

## **Report on the Italian telecommunications sector**

Working document for the First National Forum ICT/TLC  
ASSTEL, SLC/CGIL, FISTEL/CISL, UILCOM/UIL

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## Introduction

Executive summary

Macroeconomic overview

Key trends in the international telecoms sector

The Italian telecoms sector

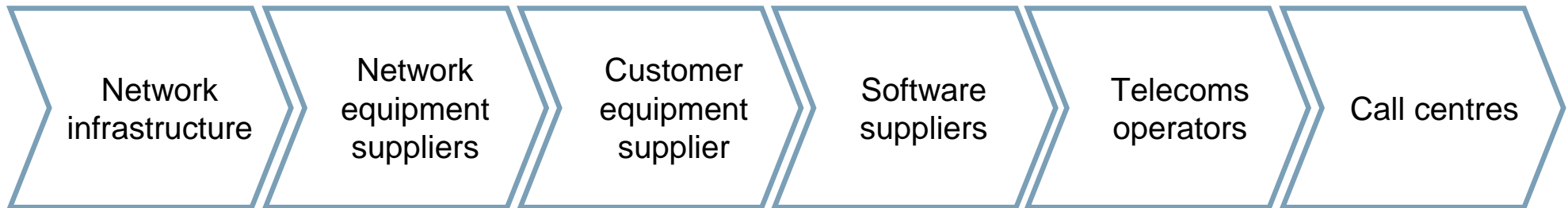
Labour market in the telecoms sector

The role of regulation and development policy

Outlook and development scenarios

# This report analyses the Italian telecommunications sector along the entire value chain

- In this report we have analysed the telecoms sector considering a broad definition analysing those players who contribute to its development so to identify strategic objectives and areas of intervention
  - Within the value chain we have separated those companies whose primary activities are functional for the management and provision of telecoms services. This has been defined as telecoms value chain and is illustrated below



- We have also identified contributions outside the telecoms value chain. The main activities of such players include the supply of solutions, services and digital applications to end users (such as Google, Facebook, YouTube, eBay etc.) and whose core business is different from the telecoms value chain in terms of competences, geographical reach, organizational structure, infrastructure and investment levels.

# The objective is to assess the status of the sector and identify strategic priorities ...

- This report on the Italian telecoms sector is intended to be the object of discussion at the first National Forum which will be held on 24 June 2010. Participants in the Forum will include ASSTEL, the National Secretariats of Slc-Cgil, Fistel-Cisl and Uilcom-Uil and the managing board (“Organi Direttivi”) of the employer association (“Associazione Datoriale”), stipulating the CCNL
- The conclusions of the report may contribute to the definition of strategic objectives and give rise to further investigation to be followed up with appropriate political and regulatory bodies
- The report covers the following topics of interest for ASSTEL, each of which constitutes a section of this report:

