
Local loop unbundling : keystone of the competition on the broadband markets in France

EETT

The Prospects of Broadband in the Mediterranean

Athens, 2-4 May 2006

Disclaimer

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Overview of the broadband retail market

The relevant broadband wholesale markets

Broadband regulation focused on LLU

French broadband retail market overview : DSL is predominant

Broadband Access

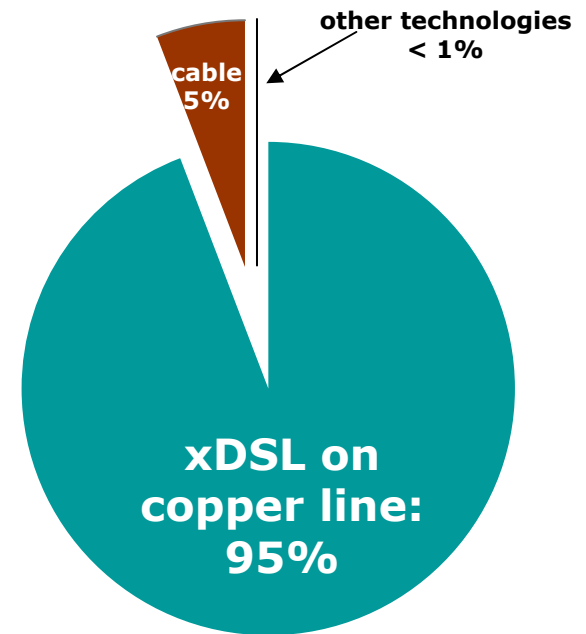
- bandwidth > 128kbps
- always connected
- no incidence on traditional voice services

xDSL

- thanks to xDSL technologies (ADSL, ADSL2+, VDSL, SDSL), copper line = lead means to broadband access
- today, 95% of the population covered in xDSL technologies (-> 98% end 2006)

Other technologies

- cable = second means to broadband, only in big cities (30% pop. covered)
- Wireless Local Loop, FTTx, Satellite, Power Line etc.



