

GRUPPO TELECOM ITALIA

Tomorrow's Networks Today

Saint Vincent October the 7° 2005

Converged Networks: the key to achieve triple play

Massimo Coronaro



olivetti



Agenda

- ▶ Convergent services and strategies
- ▶ Network evolution towards ICT & Fixed Mobile convergence

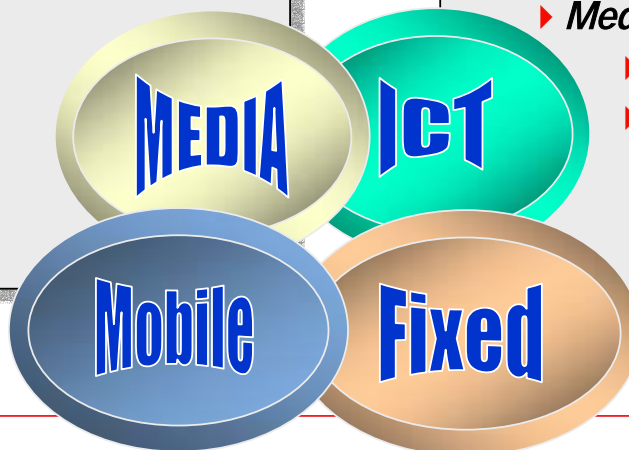
Network & service strategy: a new concept of "quadruple play"

Mass Market services

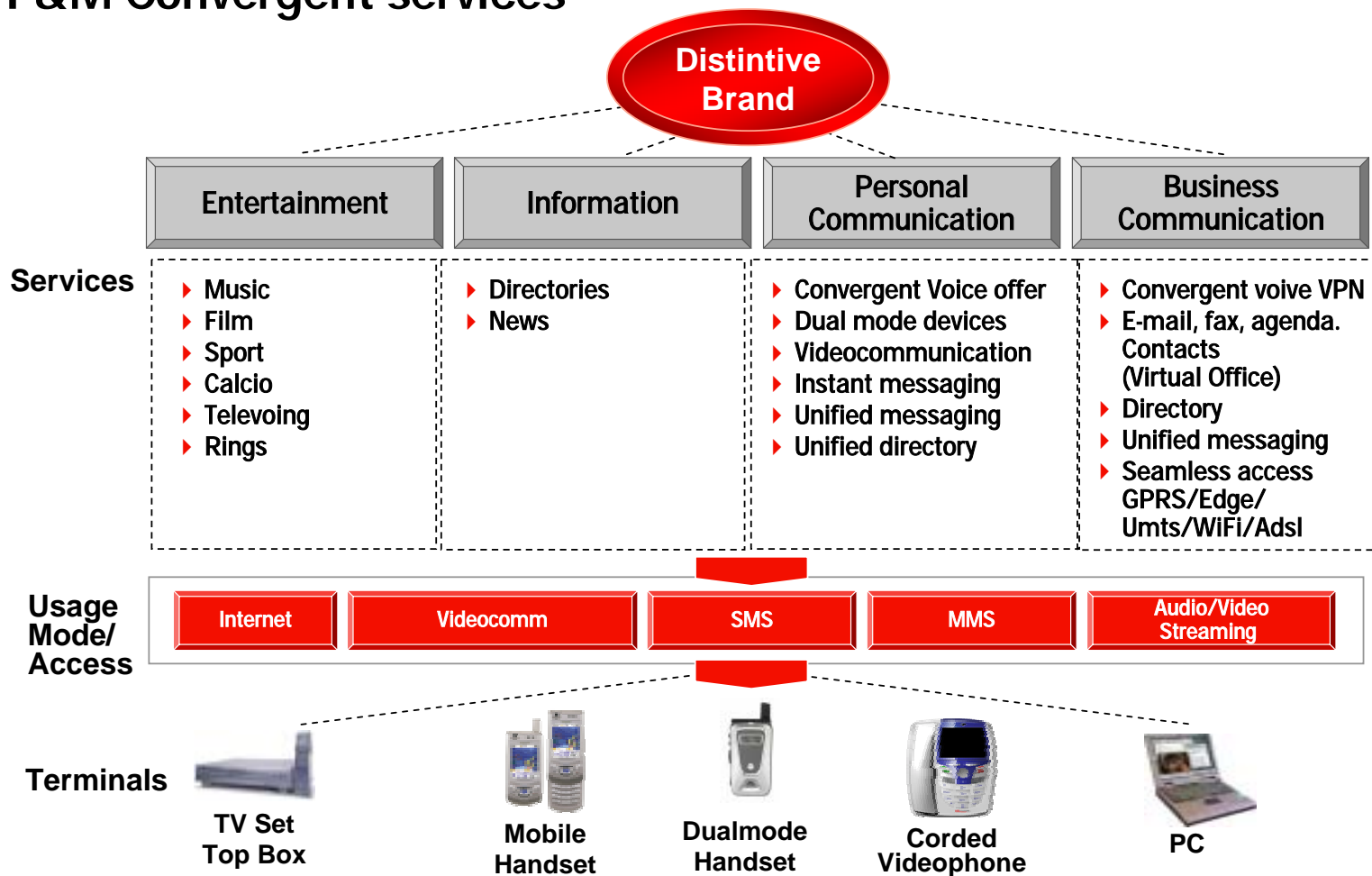
- ▶ *Communication*
 - ▶ VoIP
 - ▶ Videocommunication
- ▶ *Collaboration & Messaging*
 - ▶ Internet
 - ▶ Instant Unified Messaging
- ▶ *Media*
 - ▶ Media
 - ▶ Video
 - ▶ Music
 - ▶ Games

BusinessMarket services

- ▶ *Communication*
 - ▶ VoIP
 - ▶ IP Centrex
 - ▶ IP PBX & Contact Center
- ▶ *Information Services*
 - ▶ Intranet & Collaboration
 - ▶ Messaging
 - ▶ Application on demand
- ▶ *Media*
 - ▶ Business TV
 - ▶ E-learning



F&M Convergent services



Multimedia convergent services : PC & TV based entertainment

From PC...