Macroeconomic overview

Key trends in the international telecoms sector

The Italian telecoms sector

Labour market in the telecoms sector

The role of regulation and development policy

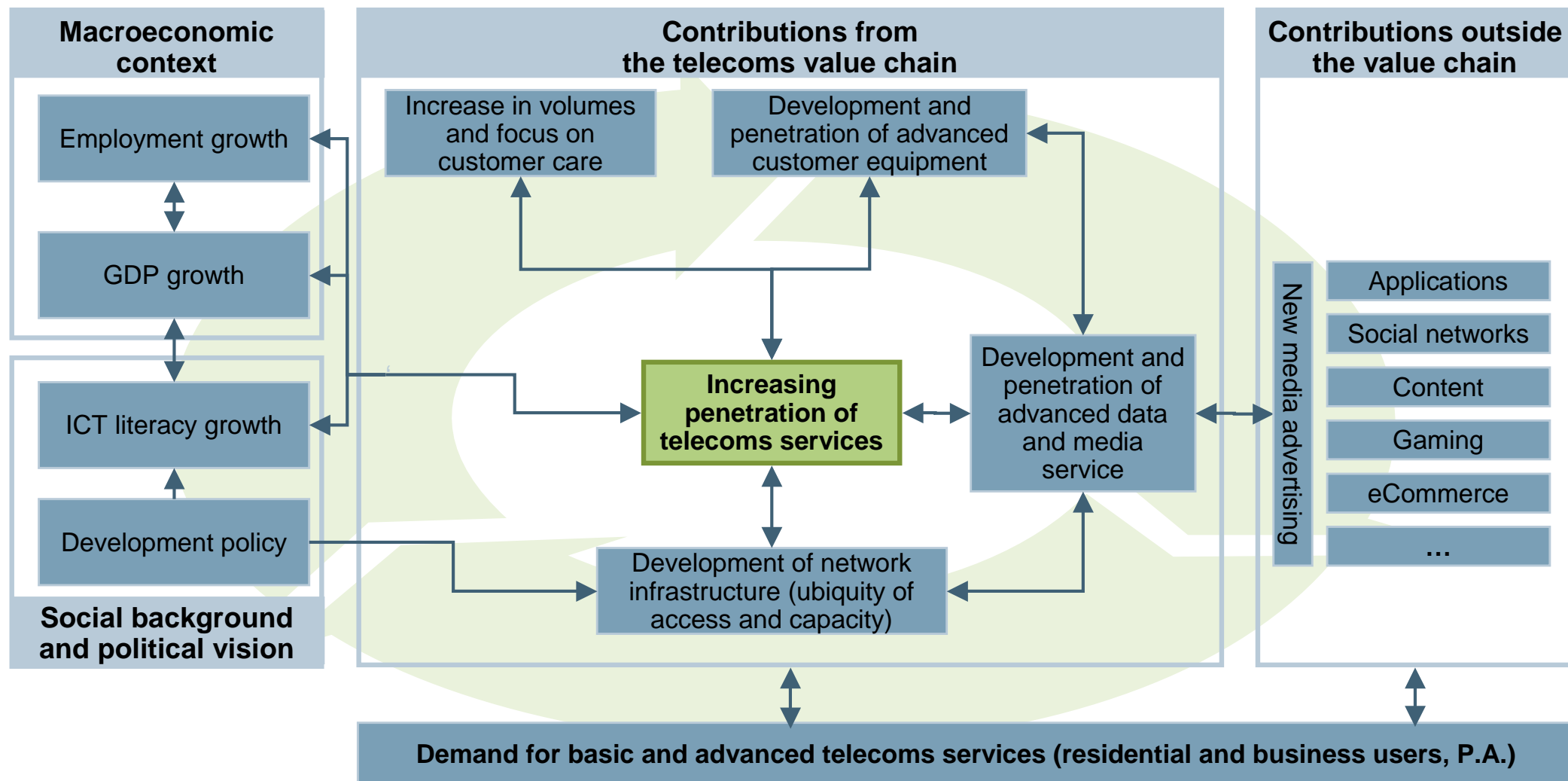
Outlook and development scenarios

## RESULTS:

Report on the status of the telecoms sector that will:

- identify risks and opportunities
- contribute to the strategic focus and further investigation

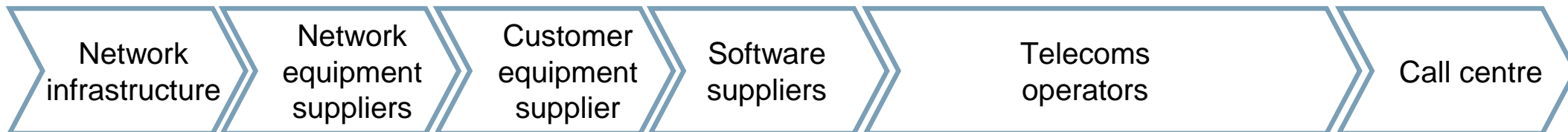
# ... considering telecoms as the centre of a virtuous circle that can drive economic development



# Methodology

- The themes that feed into an analysis of the telecoms sector are complex and object of several studies, statistics and publications at a national and international level
- This report is based on several sources:
  - questionnaires provided by sector companies (hereafter “company data”) for the purpose of this report. They form the principal source for the analysis carried out on the dynamics of the Italian telecoms value chain
  - institutional sources: ISTAT, European Commission, OECD, EUROSTAT, EITO, ITU, AGCOM (and other national regulatory authorities: Ofcom, ARCEP, CMT, BNetzA, OPTA, etc.)
  - publicly available annual reports and financial accounts (to include in the analysis of companies not belonging to ASSTEL or for which it was not possible to obtain direct input via the questionnaire etc.)
  - Analysys Mason’s market intelligence data provided by Analysys Mason Research, our in-house research unit
  - other third-party sources and databases, such as Telegeography, EIU, Euromonitor
- Given that we have taken company data as the primary source for this report, there may be small discrepancies relative to results that can be found in other institutional sources. However, potential small discrepancies do not change the broad conclusions of the analysis that has been carried out
- The observations contained in the report describe the status of the sector and the possible causes of its economic and industrial development, analysing the factors on the supply and demand size and considering the contribution of components which are external to the value chain

# Companies that have directly contributed to the report



*Has also contributed to the report*





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# The sustainability of the telecoms sector and its contribution to the national economy are threatened by external factors

## Macroeconomic context


- The telecoms sector supports wider economic development through a virtuous circle
- Recent economic conditions have hit the sector, especially in developed countries

- A strategic vision stimulating the sector can promote demand and investment ...
- ... enabling economic recovery, inside and outside the value chain