situation at Q1 2006
10M broadband access

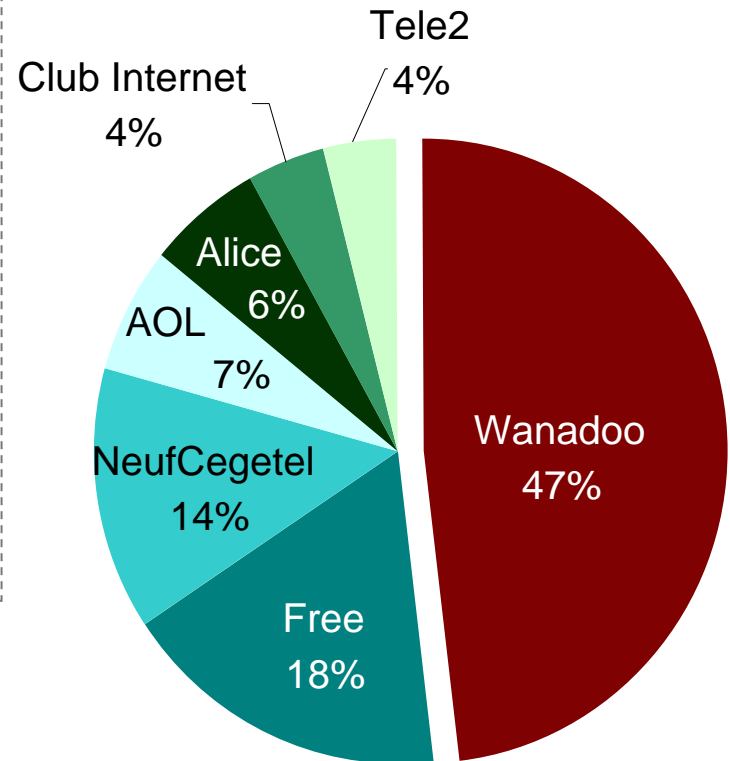
French DSL retail market is competitive

9.4M DSL subscribers

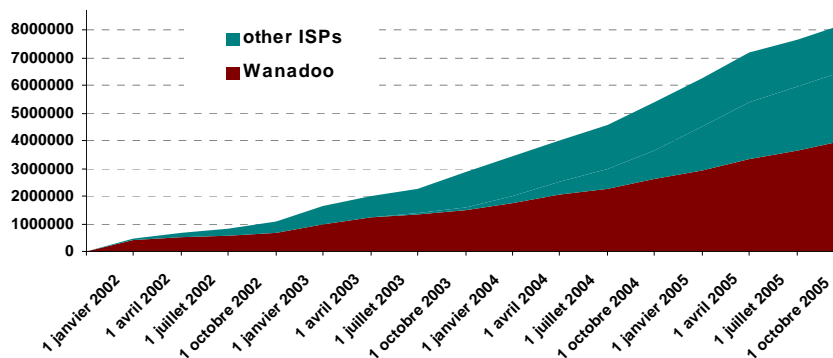
- high DSL penetration within the 30M copper lines
- rank 1st in Europe
- rapid growth: +100% in 2003, +90% in 2004 and +50% in 2005

Active competition

- the retail market is dynamic
- incumbent market share below 50%



main DSL market players
with market shares
(September 2005)



Retail offers diversity increases and retail tariffs drop...

Diversity of the offer

- increase of bitrate (up to 20Mbps with ADSL2+)
- new services have developed (double-, triple-play offers): Voice over DSL, TV over DSL...
- professional offers: data, VPN...

Drop of the retail tariffs

- down by a factor 2.5 in 2 years
- today tariffs are stabilized around 30€/month for a double- or triple-play offer

=> The broadband retail market is not regulated in France.



...but geographic disparities in terms of competition have arisen

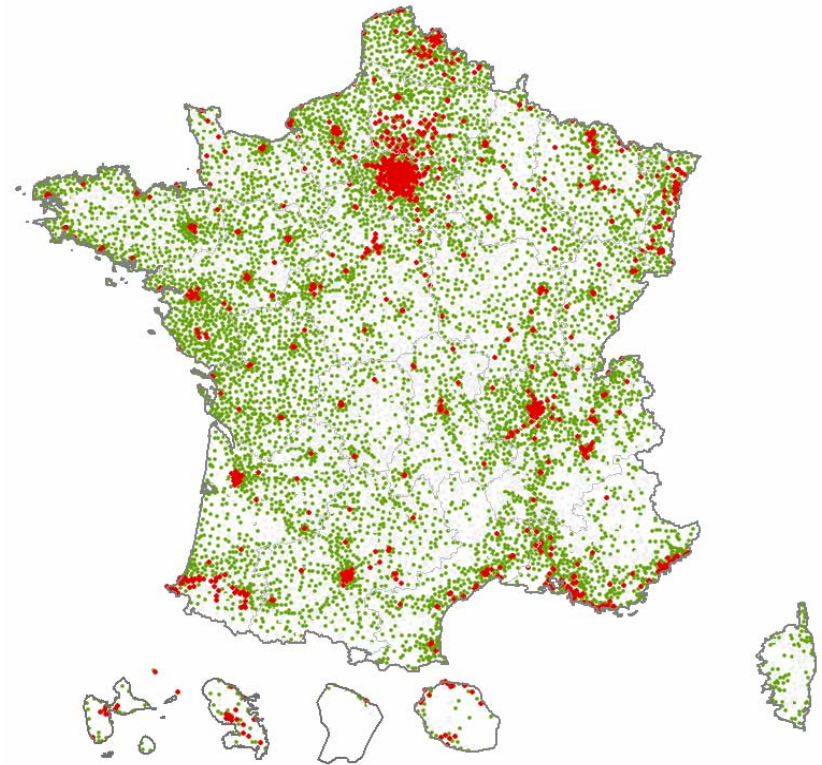
Two areas identified

- depending on how many operators are present on the wholesale market
- directly connected to LLU (Local Loop Unbundling)
- ● only France Télécom
= **non-unbundled area**

LR + 30€	Internet 8M VoIP
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- ● at least two operators
= **unbundled area** (54% of the population covered)

30€	Internet 20M TV over DSL VoIP
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situation at Q1 2006

