

SIMPLY *connect*

BROADBAND ACCESS FROM THE WORLD LEADER



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Vice President Marketing

Why we are here today.....

- ▼ Share our views on the Broadband Access Market
- ▼ Review Alcatel's Broadband Access Program
- ▼ Set a context for our future related announcements

**Broadband Access is fundamentally
changing the way we live our lives !**

Multimedia Services

- ▼ Shopping - eBay
- ▼ Instant video messaging
- ▼ Dynamic information
- ▼ Entertainment

Teleworking

- ▼ Virtual Office
- ▼ Mobile Desk

96% of DSL users believe high speed access is the most important technology in their home.

SBC Communications Survey, 2001



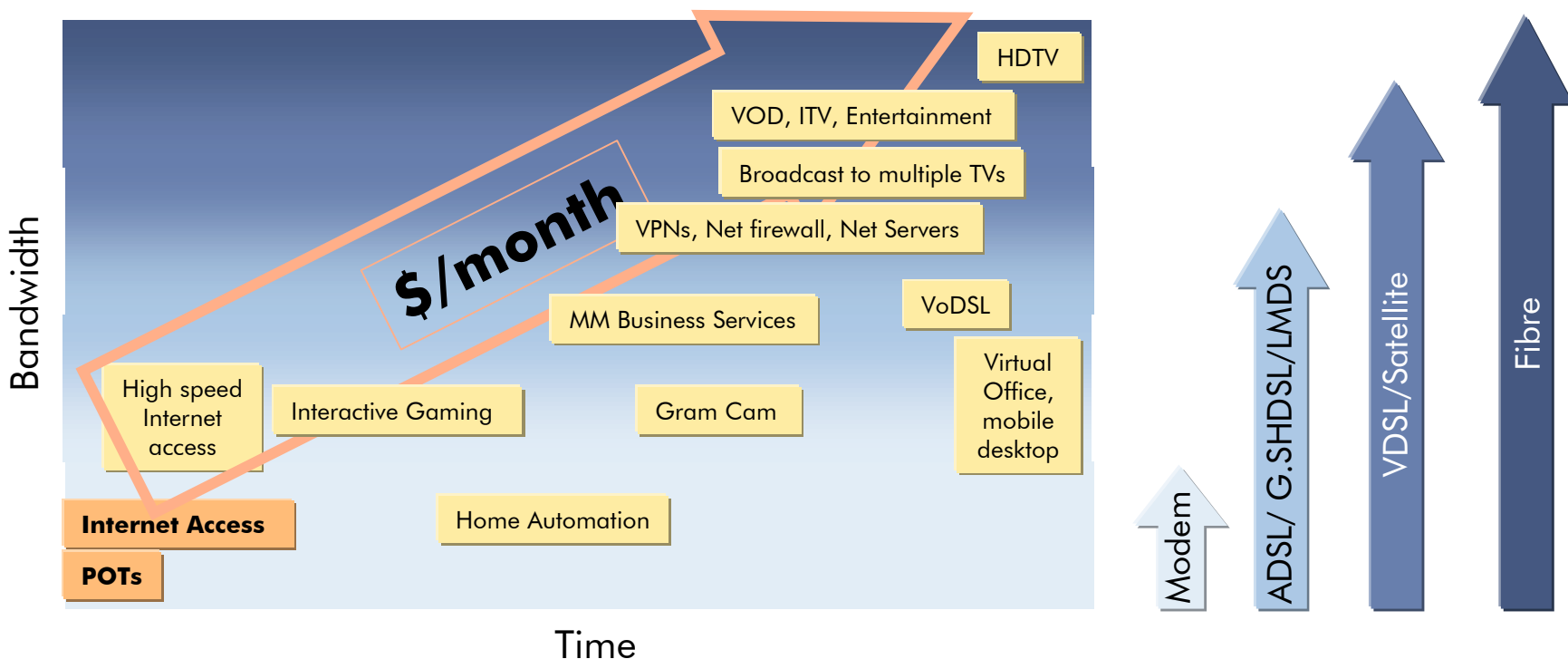
Why Broadband Access?



- + Subscription fee
- + Connection duration
- + Services usage
- + % of e-shopping transactions
- + Viewed Banners/ Portal Branding

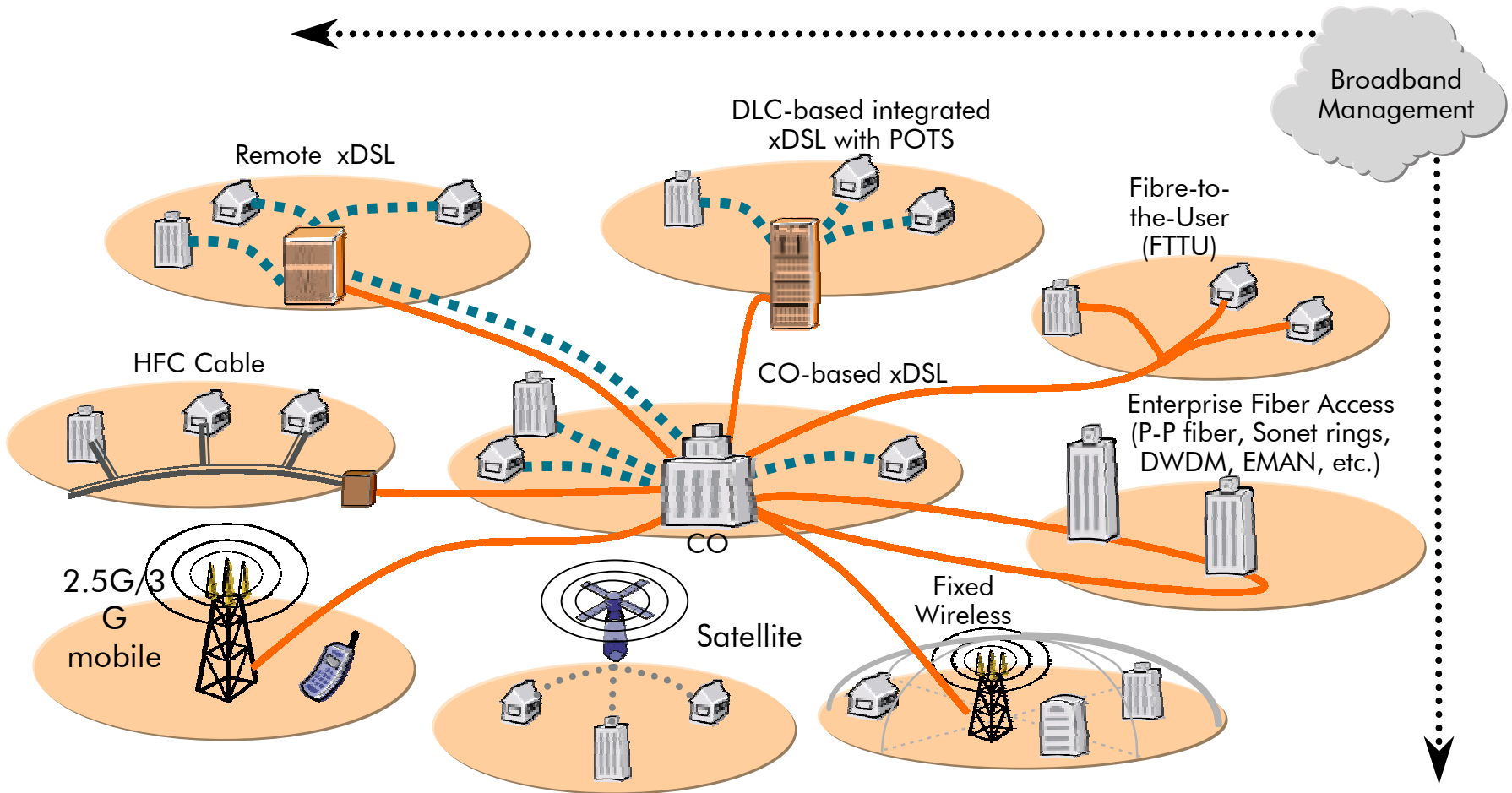
A greater potential for additional value-added revenues for the service provider

