



## Broadband market perspectives in the Italian scenario

Extract

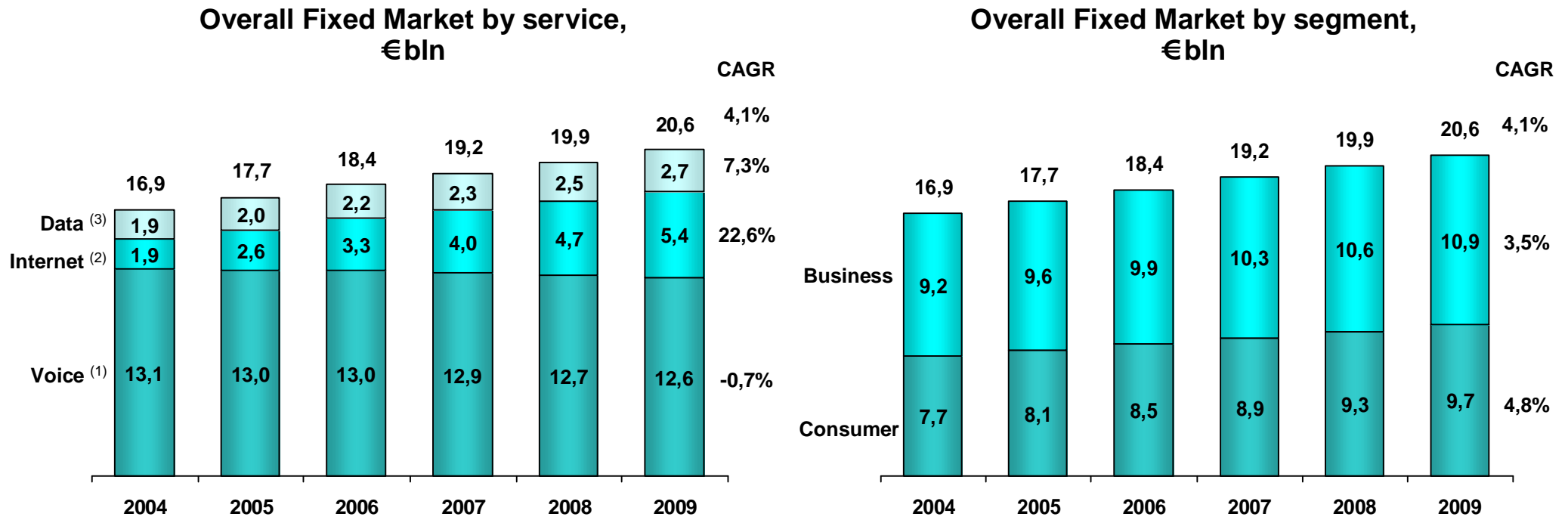
***Marco Troncone, Principal***

Milan, 21 April 2005

## Broadband market perspectives in the Italian scenario

- n Expected evolution of the Italian broadband market
- n The way forward: the 'x-play' challenge

## Overall Italian fixed market is expected to grow at about 4% driven by Internet & Data strong growth mainly in consumer segments

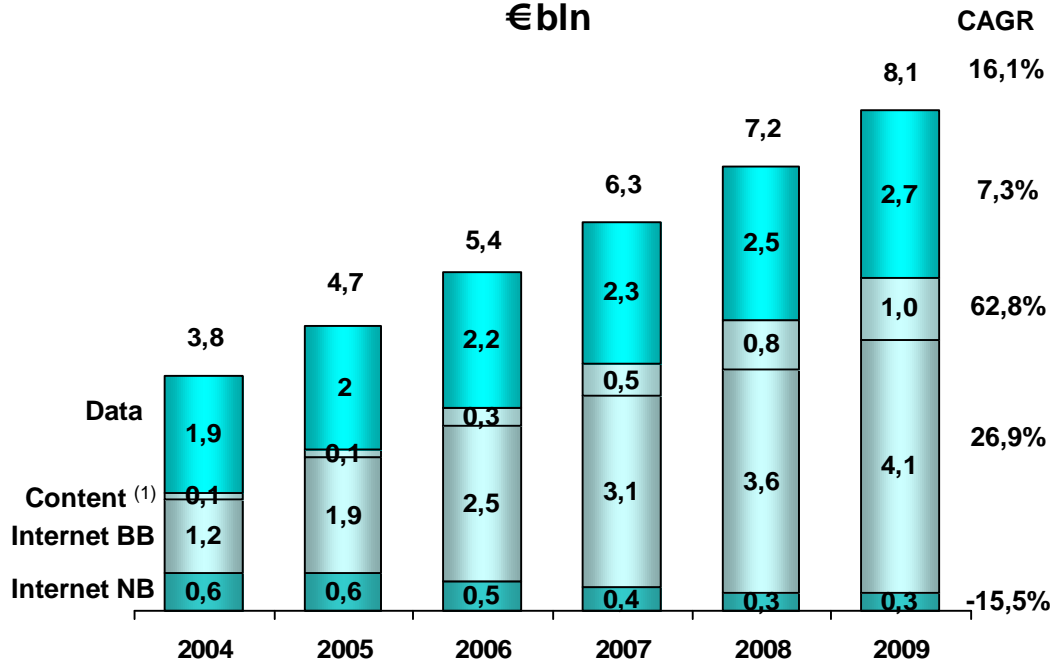


- § Voice market slightly declining due to substitution effect between fixed and mobile and continuous price competition
- § Internet market showing strong growth rate sustained by broadband penetration and new video services
- § Data growth explained in particular by the development of innovative IP-based data and web services market
- § Consumer segment showing slightly higher contribution to overall growth