... to TV

*Internet
 access ...
 Alice
 4 Mega*



Content on PC and TV

Internet	▶ Browsing, mail, (etc.), available on PC and TV
Sport	▶ Live "Serie A" soccer matches (rights acquired up to 2007) ▶ Key live events
Movies	▶ 310 Movies each year, a 200 titles catalogue and 20/30 new titles/month
Music	▶ 400,000 songs library, concerts and live events
PPV	▶ Live Soccer, Basket, Sailing, Reality Shows, Movies ...

Further technological integration with DTT (set top box)

- June 05 – pre-commercial launch in 4 cities: **Roma, Milano, Palermo, Bologna**
- 4Q '05- extension to other 17 cities (20% of Italian families, 3.6 million lines) and integrated IPTV/DTT STB
- 2006-2007: further coverage extension



Multimedia Convergent Services: BB experience in the mobile world

Entertainment

- ✓ **Mobile TV**
- ✓ **Multiplayer Gaming**
- ✓ **Serie A TIM**
(Football)
- ✓ **i.Music Store**
(library, concerts and live events)
- ✓ **Surfing Internet**



Access to the services via the TIM WAP 3G Portal (xHTML)



Wherever you are!

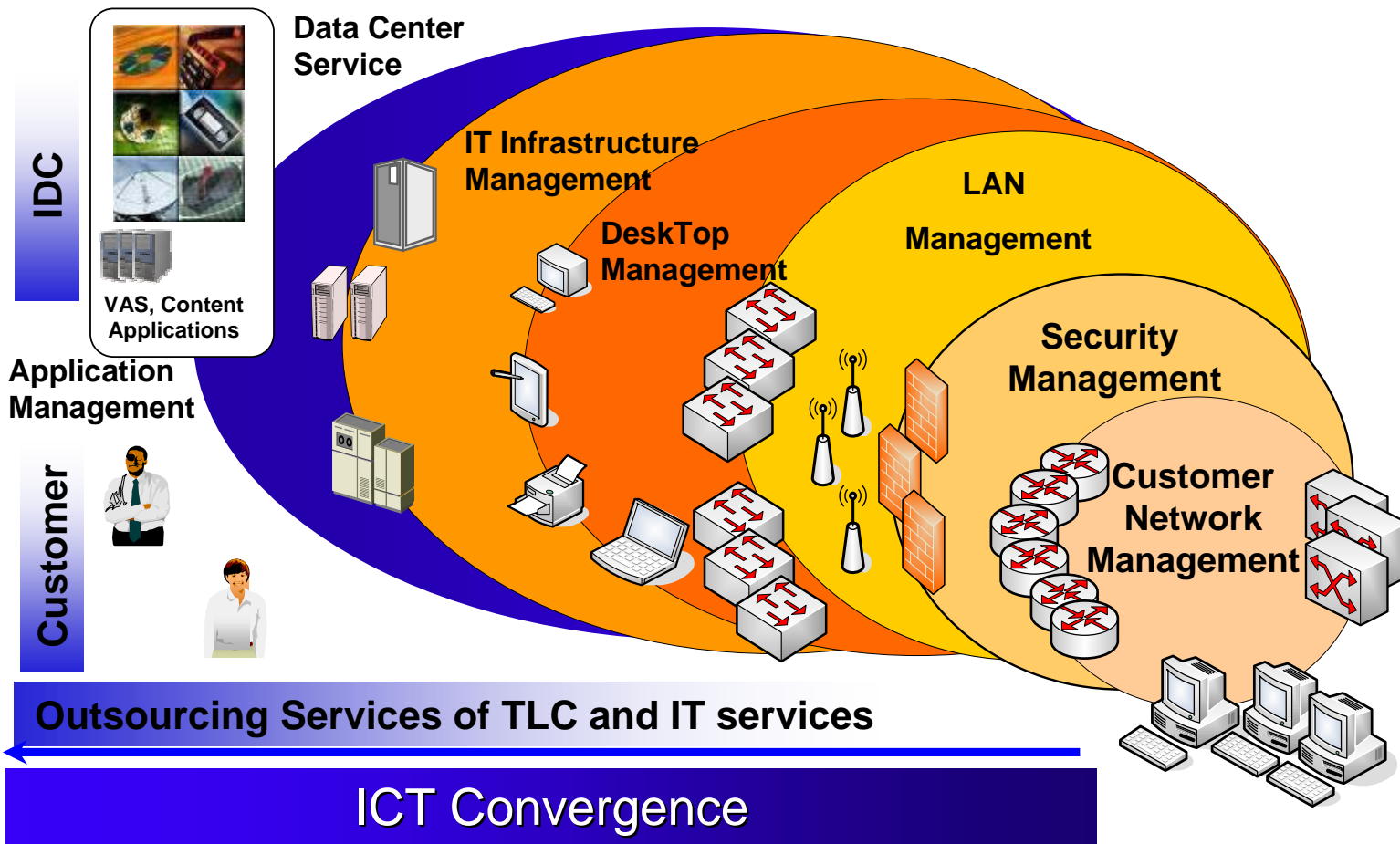
Personal Communication

- ✓ **File/Video Sharing**
- ✓ **VideoCall**
- ✓ **Community**
- ✓ **Push to talk**

A New Way to Communicate!