Value-added Services Drives Bandwidth & Revenue



**Broadband access is the fundamental foundation
for the delivery of profitable services**

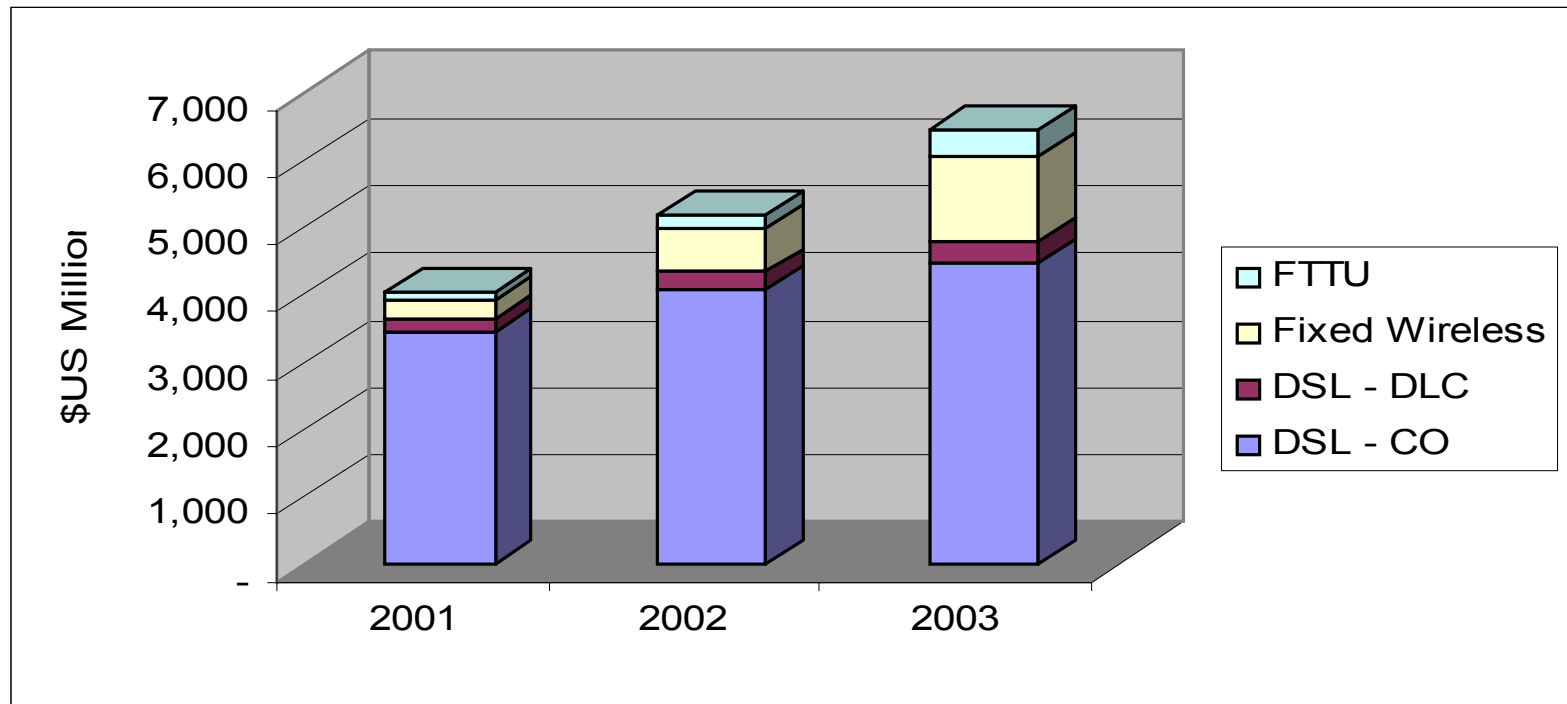
Pervasive Broadband Access Demands Multiple Technology/Solutions



**No one single solution can meet all
broadband service requirements**

ALCATEL Broadband Access - Alcatel Market Opportunity

Broadband Access equipment market is expected to be greater than \$6B USD in 2003.



As service providers generate new revenues they will continue to spend significant money on access technologies

Source: C.E. Unterberg Towbin, CIR, Dell'Oro, Gartner, IDC, Infonetics, Lehman Brothers, Ovum, RHK, Yankee and Alcatel internal analyses

Alcatel's Proven Strengths

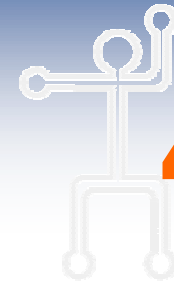
**DSL Broadband
Access :
No. 1 Worldwide**



40%



**Wireline Access -
DLC :
No.1 North
America**



43%

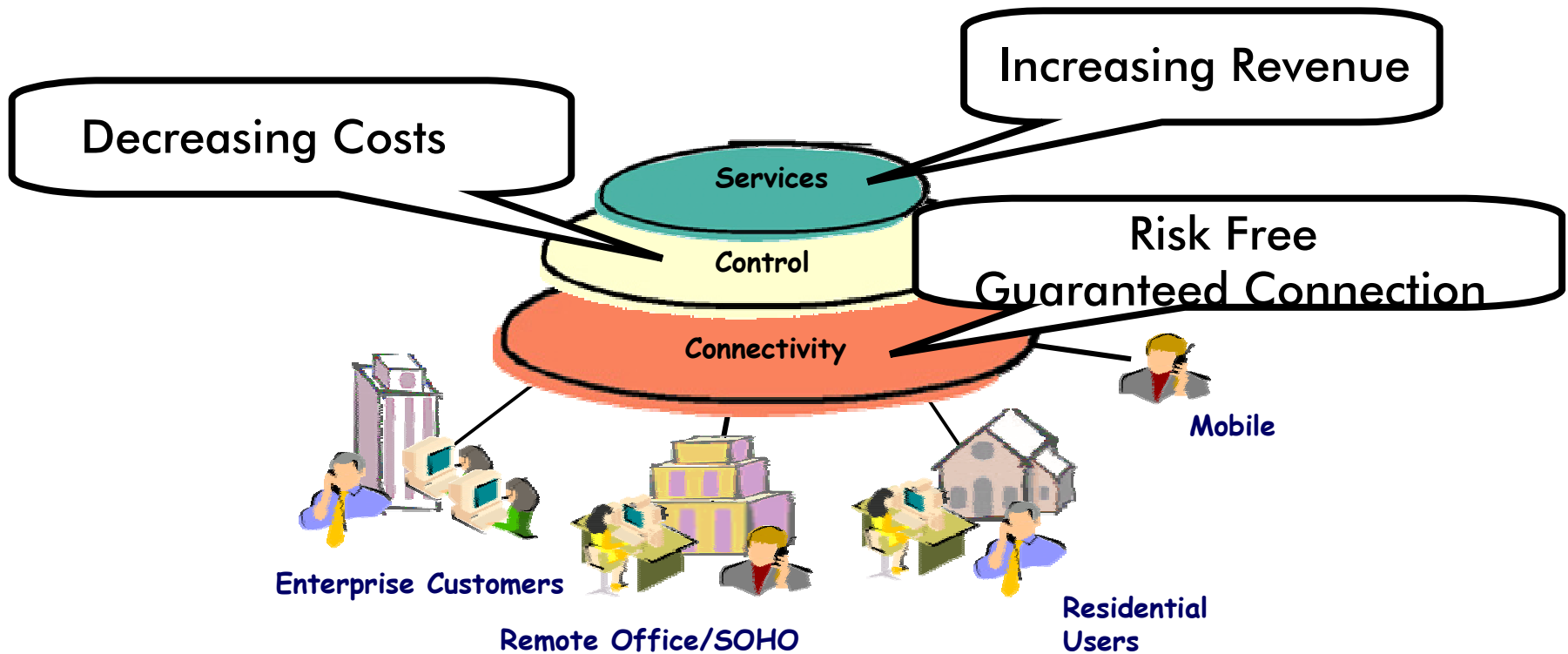
**Fixed Wireless
Access :
No. 1 Worldwide**