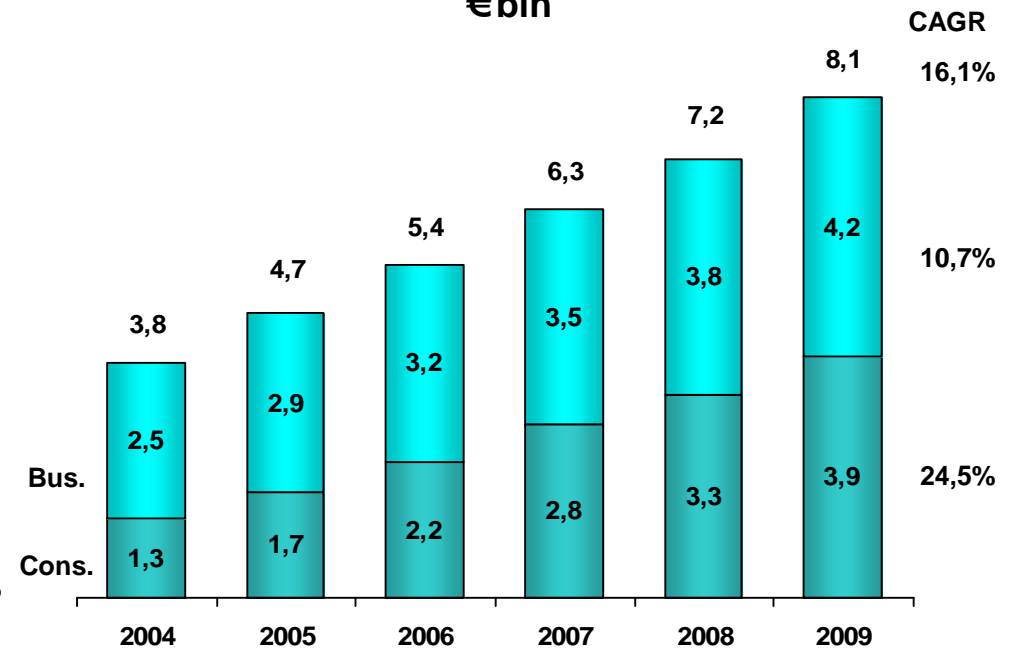
(1) includes Fixed VAS  
 (2) includes Internet content / entertainment services  
 (3) includes Data Transmission and Web Services

# Internet & Data Market growth will be mainly pushed by broadband expansion in consumer segment

Internet & Data Market by service, €bn



Internet & Data Market by segment, €bn



- § Internet dial-up reducing over time due to progressive migration to broad-band accesses
- § Broadband market growth mainly fostered by low-entry barriers xDSL accesses and new content services, in particular by Pay-TV / VoD offerings
- § Data segment growing mainly due to web services and IP-VPN for business customers

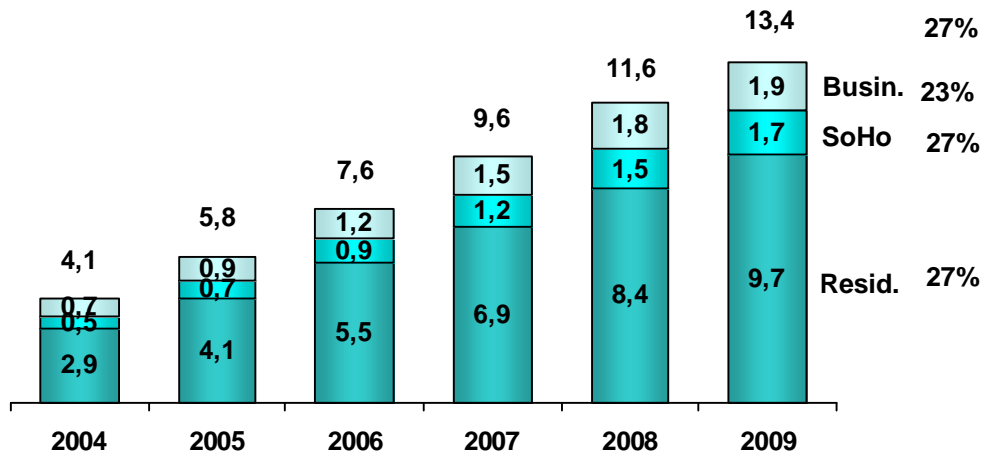
- § Consumer growth is driven by ADSL penetration, while traditional data continue to play an important role for the business segment with particular focus on IP VPN services (CAGR 2004-09: 18%) and ASP / Streaming (CAGR 2004-09: 25%)

(1) includes Internet entertainment services (PayTV, VoD and other content services)  
Sources: IDC, Ovum, ATK Analysis

# Broadband access market fast growth will be mostly rolled out through DSL and will be subject to significant price reduction at comparable bandwidth

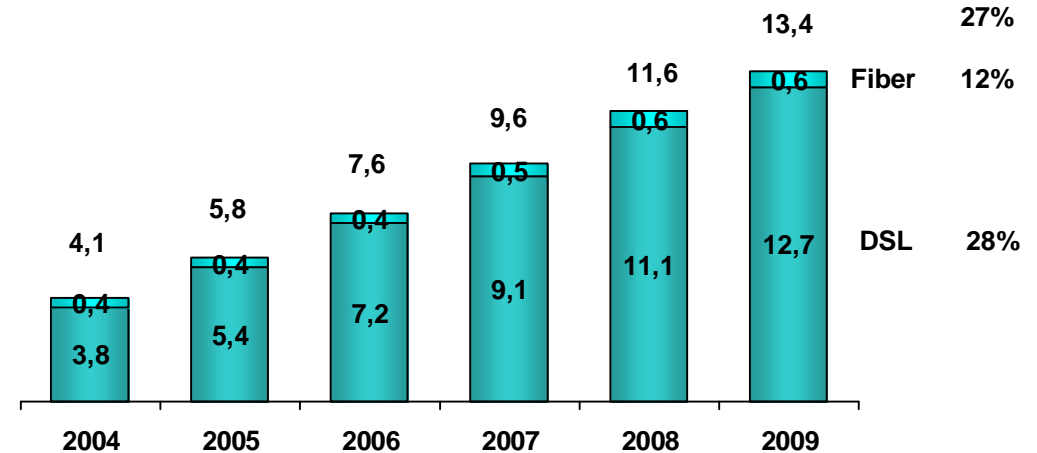
Broadband access market by segment, (mln connections)

CAGR



Broadband access market by technology (mln connections)