ICT Convergent services: to complement the business services offer



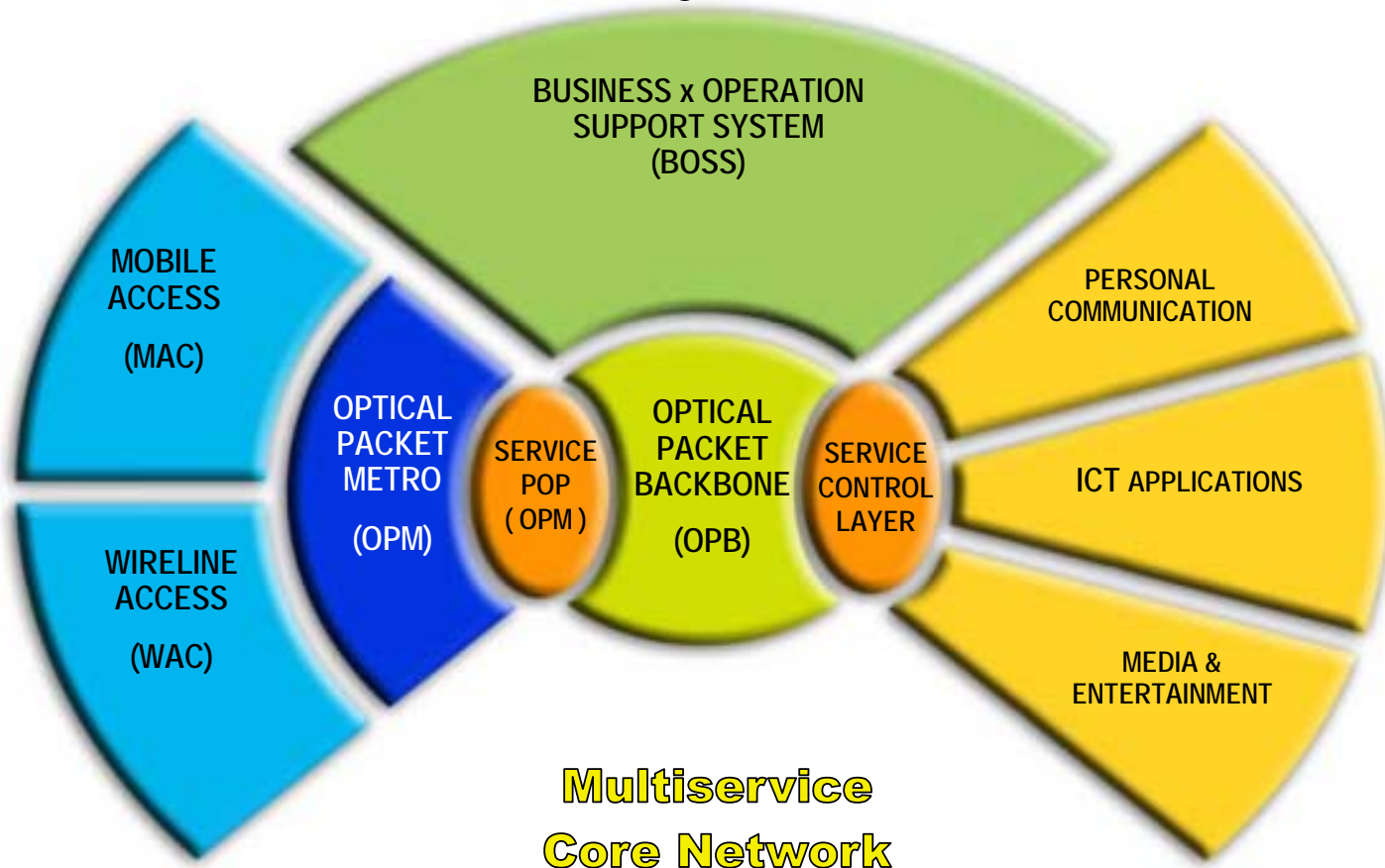
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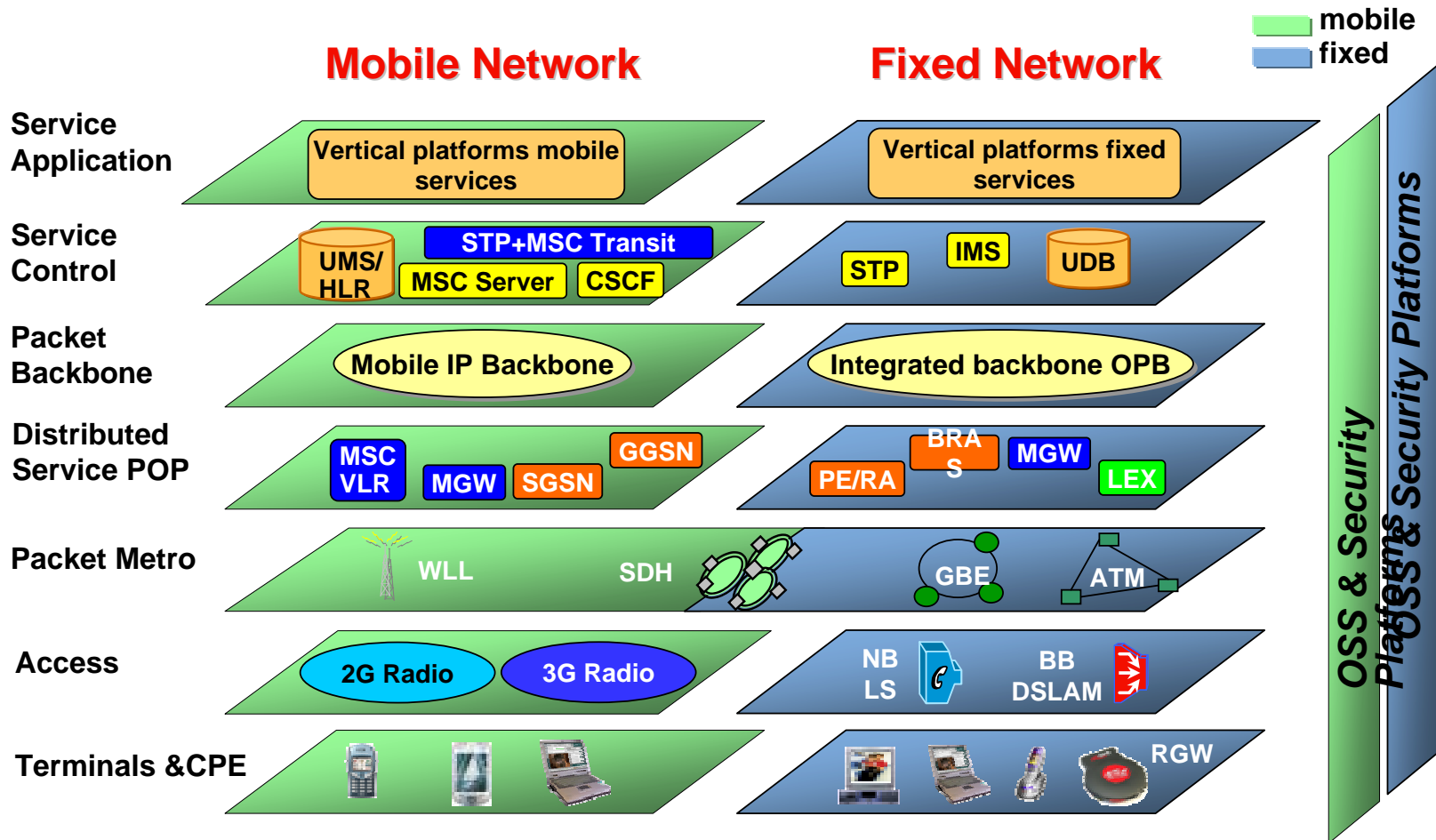
New Network Convergent Model