35%

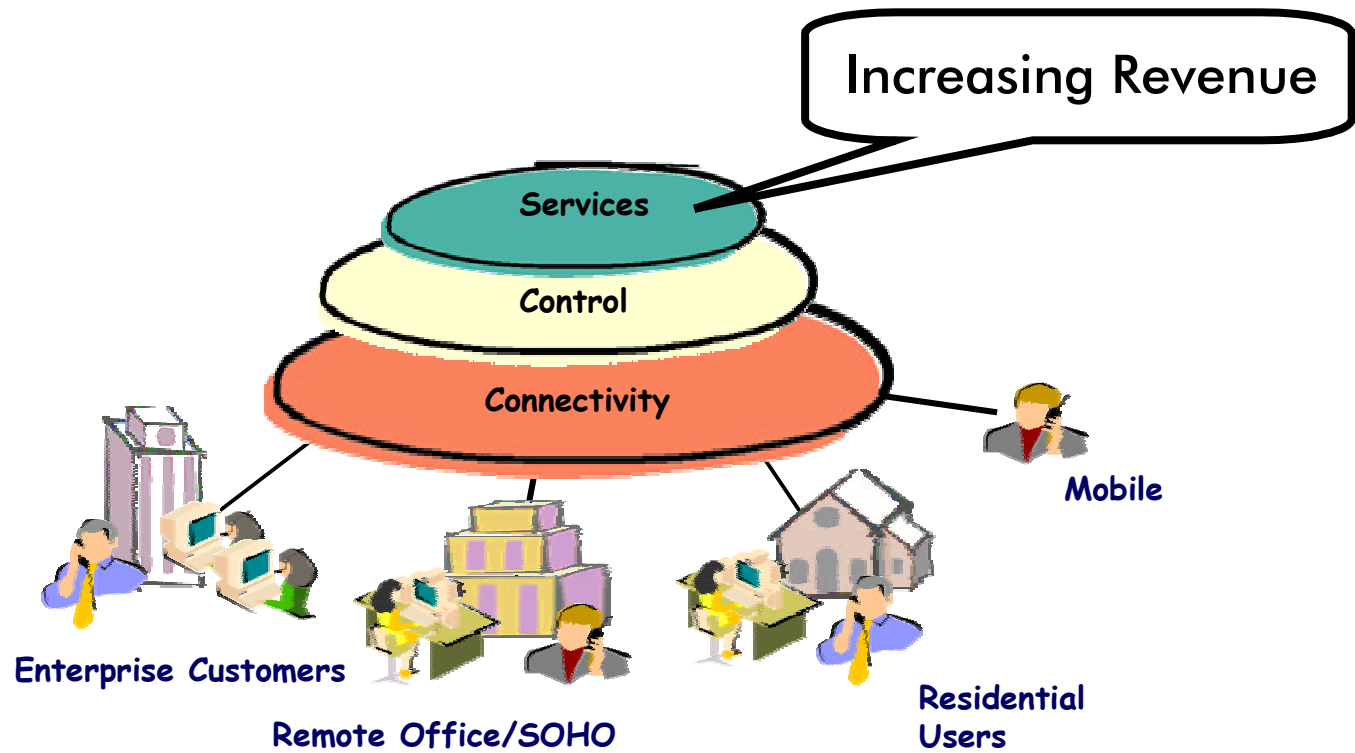


Source: Dell'Oro, RHK

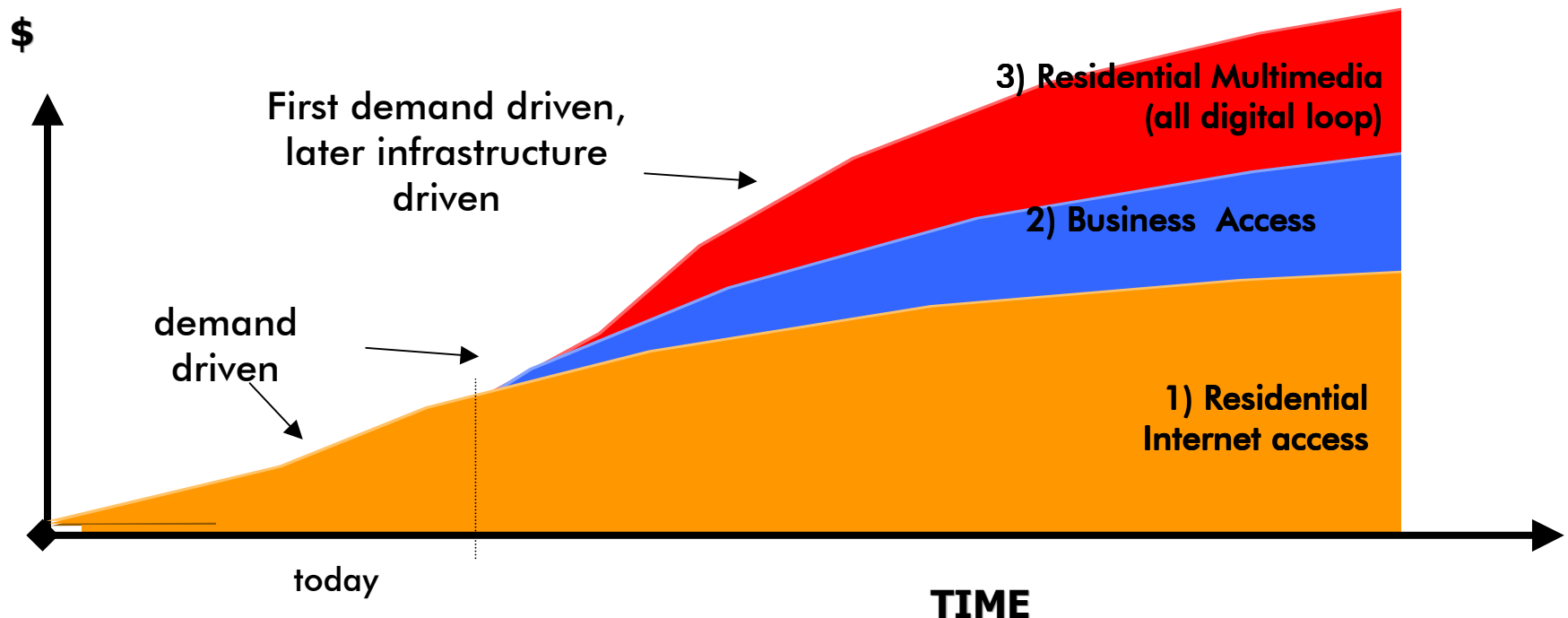
Alcatel is a major telecom equipment supplier and the world wide leader in the Broadband access technologies



