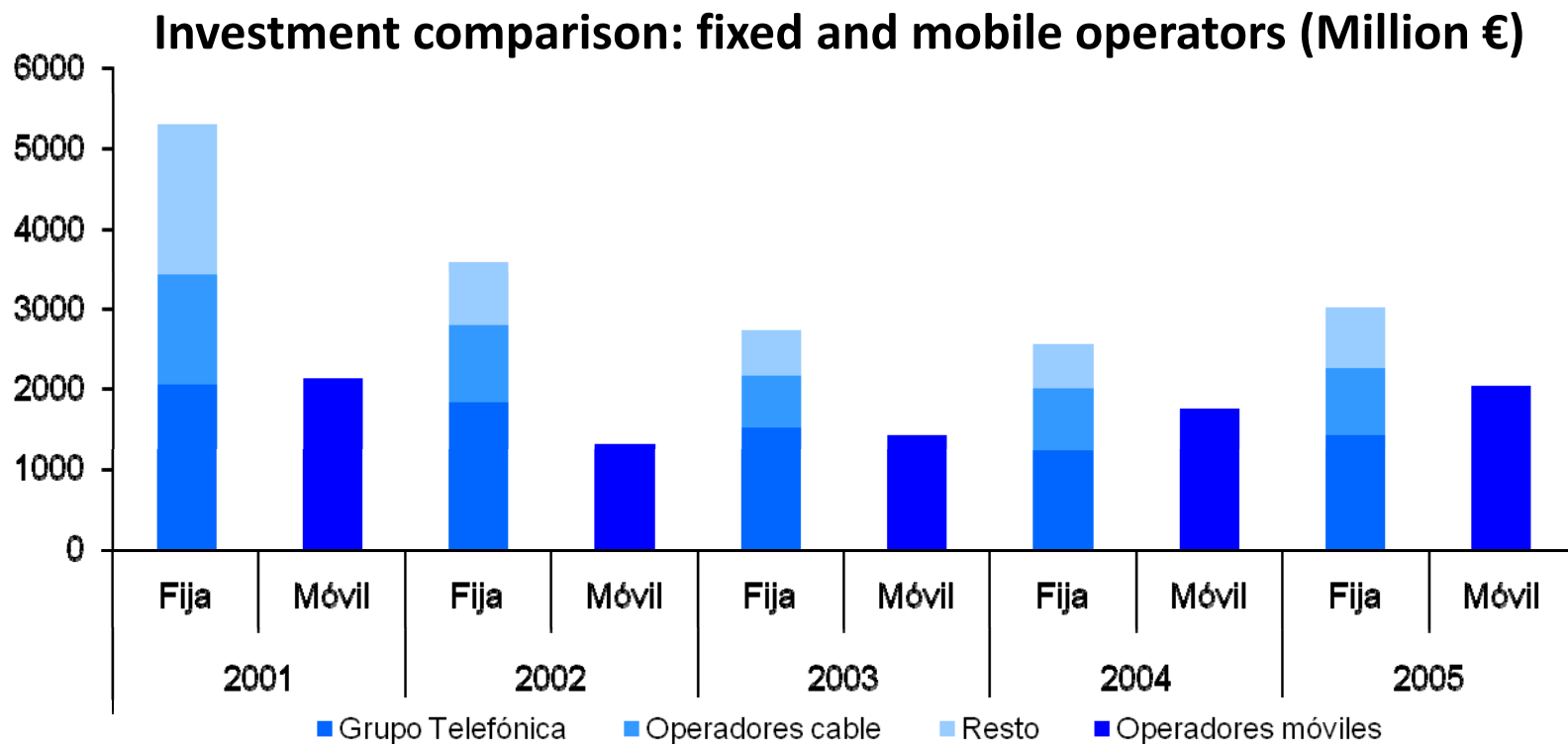
Need for investment (NGA regulatory framework)



Objective: 80.000 Million € of annual investment

Need for investment (NGA regulatory framework)

- ✓ Fixed network investment (services competition): ladder of investment failed (apart from cable and incumbent operator, no other operator willing to invest)
- ✓ Mobile network investment (infrastructure competition): permanent investment.