Service Management Platform

Intelligent Devices & Broadband Access



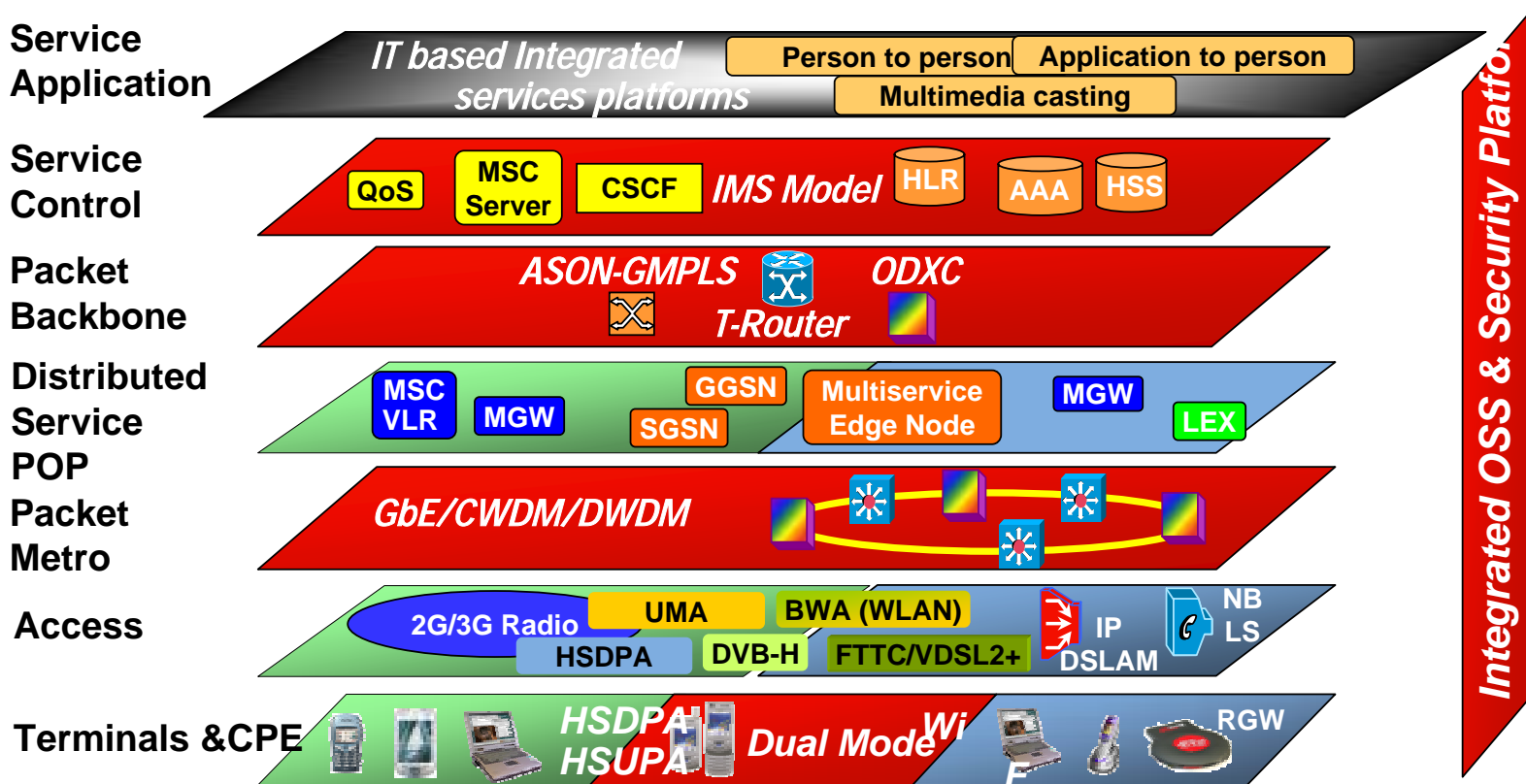
Fixed & Mobile convergent evolution: state of the art 2005