Profitable services portfolio



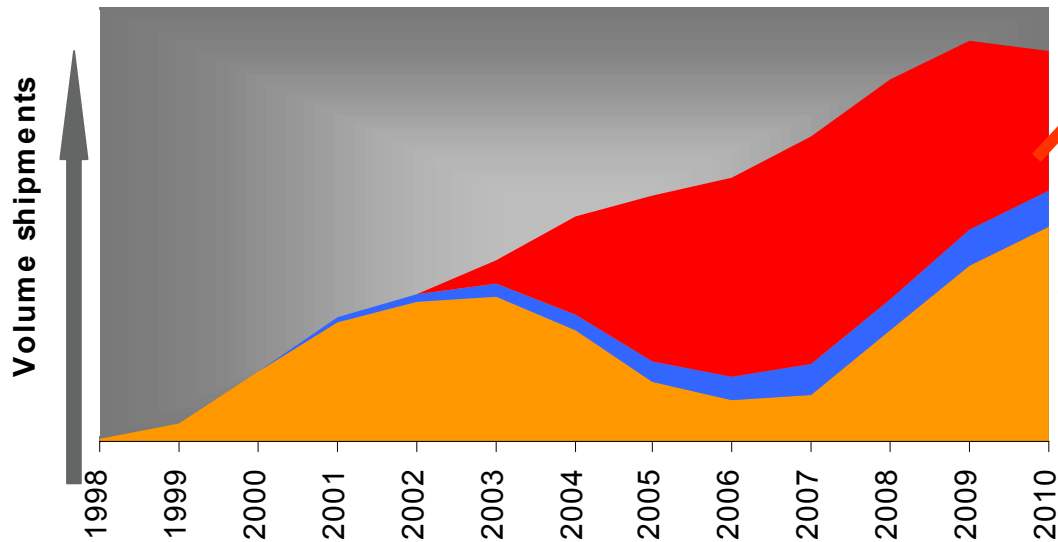
- ▼ 3 waves in DSL deployment
 - ▼ 1) Residential Internet access (limited by # of on-line households)
 - ▼ 2) Business access (SOHO/SME)
 - ▼ 3) Residential multimedia (all digital loop)



Riding the DSL waves

Alcatel product strategy

DSL evolution - NA, Europe & Asia



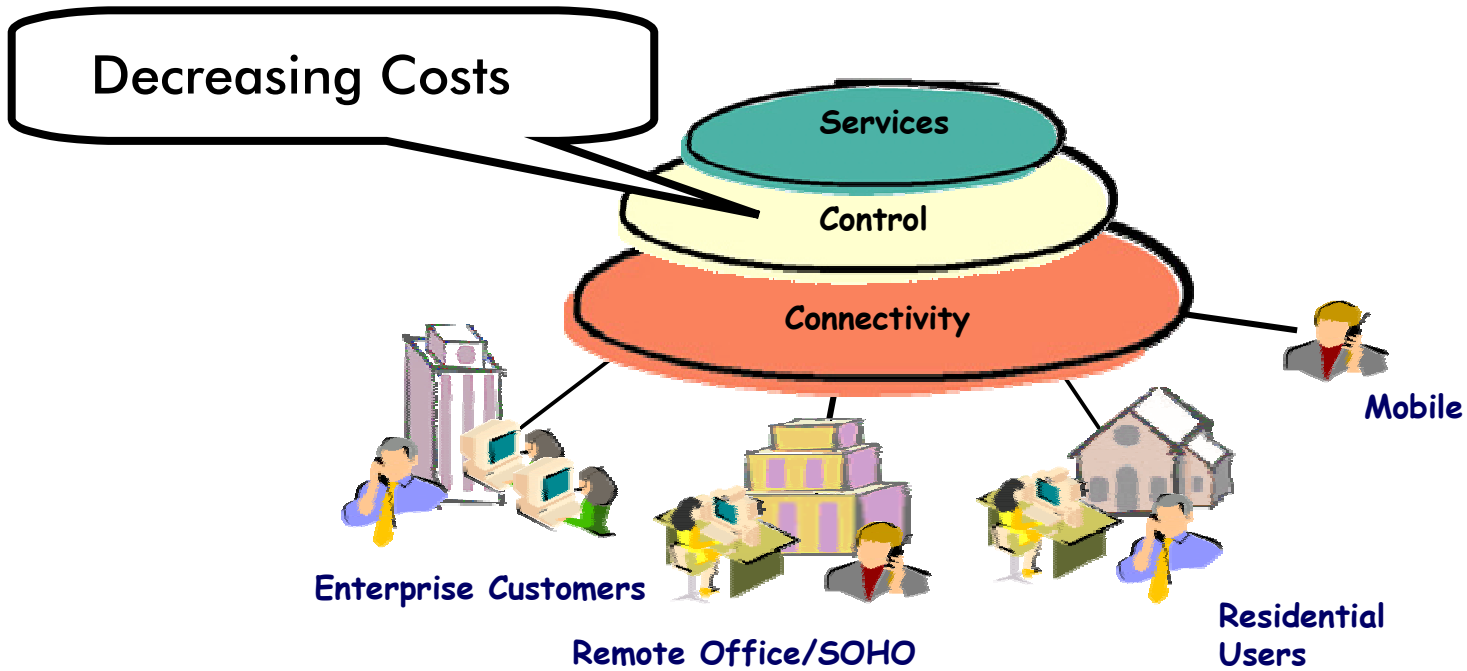
- Port shipments / yr - Multimedia scenario
- Port shipments / yr - Business Access
- Port shipments/ yr - basic access residential