CAGR

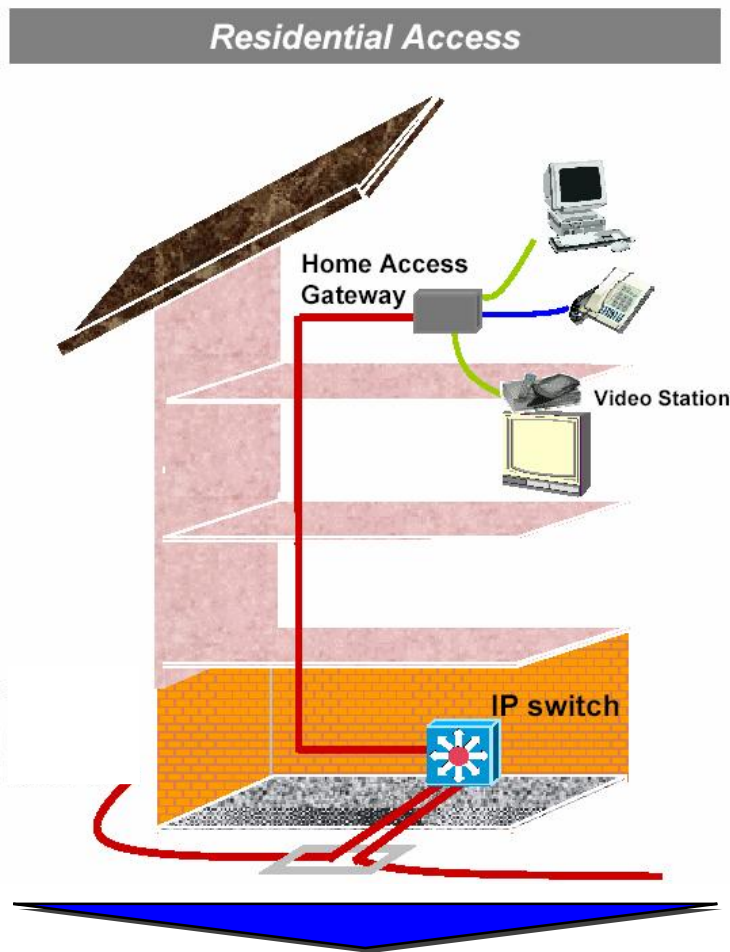


- § BB penetration in the consumer segment growing significantly but limited by lower PC adoption compared to main EU peers (eg. 61% vs. 69% for Germany and UK, 73% for Netherlands)
- § Most broadband growth explained by xDSL accesses, through both wholesale and direct options
- § Limited growth of fiber also confirmed by Fastweb customer base evolution and projections (increasing ULL xDSL share from current 60%)
- § Market value growth only partially limited by price reduction, expected to decrease only by 4% / year due to increasing access performance (larger bandwidth availability)

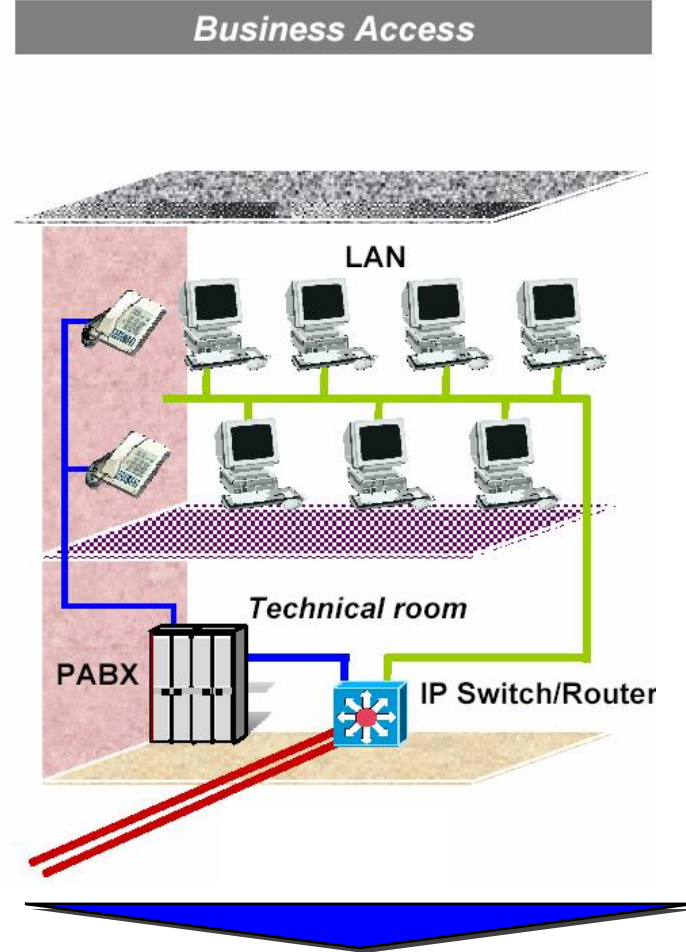
## Broadband market perspectives in the Italian scenario

- n Expected evolution of the Italian broadband market
- n The way forward: the 'x-play' challenge

The Fixed broad-band access will be the success factor both in the Residential market enabling 3-play offers and on Business segments with voice-data integration