Fixed & Mobile convergent evolution: 2008 target

Fixed - Mobile & IT platforms convergence

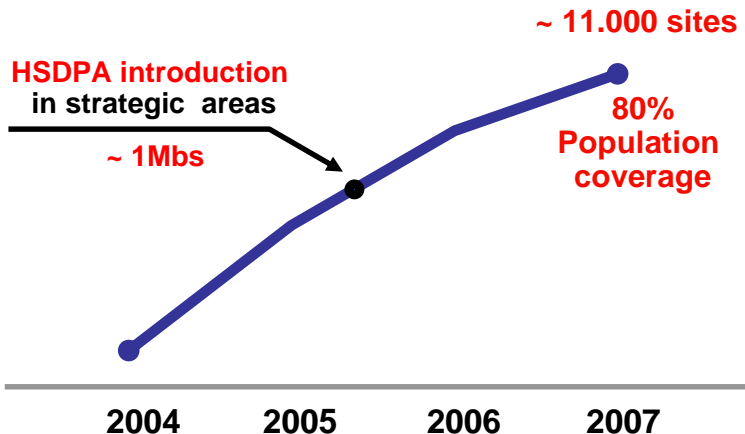
■ mobile
■ fixed
■ integrated



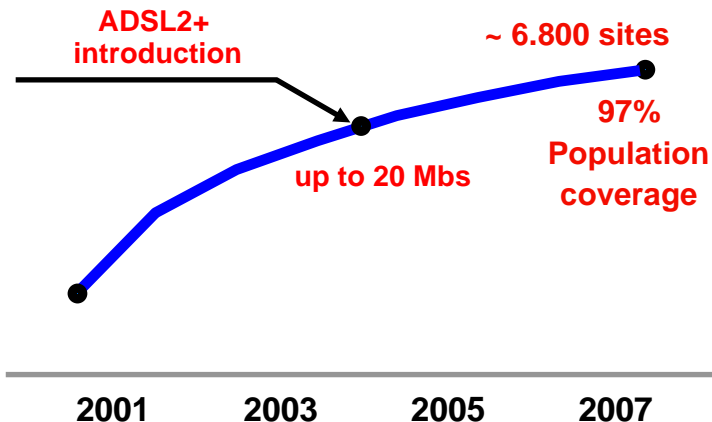
Broadband access coverage evolution

2005
 The right time for
 IPTV introduction!

...stronger push on UMTS coverage



.....xDSL coverage extension

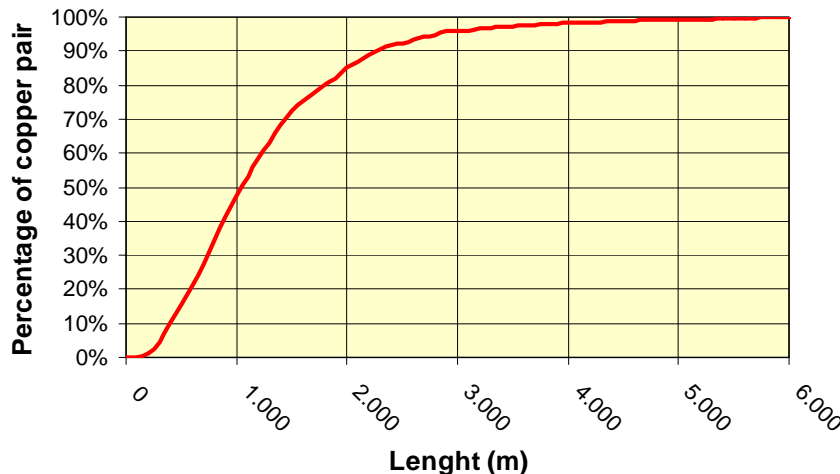
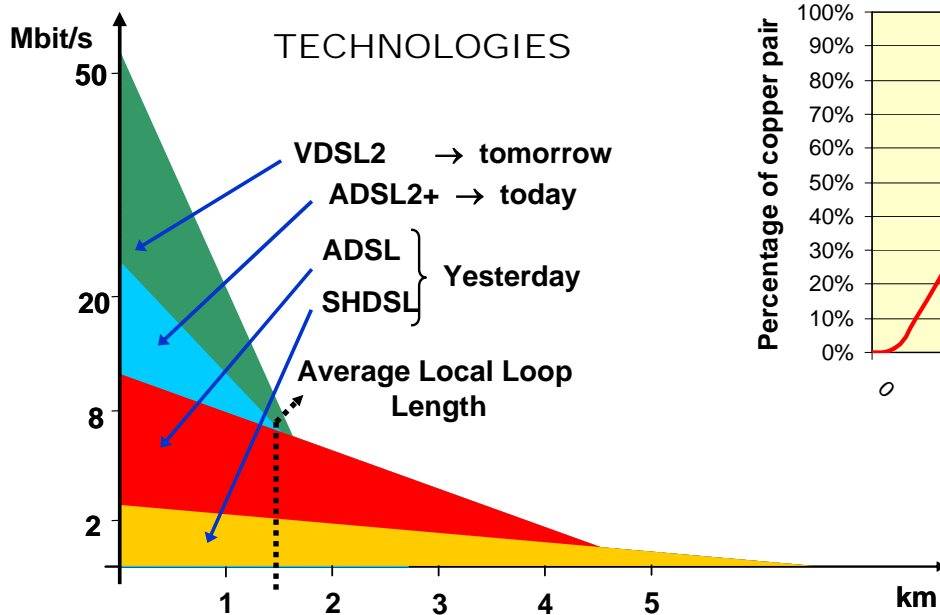