7300 ASAM R5
Multi-media enabled
(available in 2002)

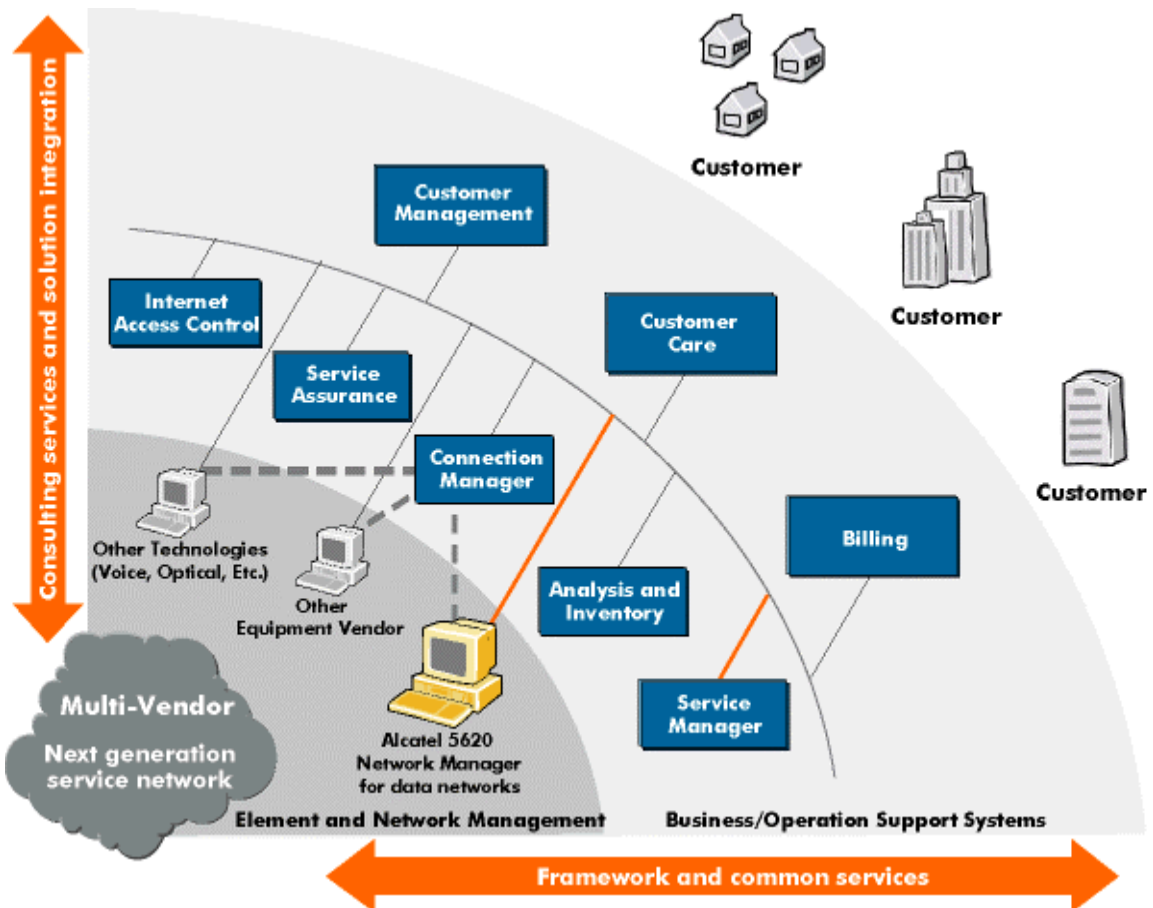
7300 ASAM R4
symmetrical DSL
VoDSL
(available now)

7300 ASAM R4
further cost-
optimization
12 line board today
24 line board 4Q2001
48 line board 2H2002

Installed base will continue to evolve to support new services and generate new revenues



- ▼ Complete management of end-to-end services
 - ▼ 50% savings provisioning and fault isolation time
- ▼ Most scaleable management solution
- ▼ Products, turnkey solutions, and complete system integration
 - ▼ maximum flexibility to align with business processes