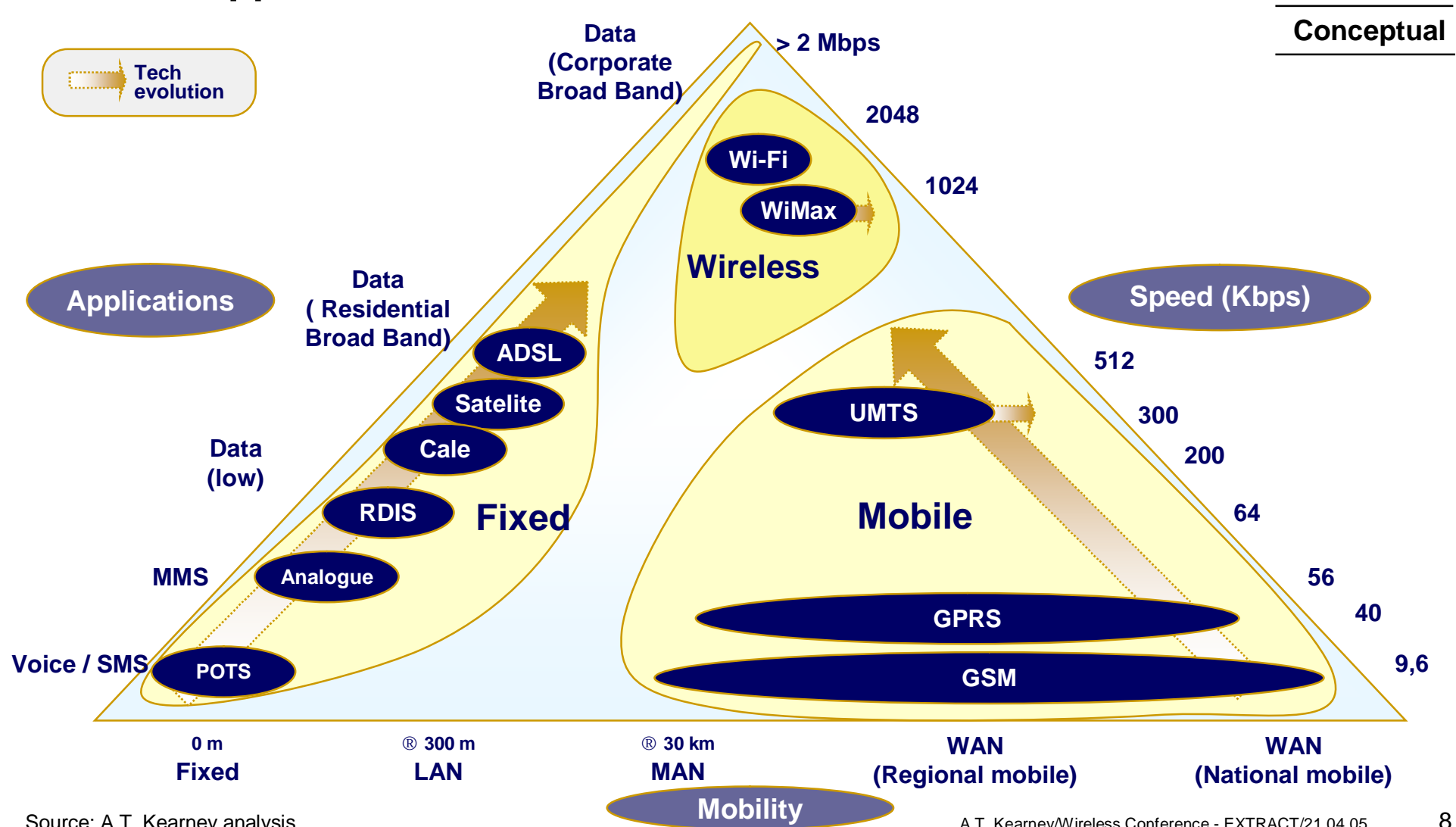


2-play, 3-play offer



Voice and Data integrated services

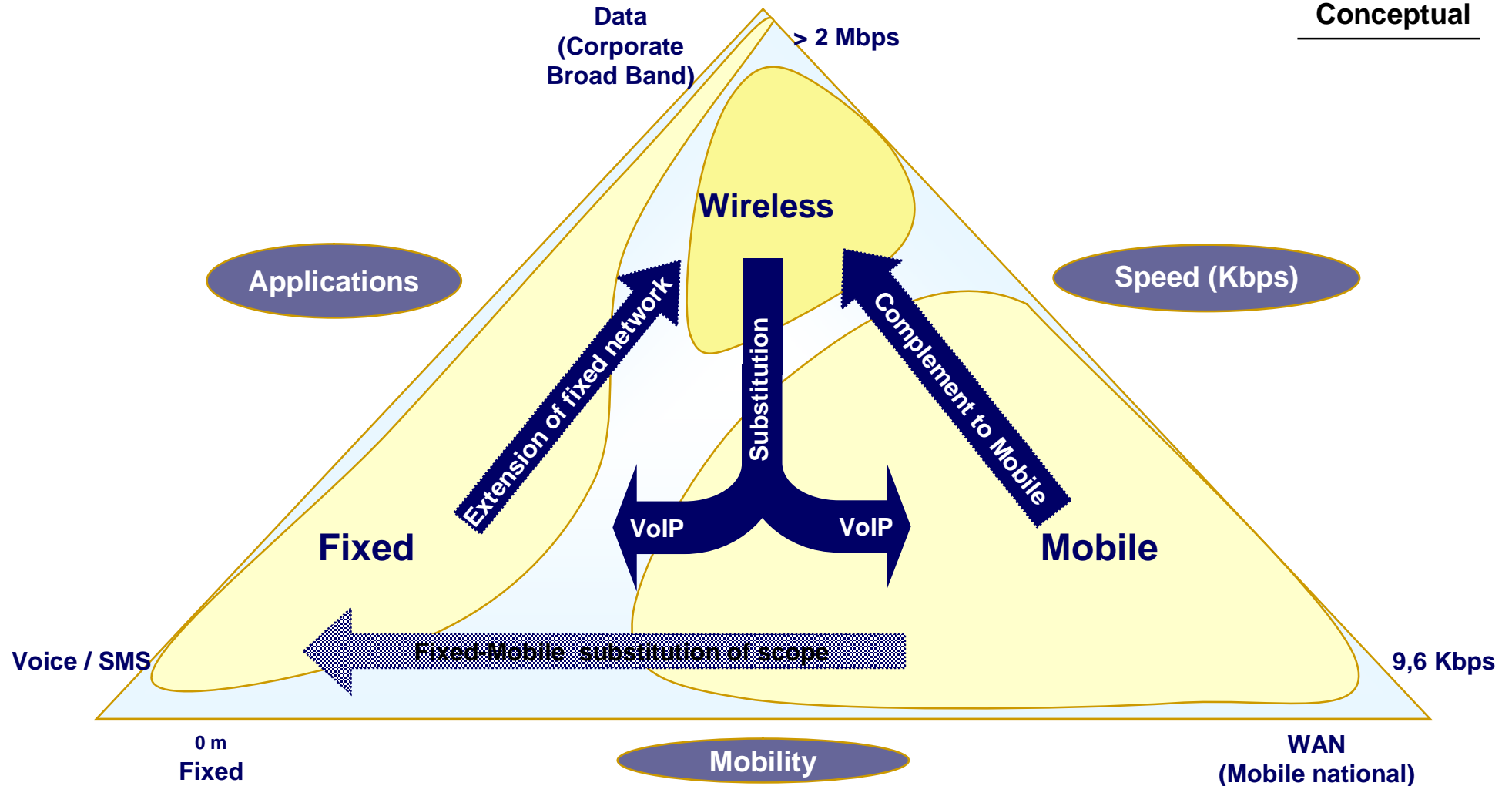
# Wireless broad-band technologies occupy an intermediate mobility position between fixed and mobile, allowing more complex and faster applications





These new Wireless broad-band technologies contribute to the convergence between fixed/ mobile and data/voice through fixed network extension, VoIP substitution and as mobile complement