## Social background and political vision

## Contributions from players inside the value chain

- Unlike other European countries, the Italian telecoms sector is experiencing a **structural downturn**, as the reduction in revenue and margins started before the global financial crisis
- **The modest growth in broadband services does not compensate** for the revenue and margin loss in traditional voice services, whose prices have decreased over time (unlike all other regulated public utility services)
- **Low demand seems to be the main cause for this slowdown**, given that other enabling factors on the demand side (retail prices and infrastructure) are in line with EU5 benchmarks

- 
- The decline in revenue has forced telecoms operators to focus on cost control that, **so far, has not affected personnel costs and has only marginally reduced total network expenditure**

## Contributions outside the value chain

- Contents and applications offered by players outside the value chain are proliferating
- Telecoms operators have no access to the (strongly increasing) revenue generated by these services...
- ... however, telecoms operators must bear the costs of upgrading their networks to cope with the boost in traffic caused by these services

# The Italian telecoms sector's revenue decline appears to be a structural issue aggravated by global economic crisis

## ***Economic downturn***

- The global economic crisis has strongly affected employment and household disposable income in Italy

## ***Main trends observed***

**2006**  
+2% GDP  
growth



**2009**  
-5% GDP  
growth

## ***Contingent and structural slowdown***

- The slowdown of the telecoms sector started in 2006, before the global financial crisis, and so it seems due to structural reasons typical of the industry (and exacerbated by the crisis)