Broadband Management improves profitability

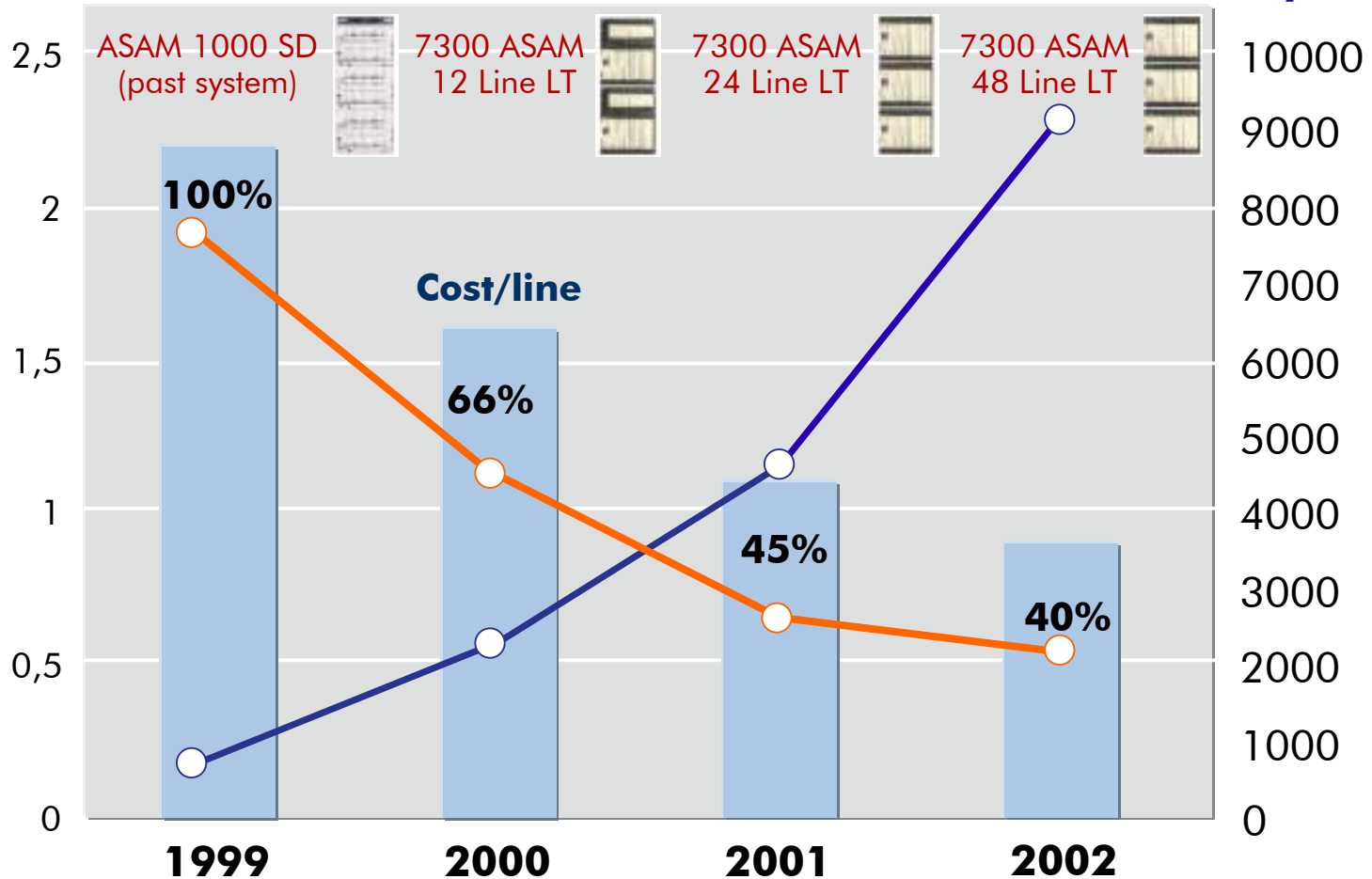


Alcatel DSL CO Equipment

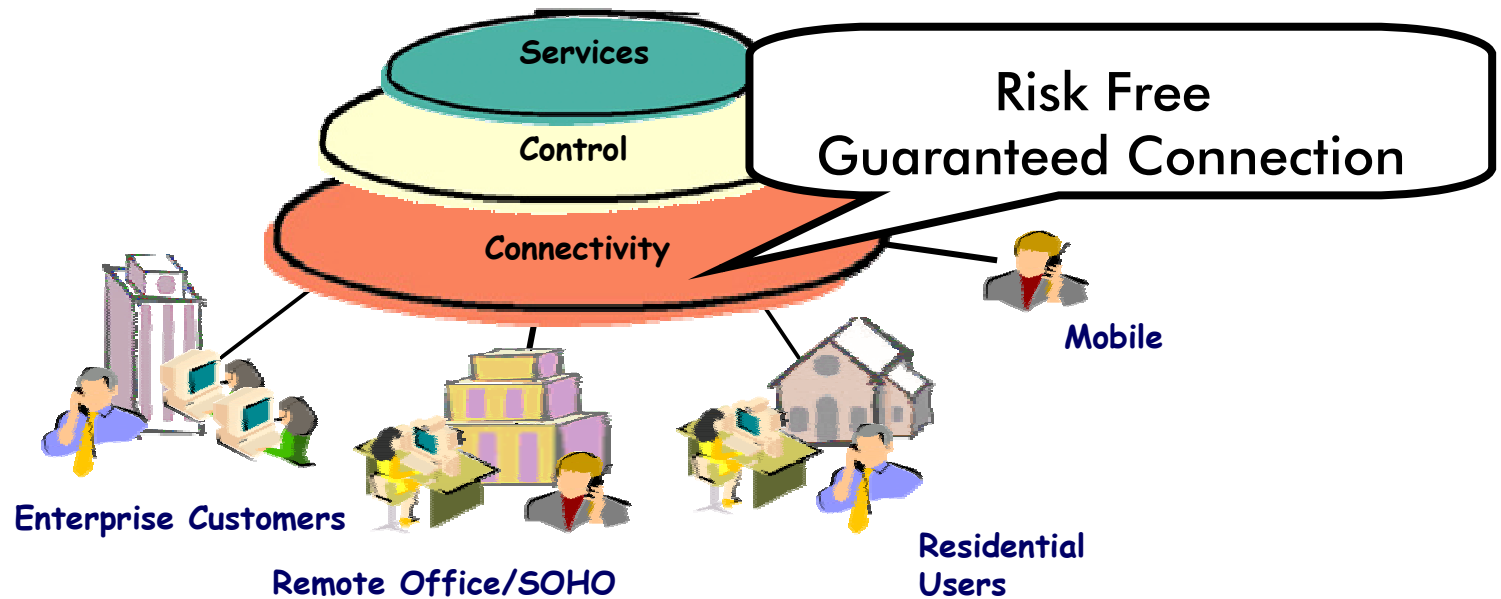
More Scalability, Less Footprint, Less Capex

Watt/line

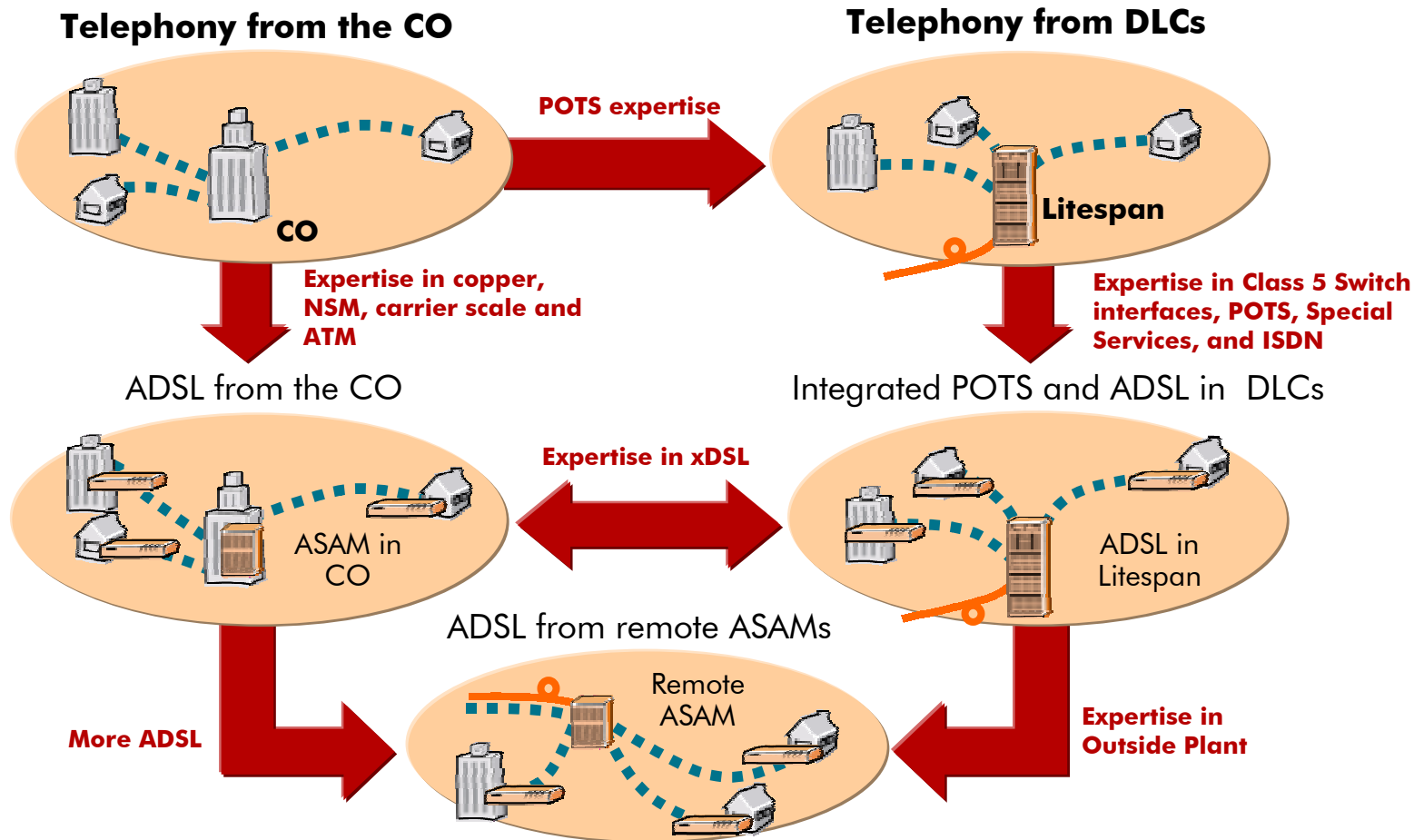
Ports/system



Leading the market in price, power and density



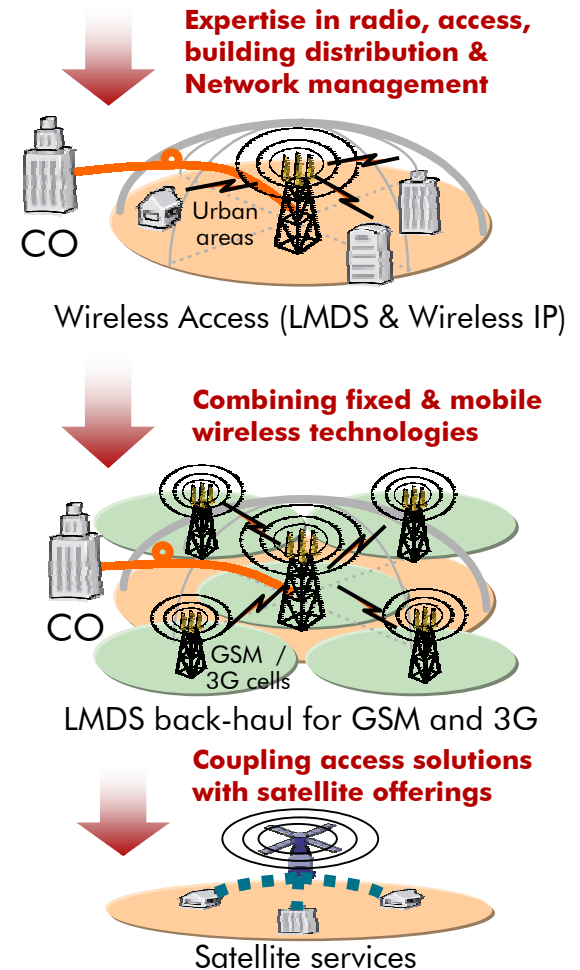
Alcatel Building out the Last Mile — Copper



Strong lineage of access technologies has enabled service evolution and revenue growth for service providers

Wireless, a complementary technology with multiple applications

- ▼ **Wireless Access (LMDS & Wireless IP)**
 - ▼ Enables multi-service portfolio for SMEs & SoHos
 - ▼ Leased Lines
 - ▼ Broadband Data, Internet, video
 - ▼ Switched and Packet Telephony
 - ▼ Solutions to optimise CPE & in-building distribution
 - ▼ Combining LMDS with DSL or ethernet for in-building distribution
- ▼ **Wireless Transmission (LMDS)**
 - ▼ LMDS provides back-haul solution for the GSM and/or UMTS mobile networks
- ▼ **Satellite Distribution**
 - ▼ Designing, deploying and optimising GEO & LEO satellites for video broadcast, IP multicast and internet services... integrated with wireline services.