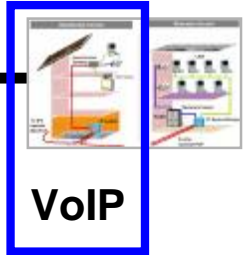
Conceptual



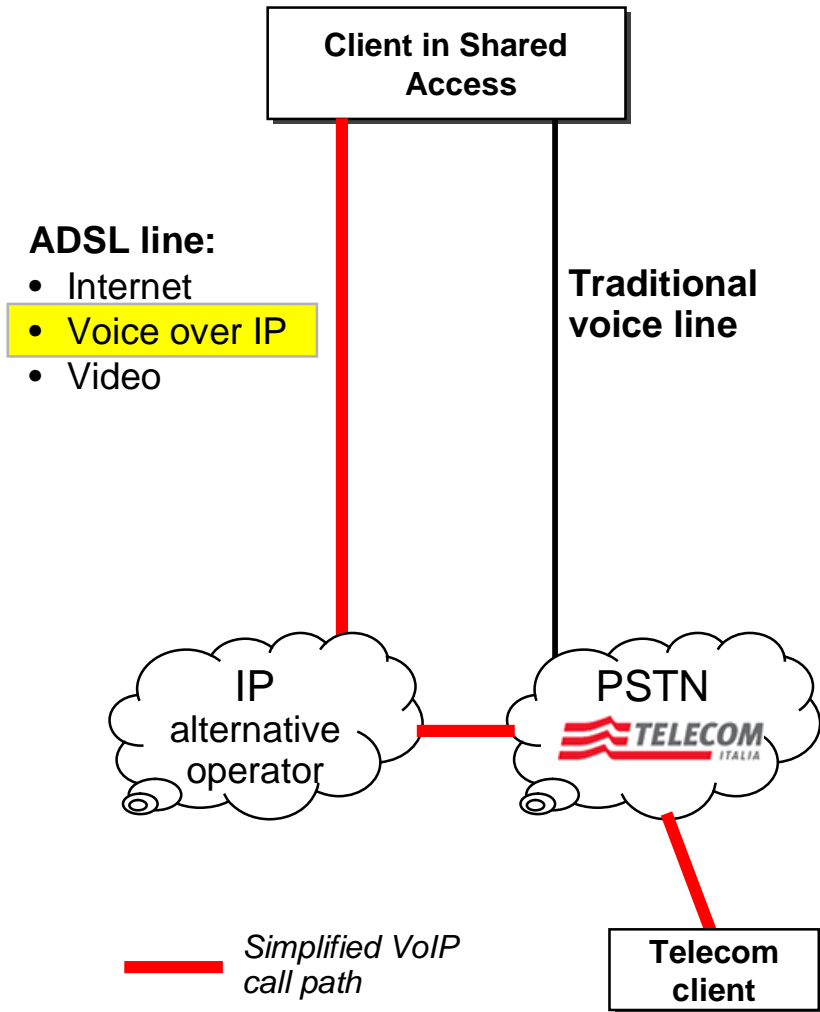
# Convergence at product/service level is becoming a reality, especially in corporate markets, as customers demand more integrated solutions

## Evolution Stage

	Stage 1	Stage 2	Stage 3	Stage 4
	<b>Emergence of Mobile Service</b>	<b>Fixed vs Mobile</b>	<b>Fixed/Mobile Cooperation</b>	<b>Convergence Completion</b>
<b>Feature</b>	<ul style="list-style-type: none"> <li>§ Strength in mobility</li> <li>§ Mostly voice services, <b>no competition between fixed and mobile</b></li> <li>§ Leveraging mobility, mobile service begins to threaten fixed services</li> </ul>	<ul style="list-style-type: none"> <li>§ As mobile service secured economies of scale, it begins to <b>replace fixed service</b> using low price</li> <li>§ <b>Mobile enters data market</b></li> <li>§ Price and response to customer needs (competitive contents) in the Access market become critical</li> </ul>	<ul style="list-style-type: none"> <li>§ As convergence begins, <b>hybrid services</b> started to emerge</li> <li>§ Combination of low price (fixed) and mobility (mobile)</li> <li>§ Integrated device and applications are critical factors</li> </ul>	<ul style="list-style-type: none"> <li>§ <b>Blurred boundary between fixed and mobile</b></li> <li>§ Seamless (between communication and other industries) Access service                             <ul style="list-style-type: none"> <li>- Convergence improves, competition in all industries</li> </ul> </li> </ul>
<b>Importance of Convergence</b>	<ul style="list-style-type: none"> <li>§ Convergence concept not developed yet</li> <li>§ Focus on competition in individual service area</li> </ul>	<ul style="list-style-type: none"> <li>§ No workable business model</li> <li>§ Convergence not attractive to customers</li> </ul>	<ul style="list-style-type: none"> <li>§ Means of differentiation</li> <li>§ Convergence replaces simple fixed/mobile coupled services</li> </ul>	<ul style="list-style-type: none"> <li>§ Basic requirement for competition (Qualifier)                             <ul style="list-style-type: none"> <li>- No convergence service offering, no M/S</li> </ul> </li> </ul>
<b>Main Service</b>	<ul style="list-style-type: none"> <li>§ No convergence services</li> </ul>	<ul style="list-style-type: none"> <li>§ Mobile-based services                             <ul style="list-style-type: none"> <li>- Mobile VPN</li> <li>- Long Distance Calls</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>§ Fixed/Mobile convergence service                             <ul style="list-style-type: none"> <li>- Fixed Mobile VPN</li> <li>- One Mailbox</li> <li>- One Number</li> <li>- One Phone</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>§ Broadband convergence service                             <ul style="list-style-type: none"> <li>- Seamless broadband data service through "One" device</li> </ul> </li> </ul>
<b>KSF</b>	<ul style="list-style-type: none"> <li>§ Network competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>§ Cost vs Service quality</li> </ul>	<ul style="list-style-type: none"> <li>§ Differentiated service toward customer needs</li> </ul>	<ul style="list-style-type: none"> <li>§ Customer base, partnership</li> </ul>



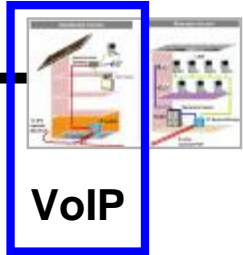
# The integration of VoIP offering, viable also for shared-access customers, will accelerate the growth of broad-band



§ The integration of VoIP offering on shared access will enable to make available 2P / 3P offerings also for non full-ULL customers

§ For example, Italian market has recently experienced the launch of 'indirect VoIP offerings' by France Telecom (*parla.it*), running over an existing ADSL line

**VoIP on shared access could be a trigger for customers experiencing an alternative operator on voice, and finally decide to leave the incumbent for cheaper alternative offers**