**2006**  
Telecoms  
account for  
almost 2% of  
GDP

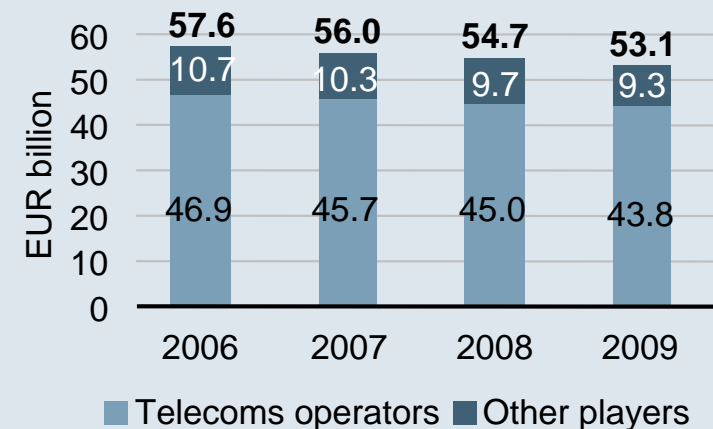


**2009**  
Gradually, it  
decreases to  
1.7%

## ***Revenue of the telecoms sector in Italy***

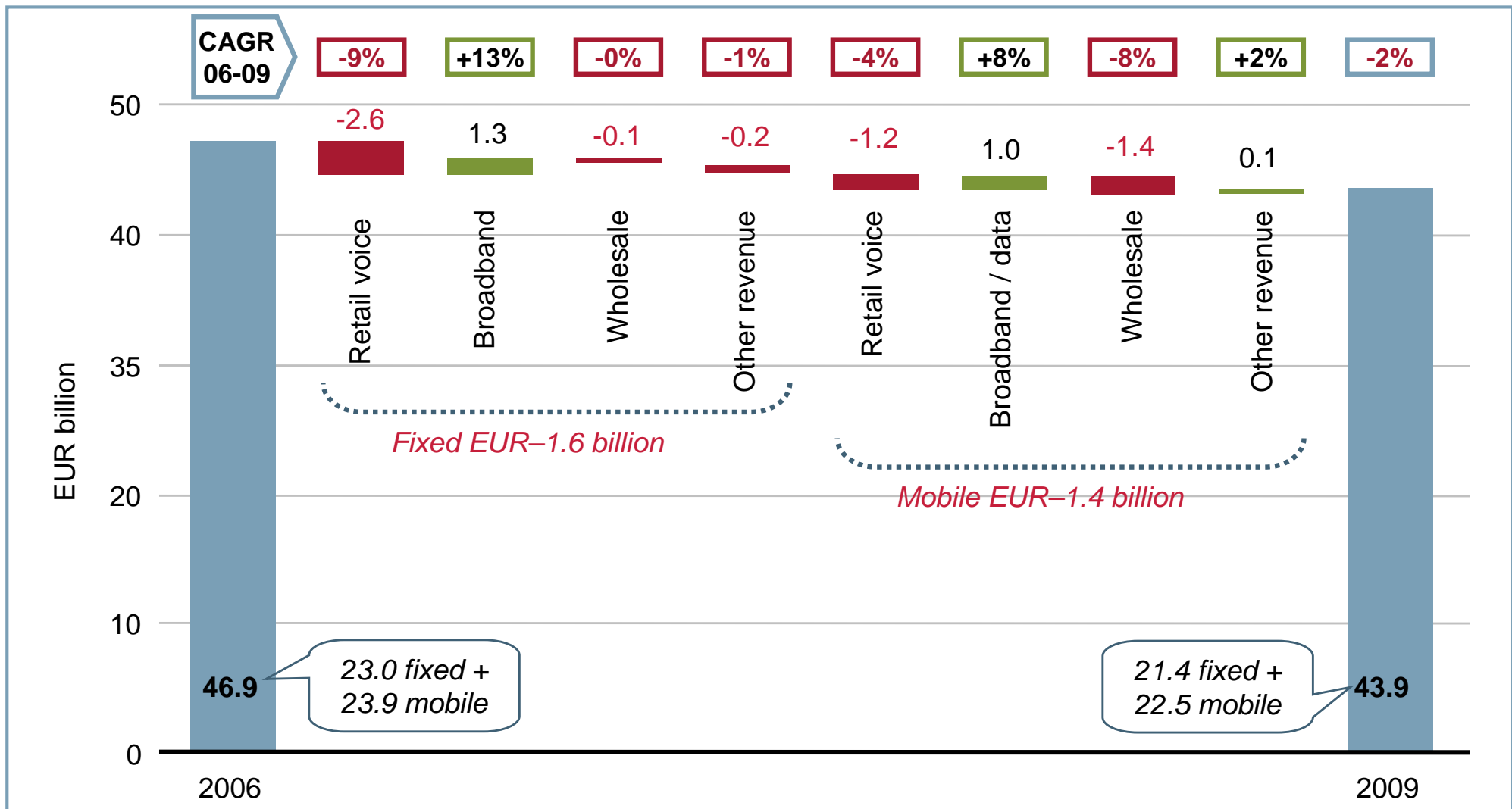
- Revenues for the telecoms value chain have decreased steadily over the last years
- Most revenues are generated by telecoms operators from end-users and then filter through to other players in the telecoms value chain
- The structural slowdown of telecoms operators, therefore, has an impact across the value chain