2005
 The right time for 3G
 acceleration!

Broadband evolution is a requirement for the convergence

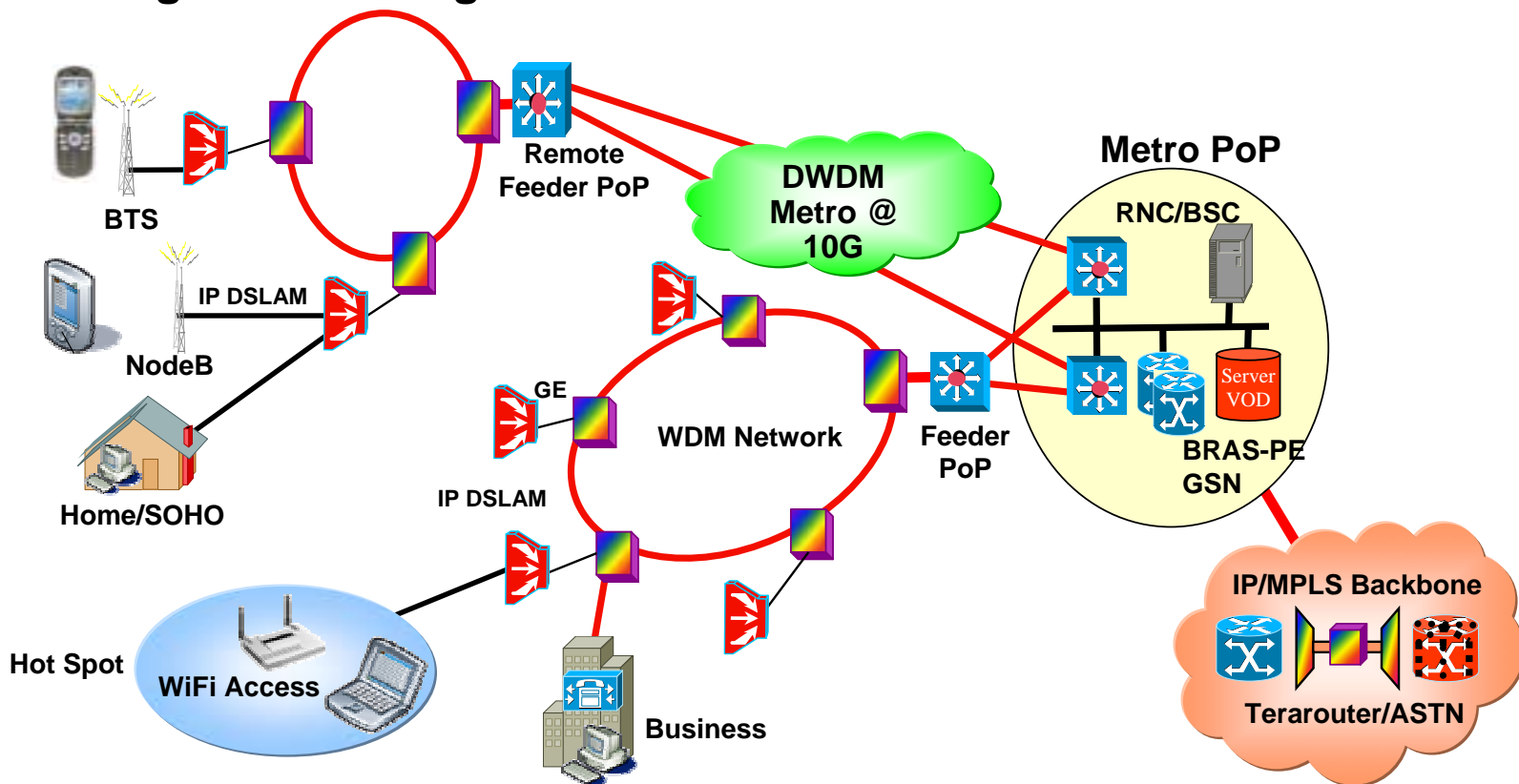


Broadband fixed access evolution



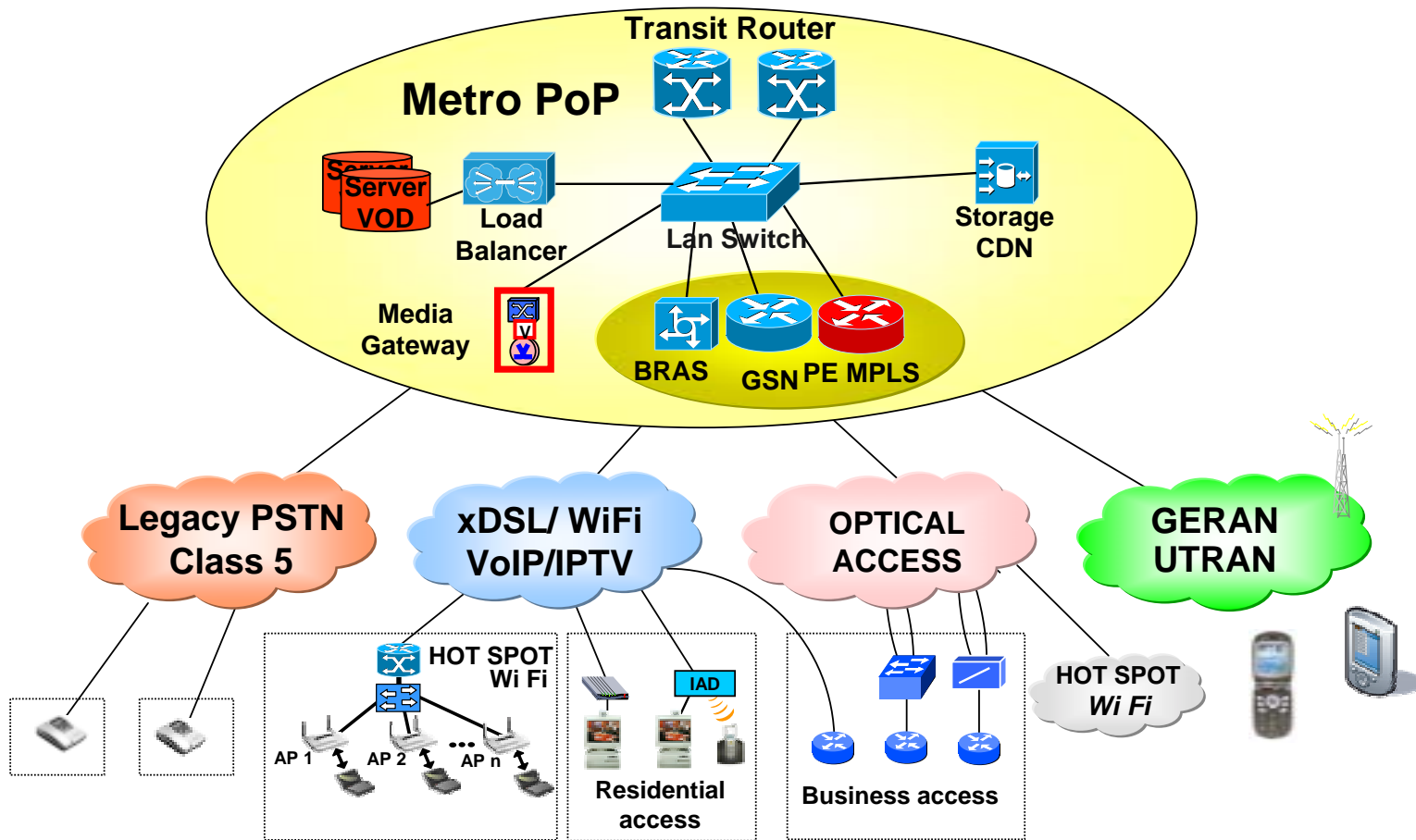
- ▶ ADSL profile “4096/640” kbit/s allows one TV quality video channel to more than 85% of the Italian telephone customers
- ▶ ADSL2+ and VDSL2/FTTX solutions necessary for multiple TV channels and HDTV