Need for investment (NGA regulatory framework)

- How to face the upcoming regulation?
- Some of the topics under discussion are:

MARKET STRUCTURE

- *Geographic markets*
- *Functional/Vertical separation*

ACCESS TO NETWORKS

- *Transition period till NGA complete deployment*
- *Current and future ex ante obligations*
- *Wholesale regulation for broadband*
- *IP interconnection*

Barriers for network deployment

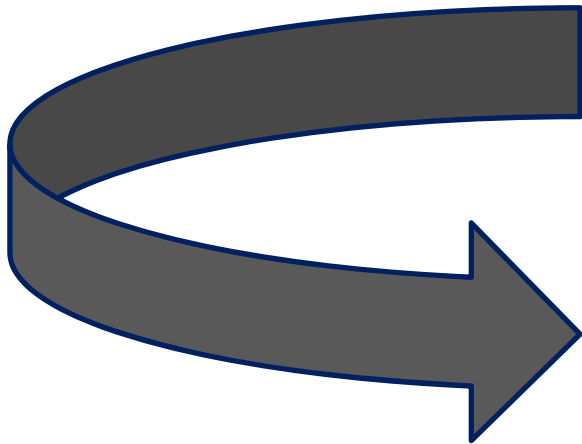
- Network deployment requires public domain usage.
- Competition on infrastructures means many pipes and antennas deployed.
- Municipalities do not like continuous works on their streets.
- Citizens permanently complain, and even they fear of possible harmful effects on health.

Information Society plans do not care about these issues...
... and new NGAs deployment requires more and more pipes,
antennas,

Barriers for network deployment

Problems particularly arise from legal framework applicable to network development in Spain

- Law on Telecommunications
- Regional legislation on territory development
- Municipalities regulations: town planning



**Conflicts on competences among
different levels of Spanish
Administration**

Barriers for network deployment

Some challenges...

- Armonization of legislation.
- Coordination of deployment among operators (not only telecom operators).
- Need to address clear information from Public Stakeholders about health and telecommunications.

Specific taxes for telecom sector

- Operator tax (33 Million € per year).
- Public domain usage tax (fixed operators) (220 Million € per year).
- Spectrum usage tax (mobiles) (240 Million € per year).
- Economic Activities Tax (mobile) (80 Million € per year).

Plus some other additional taxes...

- Universal Service (100 Million € per year) and broadband???
- Users' data storage and maintenance (50 Million € per year).
- Emergency services.
- Public domain usage by mobile operators (1,5% of total incomes generated by municipality users) is upcoming...

More than 800 Million € per year (around 18% of sector annual investment)

This situation differs from other European countries, which is a barrier for European single market and for investment in itself...

CONCEPTO / PAÍS	ESPAÑA	ALEMANIA	FRANCIA	ITALIA	REINO UNIDO
TRIBUTOS ESPECIFICOS DEL SECTOR DE LA TELEFONIA RECAUDADOS POR EL GOBIERNO CENTRAL O POR EL ORGANISMO REGULADOR DE LAS TELECOMUNICACIONES	SI	SI	SI	SI	SI
ORGANISMO REGULADOR DOMINIO PUBLICO MUNICIPAL	SI	NO	NO	SI	NO
IMPUESTOS MEDIOAMBIENTALES ¹	SI	NO	NO	NO	NO
OTROS TRIBUTOS (IAE) CON REGLAS ESPECÍFICAS PARA EL SECTOR DE LA TELEFONÍA	SI	NO	NO	NO	NO

Convergence: regulatory framework and access to contents

- The future of telecom sector is really dependant on audiovisual contents and potential business around them.
- However the access to contents market is not equally regulated as telecom sector, and sometimes becomes a serious bottleneck (exclusive rights, exorbitant pricing, ...).
- In addition, intellectual property stakeholders entities claim for more money from their creations.
- And piracy is another obstacle that must be tackled...

Convergence: regulatory framework and access to contents

Some challenges...

- Creation of real competitive contents market.
- Business models redefinition to stimulate contents creation.
- Fight against digital piracy.



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