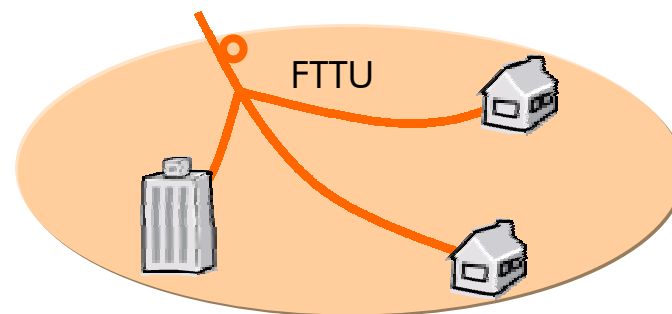
Fixed wireless and Satellite networks interoperate with wireline architecture and management to provide seamless solutions

Pushing fiber to the end user

▼ **FTTU (Fiber to the User)**

- ▼ application in both new build and overlay deployments
- ▼ leapfrogs interim technologies
- ▼ radically reduces operations through passive plant
- ▼ reduced capital costs by sharing of fiber by multiple subscribers
- ▼ enables full service bundle (voice, data and video) for residential and business

Leveraging expertise in BB access, aggregation, optical transmission and management to provide PON technology



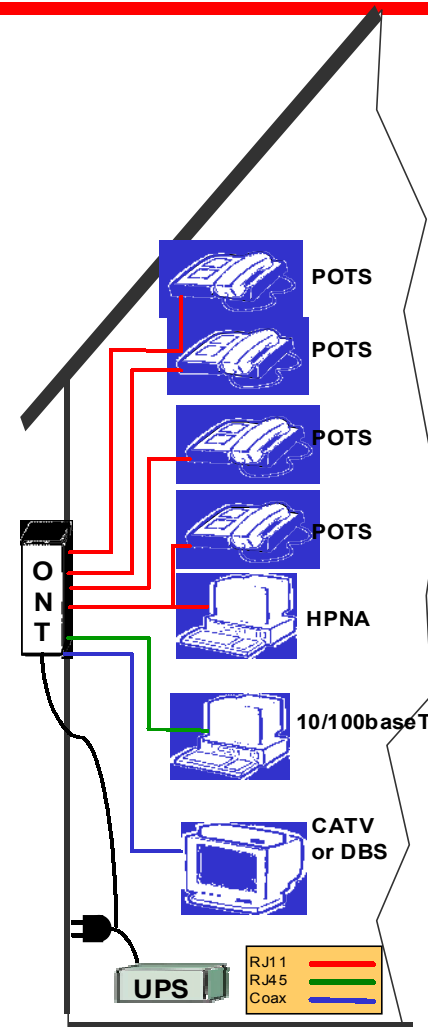
Passive Optical Network (PON)

Providing the fiber platform to unleash unlimited service and bandwidth growth

Enables new revenue generation opportunities

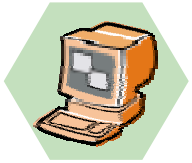
▼ 7340 FTTU (Fiber to the User)

- ▼ Standards compliant (ITU G.983)
- ▼ Shares components and EMS with 7300 ASAM and Litespan
- ▼ Architected for modularity, scalability, and cost
 - Cost effective for initial network rollout
 - High density for large-scale deployment
- ▼ Offering complete FTTU solution: fiber, passive components, and opto-electronic components

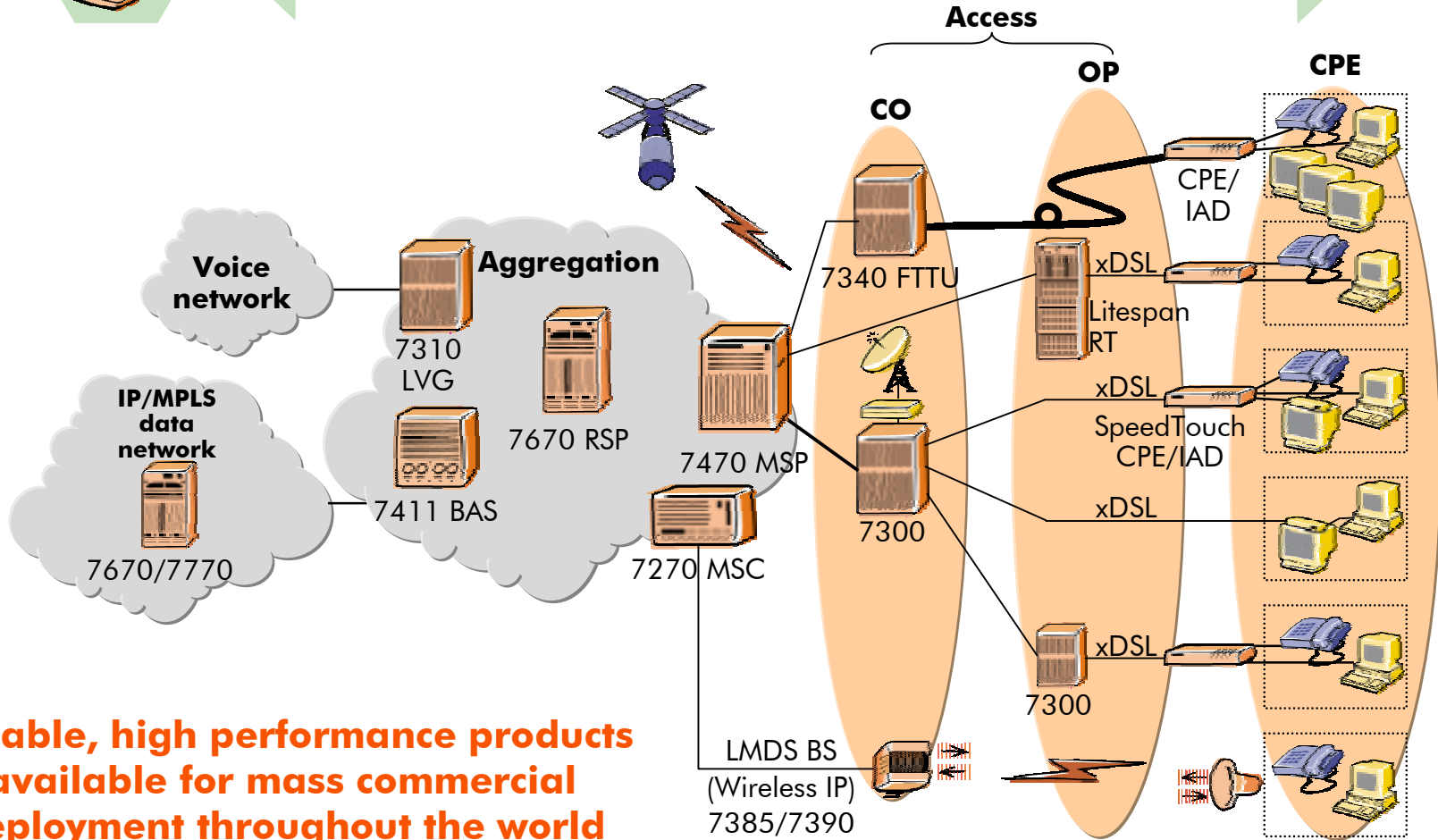


Future-proof platform supporting multitude of services

Alcatel Broadband Access Technologies



Service Creation, Network Management, Element Management



Reliable, high performance products available for mass commercial deployment throughout the world