## **Revenue from the telecoms value chain**

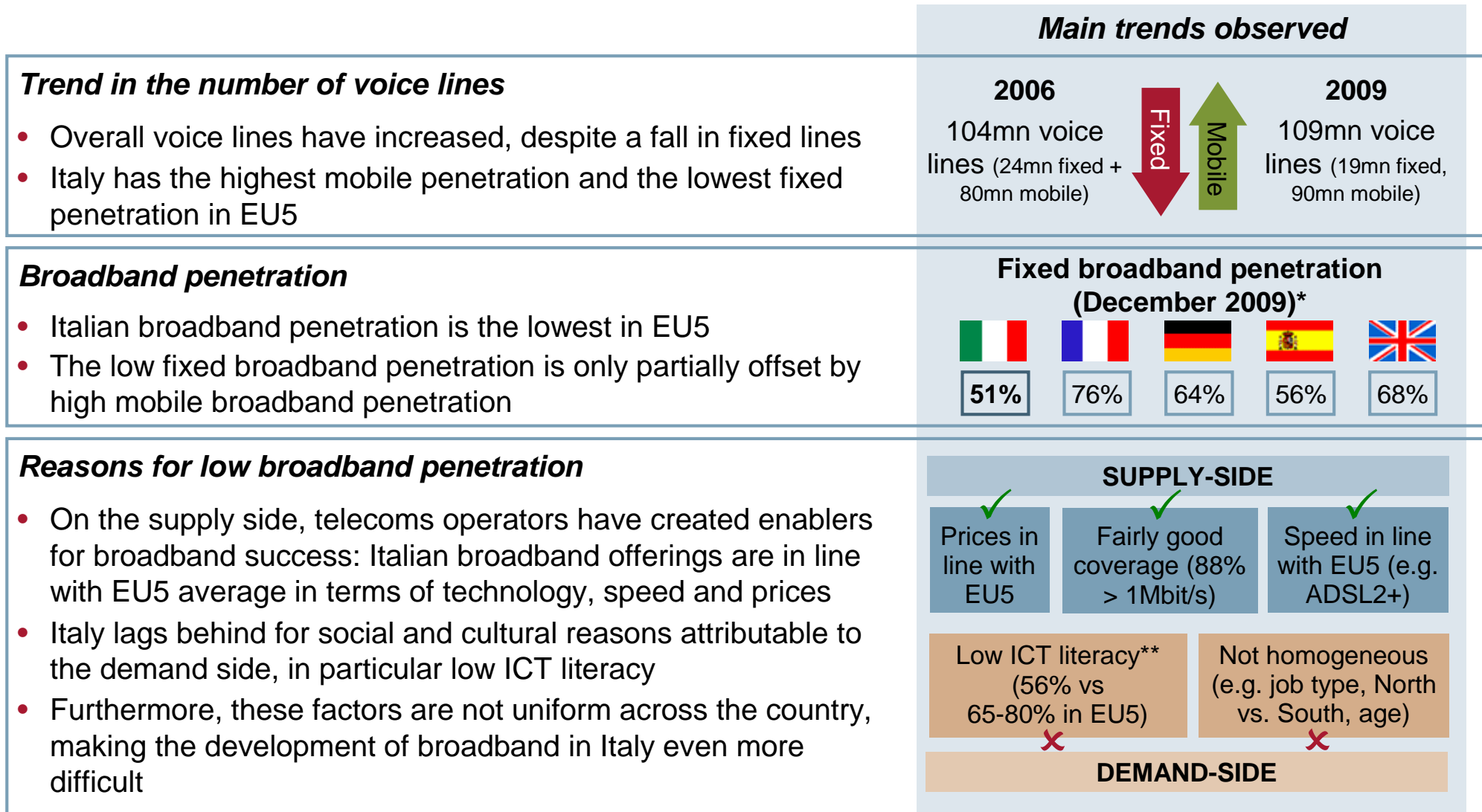


# Growth in revenues from fixed and mobile broadband services has not offset the fall in voice revenues

Italian telecoms operators' revenue bridge, 2006-09



# The number of access lines – especially broadband lines – has increased (although less than expected)



\* Note: calculated as the number of fixed broadband accesses divided by the number of households

\*\* Households with access to home computer (2008)

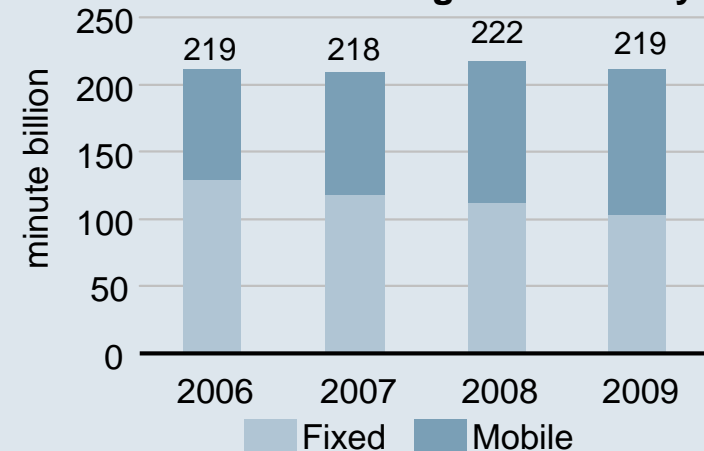
# While voice traffic has remained broadly constant, data traffic on telecoms networks has soared

## ***Broadly stable voice traffic***

- Fixed-originated traffic fell steeply between 2006 and 2009, counterbalanced by an increase in mobile-originated traffic (reflecting the trend in fixed-mobile substitution)
- Fixed-mobile substitution has affected not only on the number of lines, but also the traffic per line, due to an increasing use of mobile voice services

## ***Main trends observed***

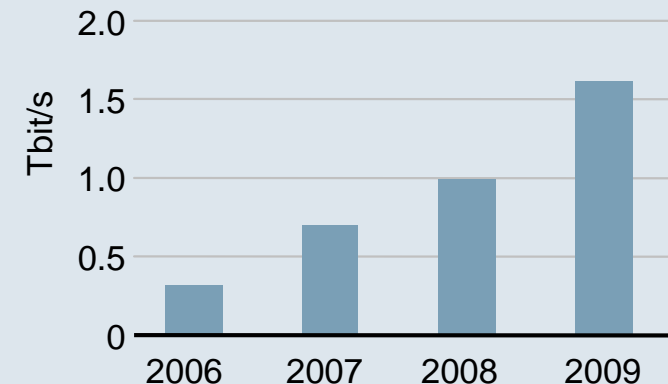
### **Voice traffic originated in Italy**



## ***Boom in data traffic***

- Data traffic has grown far more quickly than the number of users
- The spread of streaming video services and peer-to-peer applications has led to a considerable increase in bandwidth usage per user