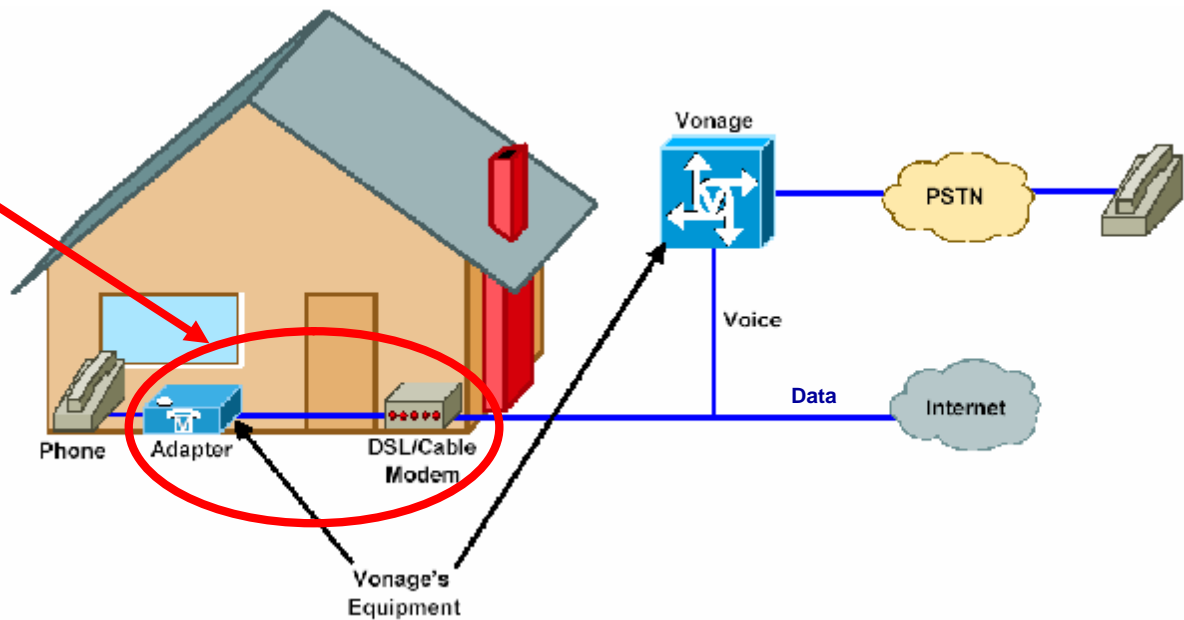


# The VoIP over ADSL will open the competition on Voice: Italian market has recently experienced the launch of a VoIP offering by France Telecom (*parla.it*) running over an existing ADSL, similar to US Vonage

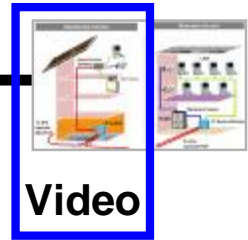


US Vonage example

- 'parla.it' ADSL modem sent to the client:
- Substitution of ADSL provider's modem with new 'parla.it' modem to be performed by the client
- Standard analog handsets to be plugged to 'parla.it' modem
- Parla.it modem therefore performing:
  - conversion of voice into IP packets
  - routing of IP packets into Parla.it network



- Plug & Play adaptor sent by Vonage to the client:
- Conversion of voice into IP packets
- Routing of IP packets into Vonage network




Recent examples confirm that an appealing Video offer delivered on ADSL will sustain the increase of broadband market share...

FastWeb example


**FastWeb TV**

- Unified interface for content in all formats: thanks to:
  - Terrestrial broadcast: RAI, Mediaset, ...
  - Satellite broadcast : BBC, Bloomberg, ...
  - Pay-TV/Pay-per-View: SKY
  - Video-on-Demand
- Integrated with Network PVR (*VideoREC*) and Electronic Program Guide
- Live football matches



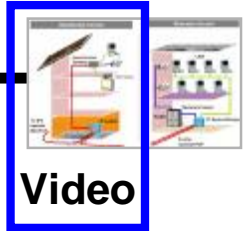
**Video-on-Demand offer**

- Over 4,500 titles
- First VoD licensing agreements in Italy with US major film studios:
  - 20th Century Fox
  - Universal Studios
  - DreamWorks



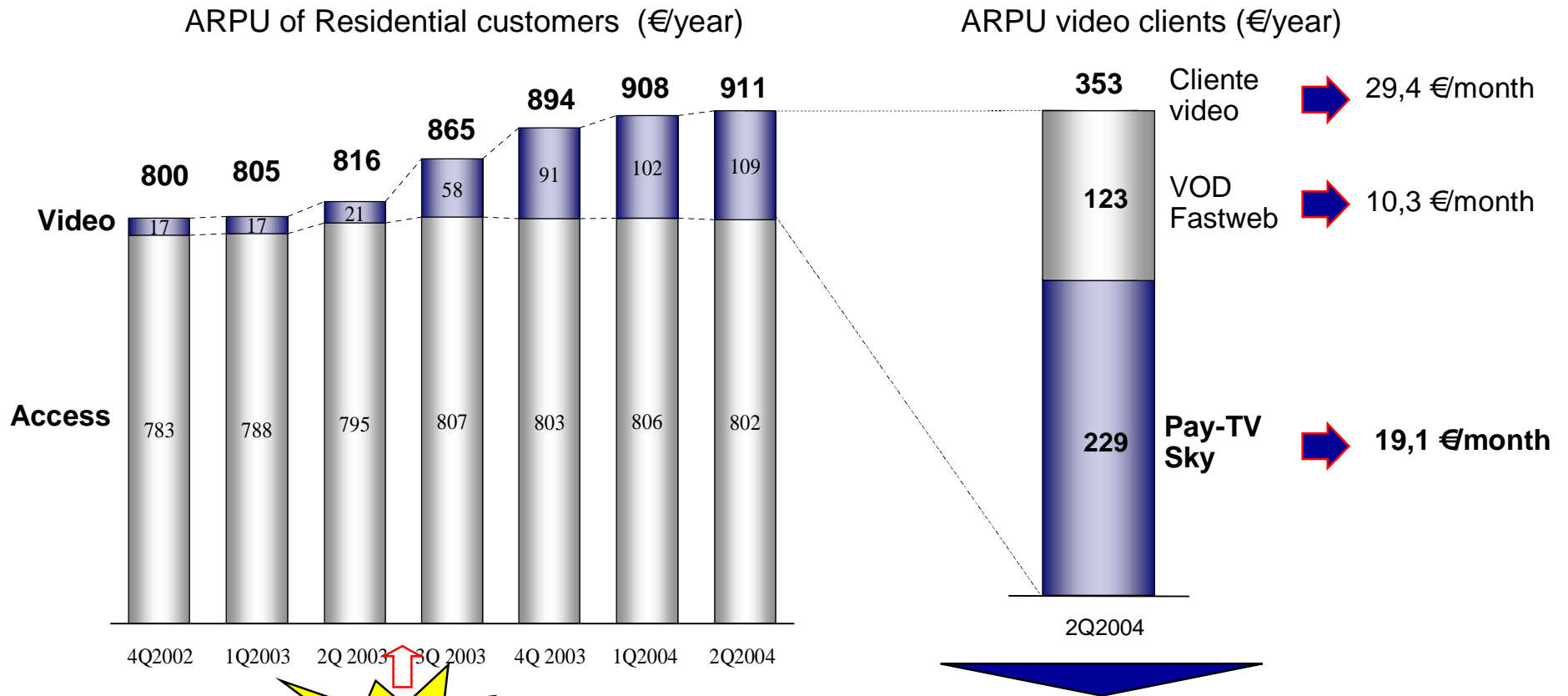
Strategy on Video services:

- n Video as an appealing integration of Voice+Internet offer
- n Contents re-selling, no production
- n Cost-plus pricing, keeping low margins not to dissuade customer



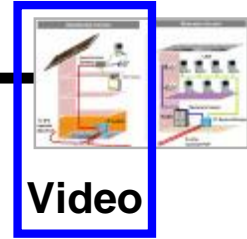
...as well as contribute to operator revenues

**FastWeb example**



**Launch offer Sky**

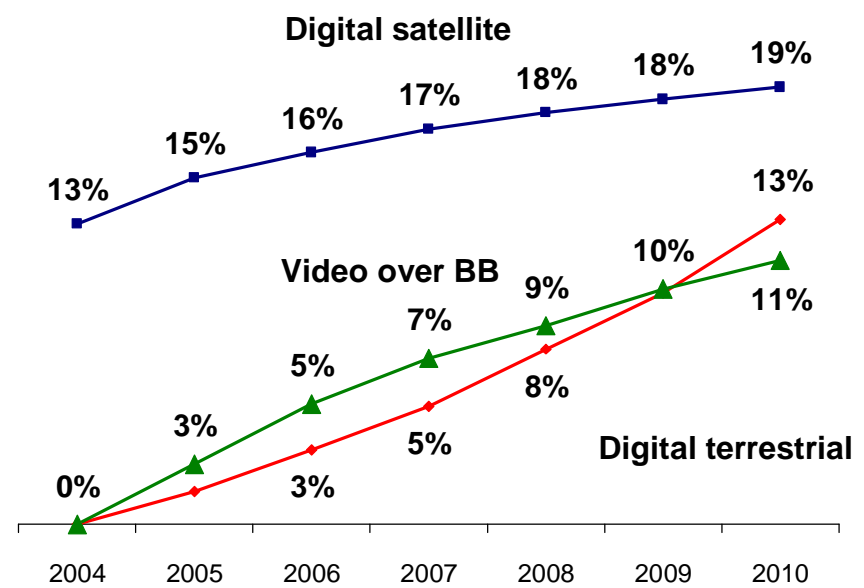
**Strong ARPU growth of FastWeb customers due to the launch of SKY Pay-TV**



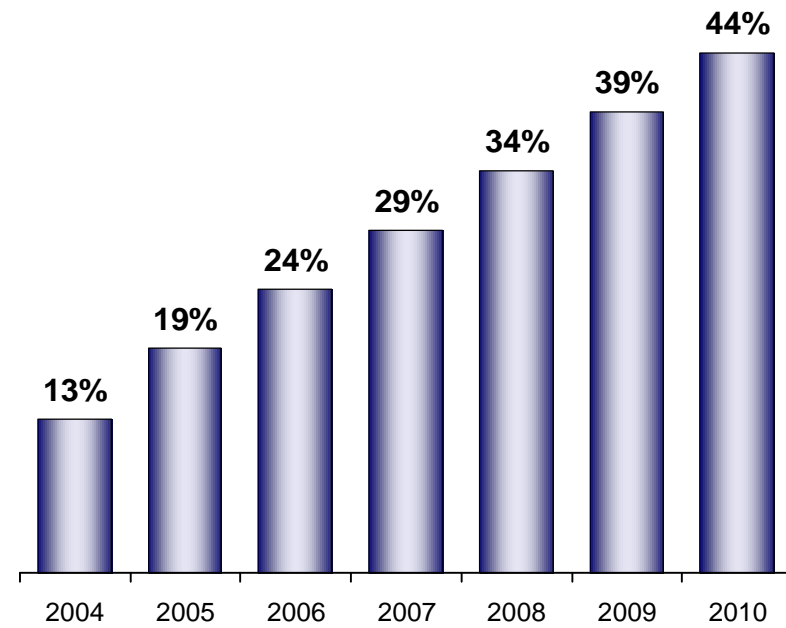
# The penetration of digital video services will grow, 1 out of 5 households will access video services over broad-band