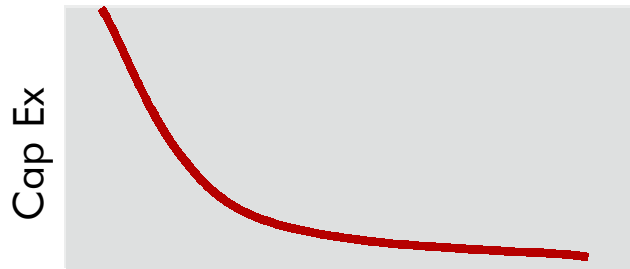
- ▼ Segmented end-customer requirements
 - ▼ *Residential*
 - ▼ *Business (SOHO, SME, corporate)*
 - ▼ *Wholesale customers (corporate, service providers)*
- ▼ Alcatel solutions
 - ▼ End-to-end Service Provisioning
 - ▼ end-to-end provisioning for internet access for residential (ADSL)
 - ▼ streamline operations, reduce time to connect, acquire customer satisfaction
 - ▼ Business Access for SOHO/SME
 - ▼ SME packages: internet access, integrated voice, legacy support, VPN
 - ▼ Reuse existing infrastructure, manage legacy revenue stream, specific market approach
 - ▼ Teleworker package
 - ▼ Corporate VPN access (internet, intranet), additional voice (VoDSL), IP VPN
 - ▼ Position the package, manage your revenue stream, no additional investment
 - ▼ provisioning end-to-end for radio access users
 - ▼ network provisioning for SME customers with LMDS Access
 - ▼ Multi-media solutions
 - ▼ partnering for success

Alcatel's — Key Thrusts

Develop unparalleled reach and capabilities

Residential	Small/Medium Enterprise
ADSL	LMDS
Satellite	G.Shdsl/VDSL
VDSL	2.5G/3G
FTTU	FTTU
2.5G/3G/LMDS	

Maintain leadership in price, power and density

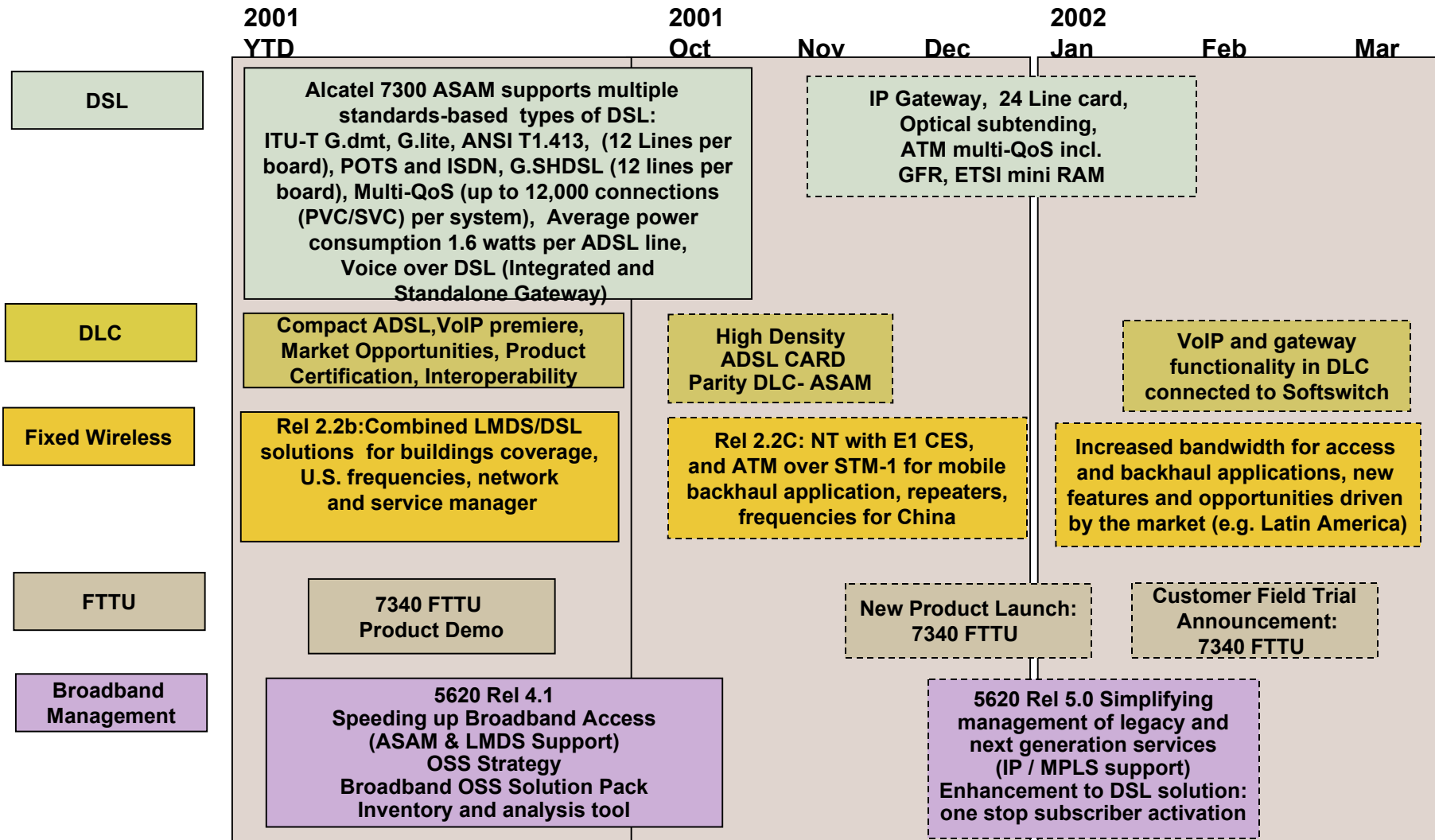


Enable tomorrow's services without today's constraints



Ensure profitability with zero touch networks

Analyst Briefing Roadmap



Alcatel providing opportunities for in-depth one-on-one briefings

- ▼ End-users want broadband access
- ▼ Service providers need to offer profitable broadband services
- ▼ Alcatel is a worldwide leader in broadband access technologies.
- ▼ Alcatel is enabling service providers around the world to deploy profitable broadband services quickly by leveraging our experience, technologies, existing platforms, professional services and end-to-end solutions.

Alcatel is committed to the broadband access market !

1. *Analyst Corner Website*

- ▼ Contains information prepared specifically for industry analysts
 - ▼ Hot technologies: Broadband Access, Optical Network Intelligence, Mobile Networks, OSS Automation, Switching Evolution, Multi-service Edge, IP Core Routing.....and much more.
 - ▼ Presentations of interests: Corporate, Optical Networks, Enterprise, Carrier Networking, Microelectronics.
 - ▼ IAR Team Contacts.
- ▼ Location: **www.alcatel.com/industry_analysts/**

2. *Industry Analyst Relations team*

- ▼ Michael Lawrence: **michael.lawrence@alcatel.com**