### **IP transit bandwidth in Italy**



# Despite a decline in margins, telecoms operators have kept investments at a high level

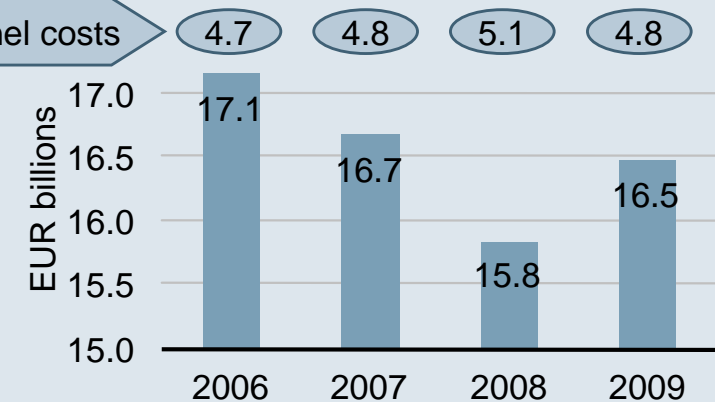
## Decline in margins

- Revenue slowdown has decreased operators' margins between 2006 and 2008
- Operators have therefore focused on cost control, which led to an improvement in margins in 2009
- Despite an increase in 2009, total EBITDA for telecoms operators remain below 2006-07 levels
- Cost control has not affected personnel costs, which have remained broadly stable over the period

Personnel costs

## Main trends observed

### EBITDA of telecoms operators



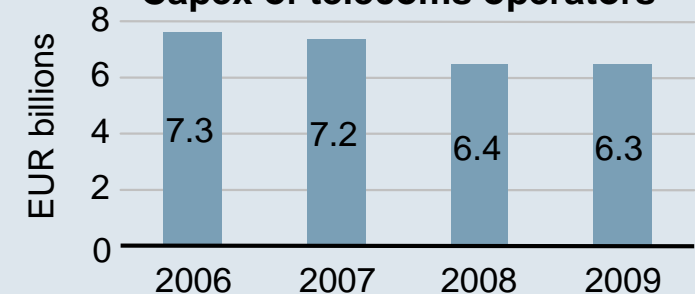
## Maintaining high levels of investment

- Although margins have fallen, telecoms operators have maintained investments at a high level
- This enabled Italian operators to remain in the high end of EU5 benchmark in terms of capex as % of revenue, invested in upgrading and expanding their networks
- Marginal reduction in capex has been partially compensated by an increase in network opex, favoured in some instances by the outsourcing of network maintenance

### Capex as % of revenue (2009)



### Capex of telecoms operators



# However operators have expanded their networks to cope with surging volumes

## Network infrastructure expansion

- Operators have increased their network infrastructure to cope with increasing accesses and surging traffic
- As a result, installed IP peering and transit capacity has increased significantly and, to a lesser extent, also metropolitan and long-distance fibre optics networks

## Fixed network infrastructure

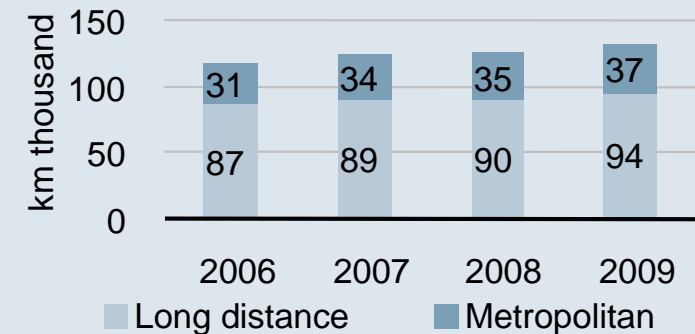
- Fixed network operators have invested in the expansion of the access network for the provision of xDLS services by means of LLU (+58% in installed DSLAMs and related backhauling in the period 2006-09)

## Mobile network infrastructure

- Mobile network operators have increased the capacity of 2G networks (for the provision of voice services) as well as capacity and coverage of 3G networks (for the provision of mobile data and broadband services)

### Main trends observed

#### Extent of fibre-optic networks\*



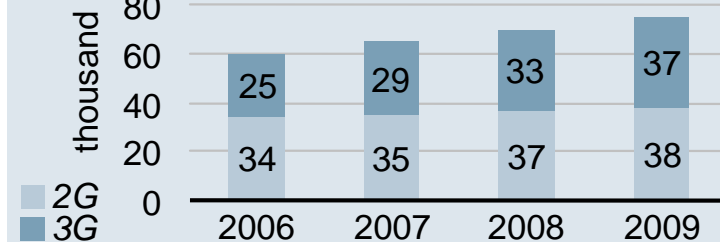
2006

14 000 installed DSLAM  
8000 exchanges with DSLAM\*

2009

22 000 installed DSLAM  
12 000 exchanges with DSLAM\*

#### Number of radio sites in use





# The slowdown experienced by telecoms operators has spread to the rest of the value chain

## Impact of slowdown on the rest of the value chain

- The slowdown felt by telecoms operators has negatively affected the rest of the value chain
- Equipment providers, especially network equipment suppliers, seem to be among the worst hit