## Digital video services penetration on HH ( % )

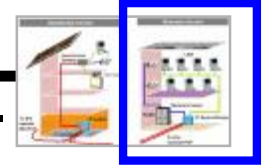
Split by access-platform



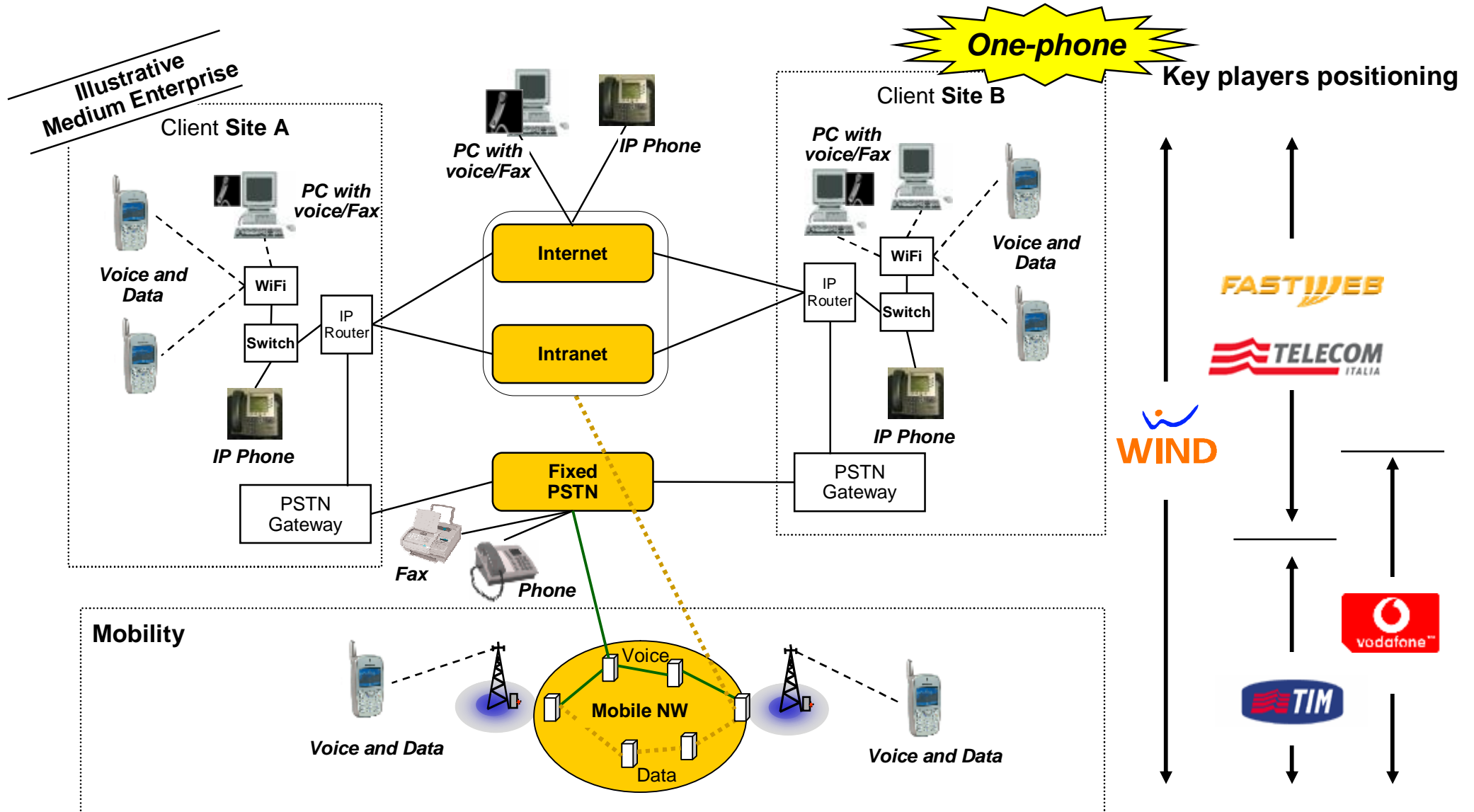
Total Penetration



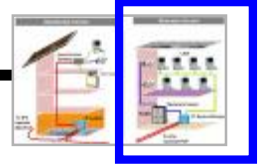




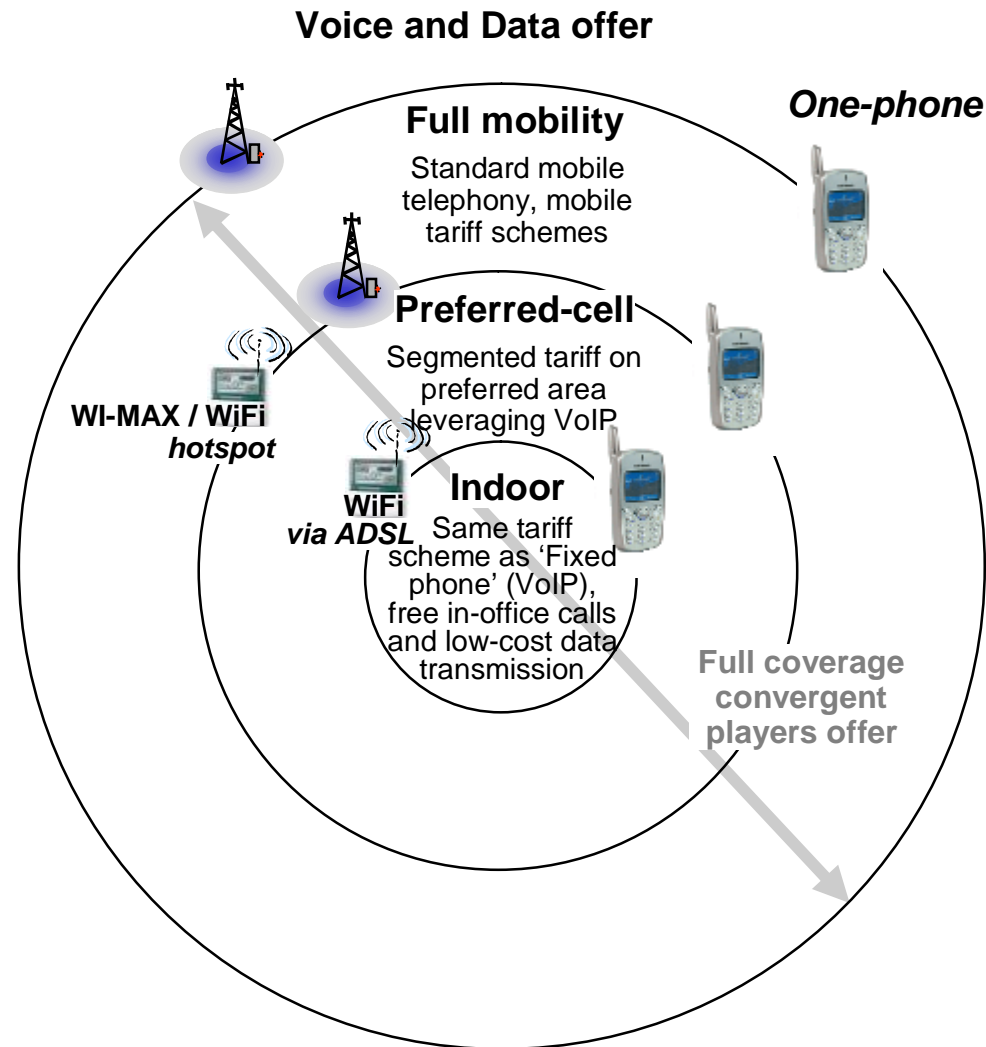
# Key players different positioning on capability to deliver integrated Voice and Internet offering both in mobility and in-office







# Convergent operators can instead leverage on distinctive value proposition through innovative convergence technology on services / handsets



## Conclusions

- n Broadband growth pace will be maintained: Italy will not lag behind
- n The access market pie will remain a game for few players
- n Market complexity is increasing and boundaries are blurring: broadband access as the integrating platform for other innovative service layers
- n Triple-play offers are paving the way for 4P propositions, the next frontier
- n In the convergent arena, broadband players will have to play a role, not necessarily the leading one