Metro/regional convergent network evolution



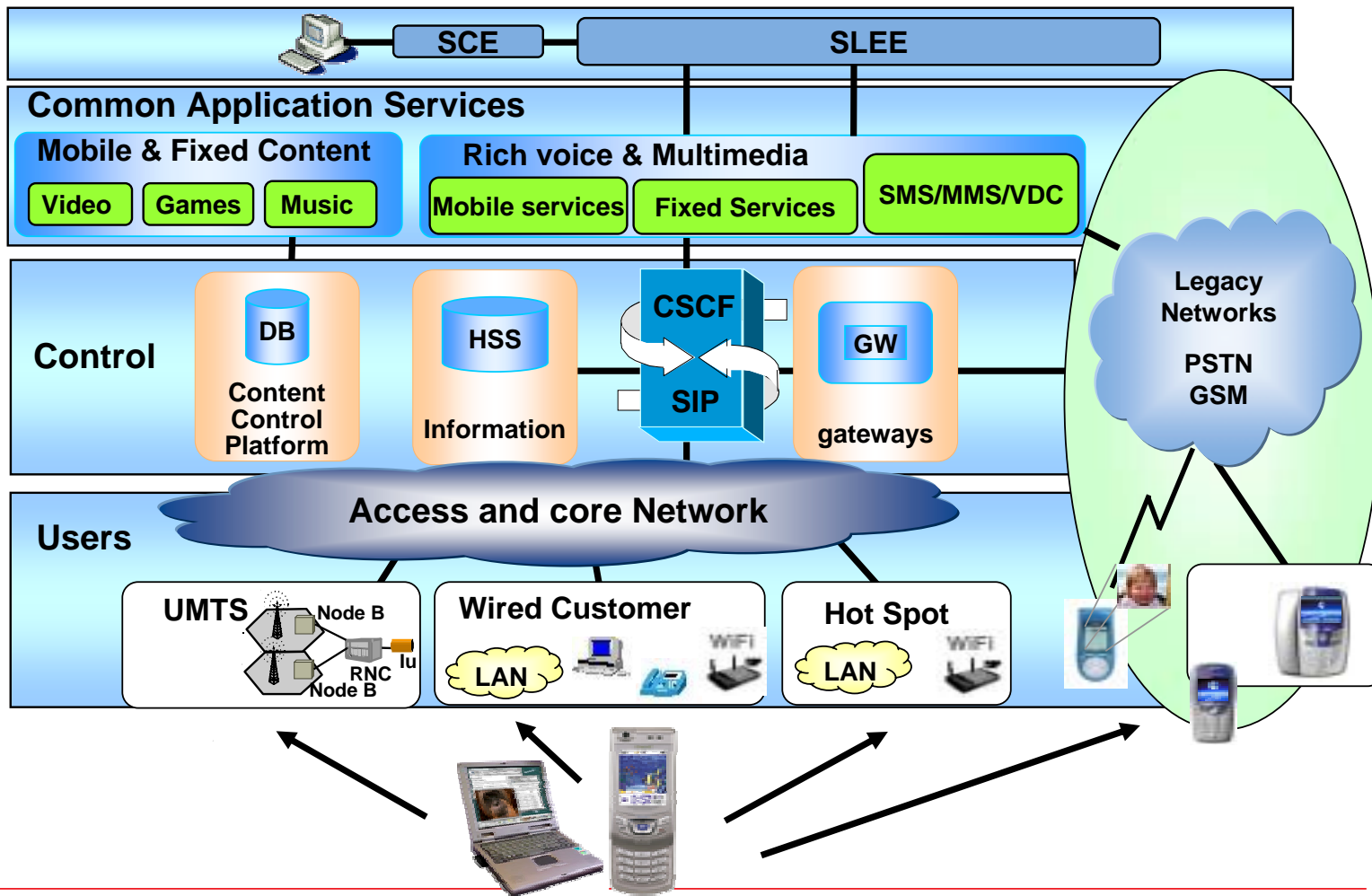
- ▶ Access networks evolving towards IP DSLAMs
 - ▶ Metro networks based on Metro Eth and xWDM rings
 - ▶ Backbone network based on IP/MPLS and ASTN paradigm