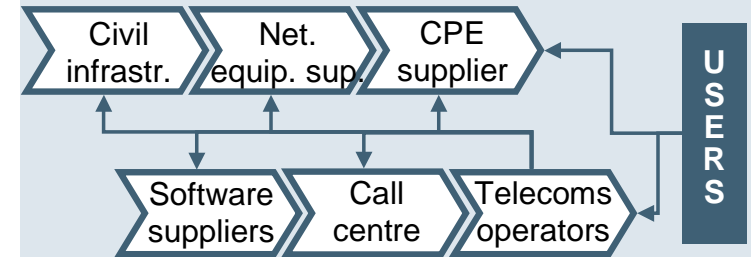
## Impact on network equipment providers

- Revenue from network equipment has fallen sharply in the last two years, especially the component billed in Italy
- EBITDA has decreased substantially, despite a small recovery in 2008
- The role of suppliers not registered in Italy is increasing (from 25% to 33% of telecoms operators' expenditure)

## Impact on customer equipment suppliers

- The fixed and mobile customer equipment market has contracted slightly
- Sales of mobile handsets have decreased, despite the boom in smartphones (EUR1 billion in 2009)

## Main trends observed



2006

Revenue  
EUR5.2bn  
of which  
EUR3.6bn is  
billed in Italy  
EBITDA 7.3%

2009

Revenue  
EUR3.9bn  
of which  
EUR2.5bn is  
billed in Italy  
EBITDA 4.3%

2006

Customer  
equipment  
expenditure  
EUR3.9 billion

2009

Customer  
equipment  
expenditure  
EUR3.7 billion

# Telecoms operators have moved towards outsourced call centres

## Growth of call centres for telecoms

- Telecoms operators have been central to the growth of revenue and expertise of Italian call centres
- Headcount in outsourced call centres for telecoms has increased significantly in the last three years
- Outsourced call centres have expanded to cover other industries, which now represent over 60% of total turnover

## Main trends observed

Call centre	2006		2009
Employees*	9700	↑	16 200
Turnover from telecoms (EUR)	261mn	↑	423mn
% turnover other sectors	60-65%		

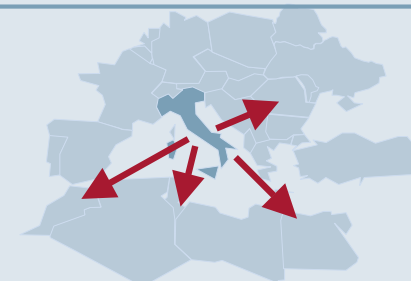
## Increase in labour cost for call centres

- The call centre business is increasingly under pressure by variable revenue and fixed costs (labour)
- The share of labour costs over total costs has increased after the forced absorption of temporary workers

Labour costs as % of total costs	2004	↑	2009
	73%		80%
Labour cost (y-o-y growth 2008-09)	↑		+4%

## Slow development of offshoring

- Italian call centres' offshore activities are not significant due to several factors: language barrier, limited cost differential, public incentives for the development of call centre activities in some Italian regions



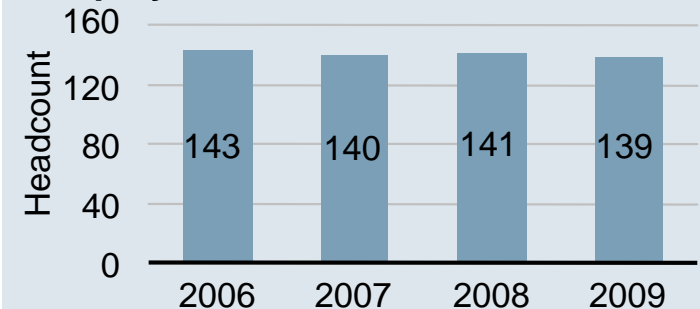
# The growing burden of personnel costs has reduced flexibility in recruitment across the telecoms value chain

## Evolution of the telecoms value chain headcount

- The number of staff employed across the value chain has fallen, despite a rise in the headcount in outsourced call centres, partially due to the absorption of temporary staff
- The Italian telecoms sector seems to have seen fewer structural changes than European peers

## Main trends observed

### Employees in the telecoms value chain



## Consequences for employment in the telecoms sector

Trends in headcount and turnover have caused:

- an increase in the average employee age, also due to the low average age of the sector
- an increase in the proportion of permanent contracts

2006

50% employees  
> 40 years old



2009

56% employees  
> 40 years old

97% standard  
contracts\*



98% standard  
contracts\*

## Personnel cost

- Cost per FTE increased in the period 2006-09 in part due to the increase in seniority
- This, together with the reduction in revenue, has driven personnel costs from 10% to 12% of revenue in the period