New NGN Multiservice convergent PoP

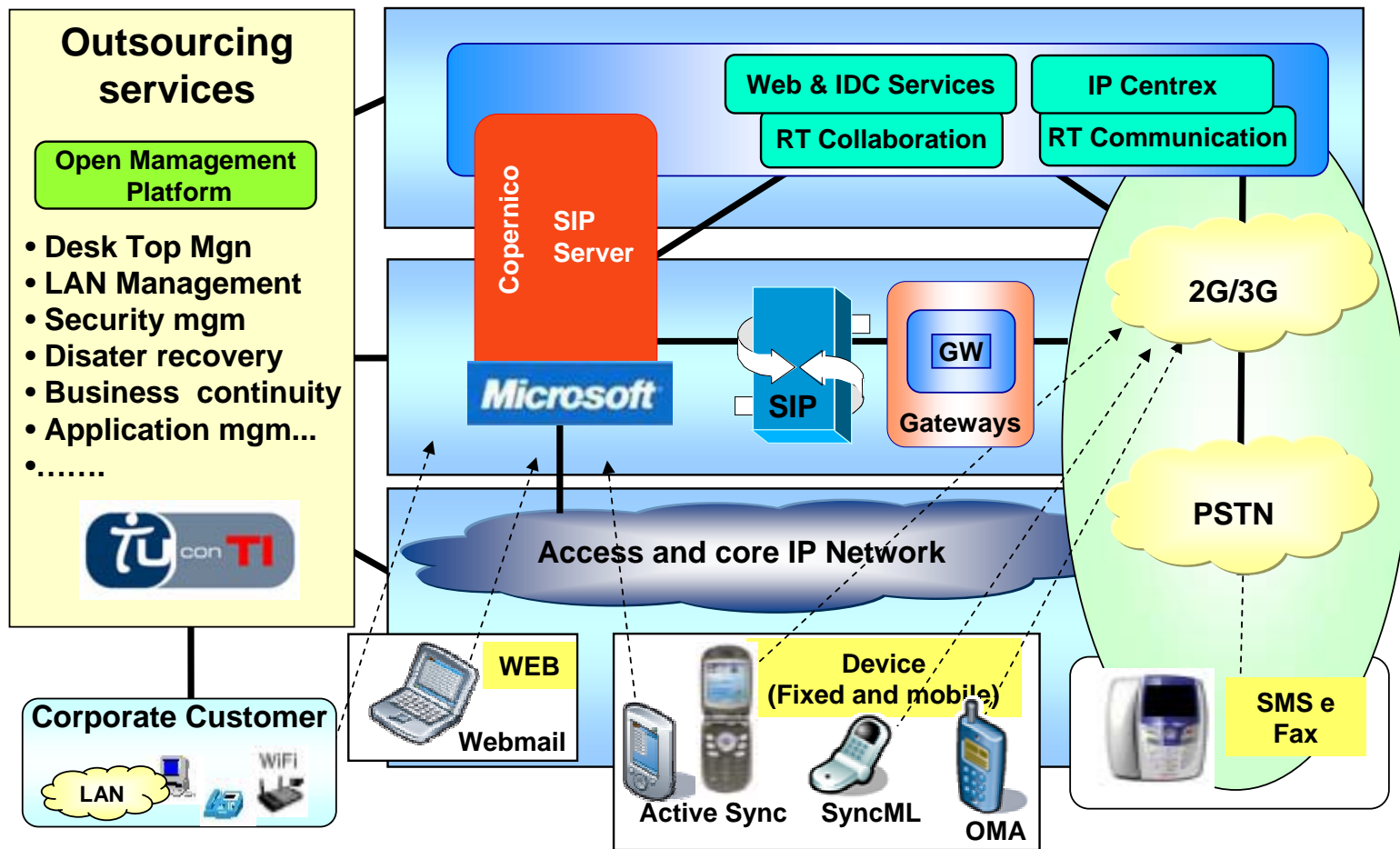


Tomorrow's Networks Today

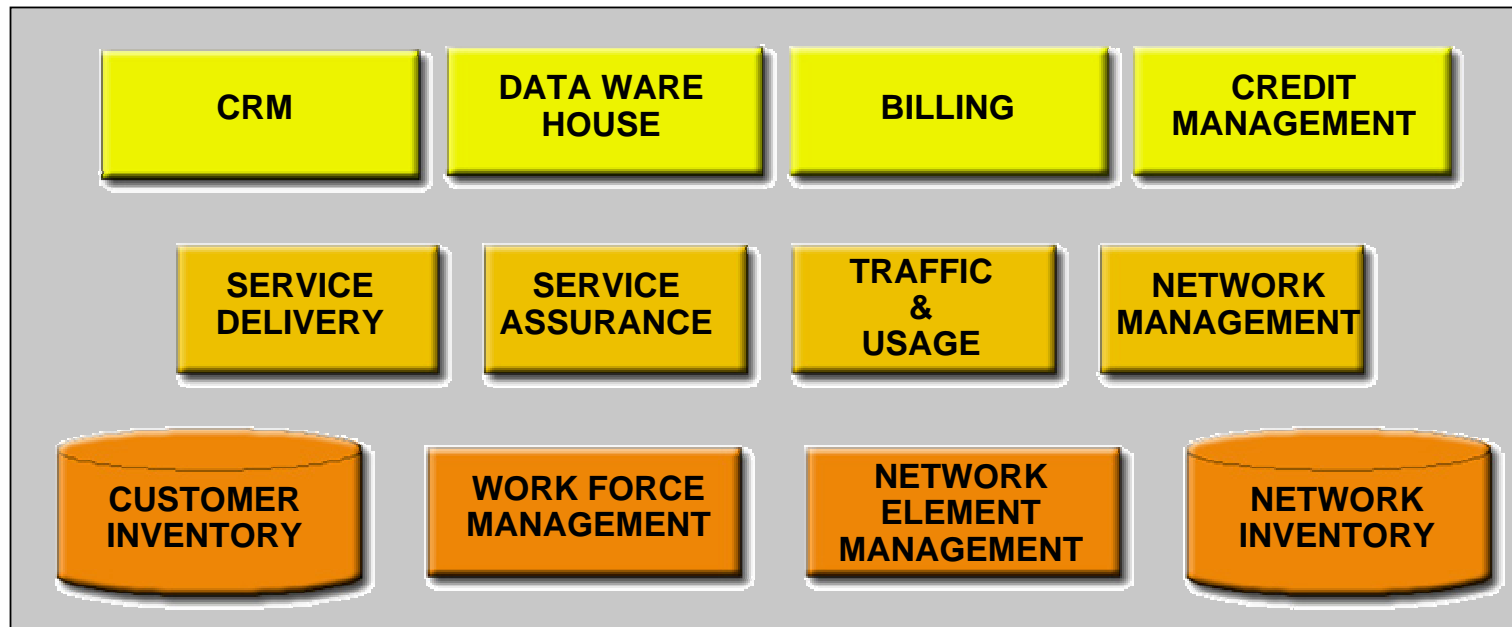
Fixed & Mobile application service convergence: IMS/NGN model



ICT services convergence: co-operation with vertical platforms



New IT-based convergent model for OSS & BSS



Network Neutral
EM Layer

Activation

Fault

Auditing

Performance

Usage

IDC



Network
elements



Home/Office
Terminals



Conclusions

- ▶ Broadband continue to have a booming growth:
 - ▶ xDSL is going to become the new personal fixed phone line for each member of future households
 - ▶ UMTS/HSDPA and WiFi will enable broadband services in mobile and nomadic environments

- ▶ The rush to the fixed mobile convergence is started and the Service Providers will try to gain competitive advantages from the new service opportunities offered by the BB and ICT technologies

- ▶ Value Added Services are ready for the market: Rich Voice, Entertainment, IPTV, Real time collaboration and cooperation on both fixed and mobile accesses

- ▶ Intelligent Devices: terminals, PDAs, appliances, home servers are key components for a fixed mobile convergent architecture enabling a seamless customer experience

- ▶ progressive convergence of IT & TLC markets will combine the use of communication, networking and IT services/applications