2006

Operators spend  
EUR4.7bn in  
personnel costs, and  
EUR0.2bn in  
outsourced call  
centres



2009

Operators spend  
EUR4.8bn in  
personnel costs, and  
EUR0.4bn in  
outsourced call  
centres

# Telecoms operators bear much of the cost of supporting new data and media services, but cannot 'monetise' them

## Penetration of internet-enabled services

- Services and applications offered via internet by players outside the telecoms value chain are proliferating
- Broadband users are the audience for services that are paid for by advertising in most cases

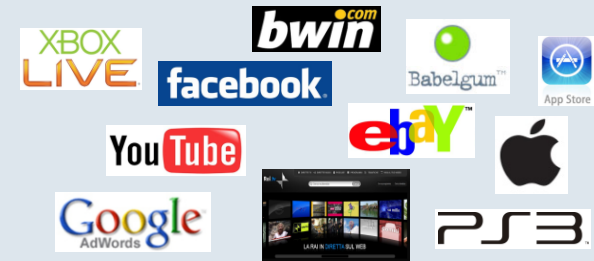
## New revenues are bypassing the telecoms value chain

- The value that the telecoms value chain can extract from users has reached its limit
- Revenue generated by players outside the value chain (often registered in other countries) are strongly increasing
- Benefits for telecoms operators are limited, taking the form of an indirect stimulus to take-up of telecoms services; in most cases operators are unable to monetise these services

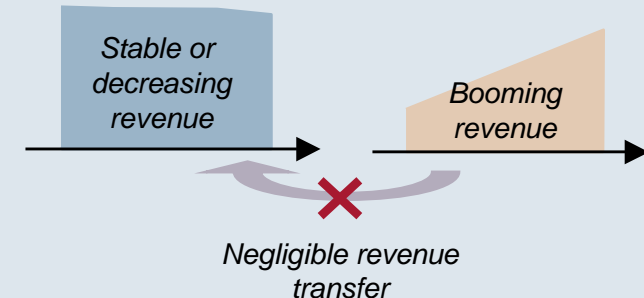
## Increase in network costs due to surging traffic

- The increase in traffic generated by players outside the value chain requires expanded and upgraded network infrastructure

## Main trends observed



## Telecoms operators' revenue vs. Revenues outside the value chain



## Capacity increase 2006-09

- IP peering capacity +326%

# A strategic stimulus plan can promote demand and so drive investment for the growth of the whole telecoms value chain

	<b>Main trends observed</b>																		
<ul style="list-style-type: none"> <li>The development of the telecoms sector can drive Italy's economic growth</li> </ul>	<p>The EC quantifies broadband contribution to EU27 GDP growth in EUR630-1090bn between 2006 and 2015</p>																		
<ul style="list-style-type: none"> <li>Development policies must be designed to stimulate the entire telecoms value chain, to the benefit of the national economy</li> <li>Stimulus may be focused directly on telecoms operators (even on a regional basis), or indirectly by improving the ICT literacy (hence stimulating demand)</li> <li>The development of the sector therefore requires the definition of a strategic vision, supported by resources and regulation</li> </ul>	<p>The diagram illustrates a flow from 'Funds and resources' to 'Demand stimulus', 'Infrastr.', and 'Market liberalis.'. 'Regulation' is shown as an external factor influencing these elements. All these components are supported by a 'Strategic vision' at the base.</p>																		
<ul style="list-style-type: none"> <li>Demand can be stimulated by improving ICT literacy and by means of incentives for the purchase of PCs</li> </ul>	<p><b>Examples of stimulus initiatives: e-Government, training, PC in schools and PA, incentives for PC purchasing</b></p>																		
<ul style="list-style-type: none"> <li>The current government plan is focused on bridging the 'digital divide' and does not include the development of NGAN</li> <li>There are regional / local initiatives on NGA, but these are as yet fragmentary (e.g. Lombardia Digitale: NGAN by 2015)</li> </ul>	<table border="1"> <thead> <tr> <th>Public plans</th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>100% coverage</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>NGAN</td> <td>✗</td> <td>✓</td> <td>✓</td> <td>✗</td> <td>✓</td> </tr> </tbody> </table>	Public plans						100% coverage	✓	✓	✓	✓	✓	NGAN	✗	✓	✓	✗	✓
Public plans																			
100% coverage	✓	✓	✓	✓	✓														
NGAN	✗	✓	✓	✗	✓														
<ul style="list-style-type: none"> <li>The roll-out of NGAN requires a new regulatory approach which could include an analysis of regional / local differences</li> </ul>	<p><b>In Italy the NGAN regulatory framework, which is critical for NGAN investments to start, has not yet been finalised</b></p>																		

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