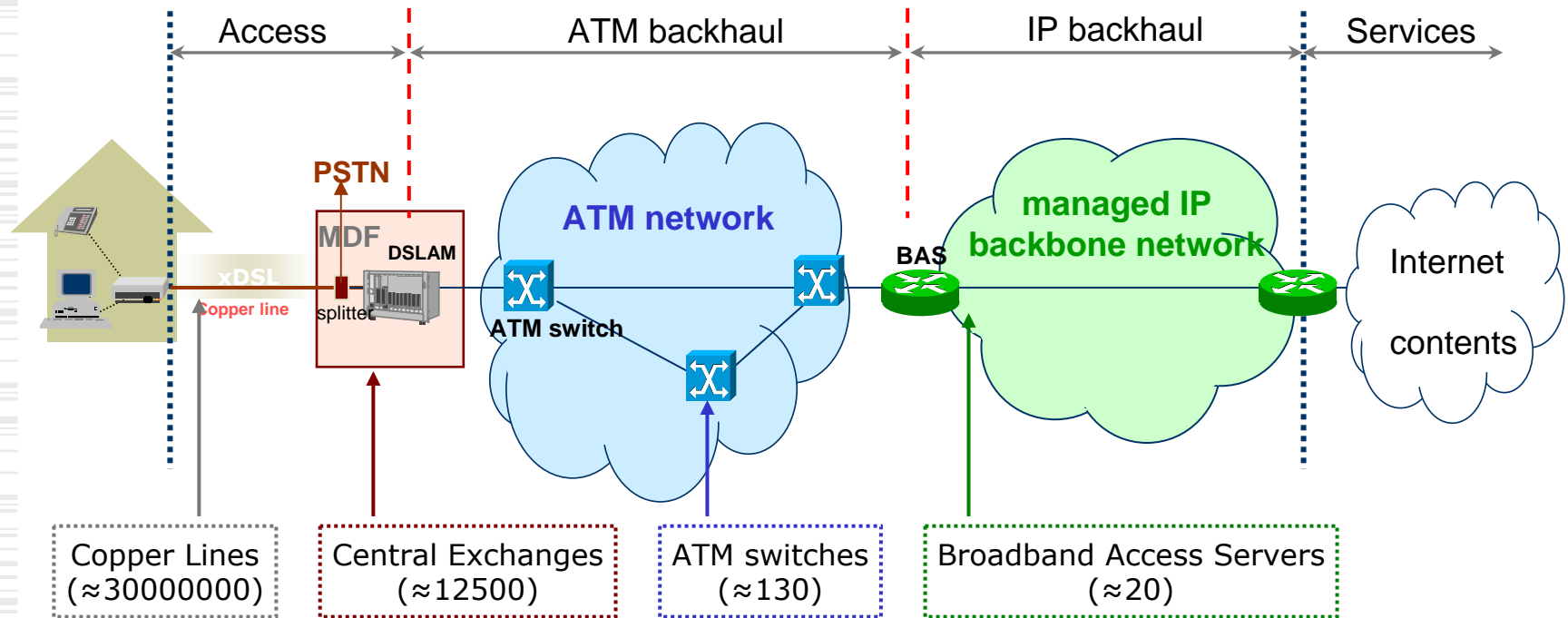


Overview of the broadband retail market

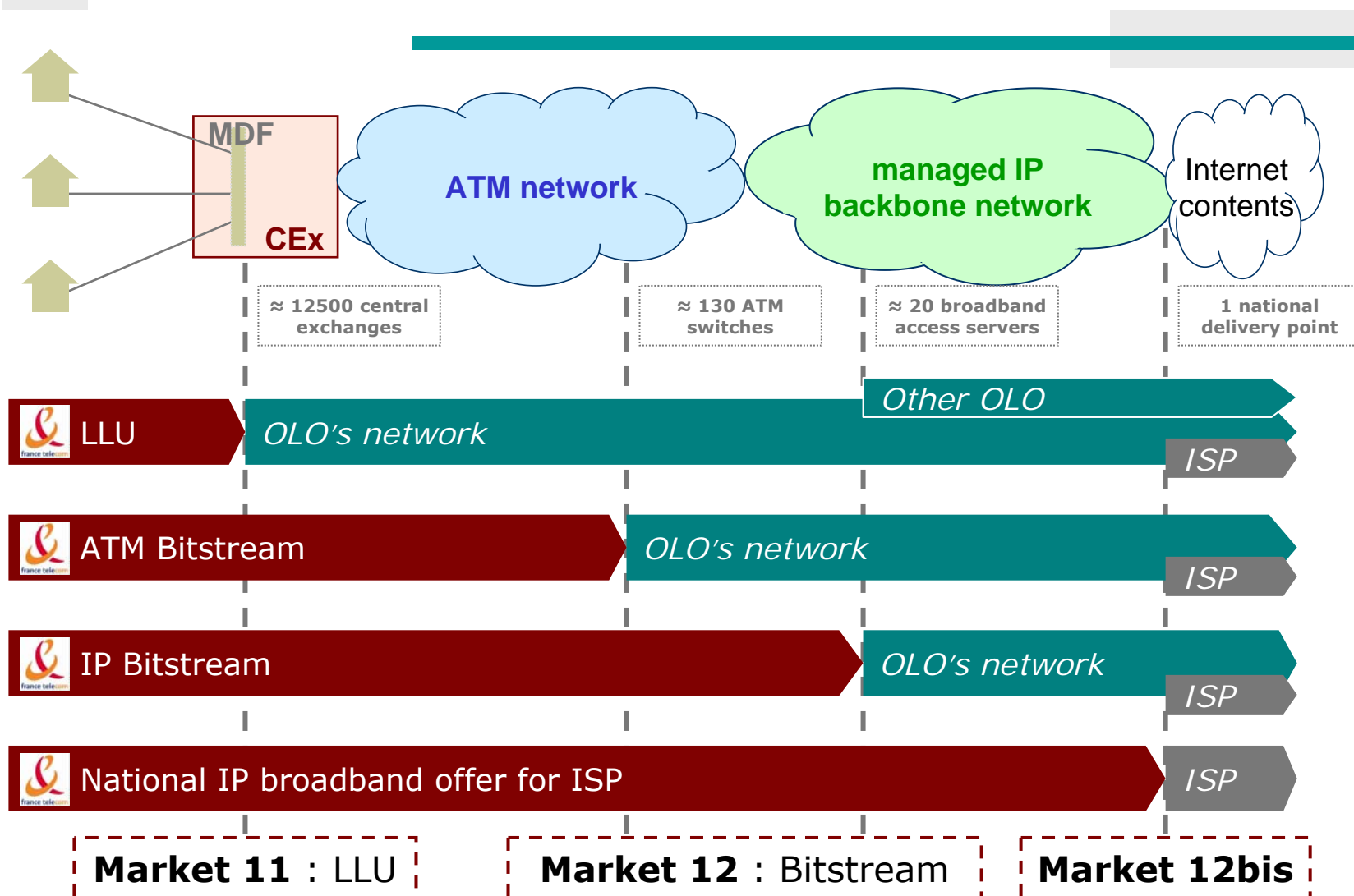
The relevant broadband wholesale markets

Broadband regulation focused on LLU

Technical architecture of France Télécom's network



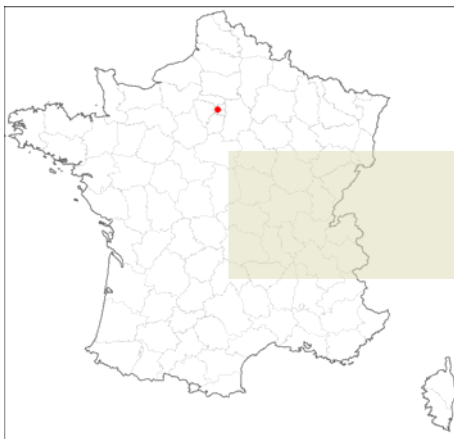
Broadband wholesale offers



Three wholesale broadband offers : geographical architecture

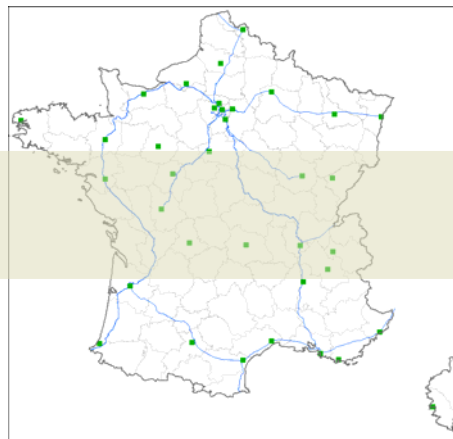
Increased capillarity for the OLOs

- more investments in facilities, networks...
- more independency (technical / economical) towards France Télécom



National offer

- 1 delivery point
- no need for a network



Bitstream offer

- regional delivery (20 to 130 points)
- need for a national network



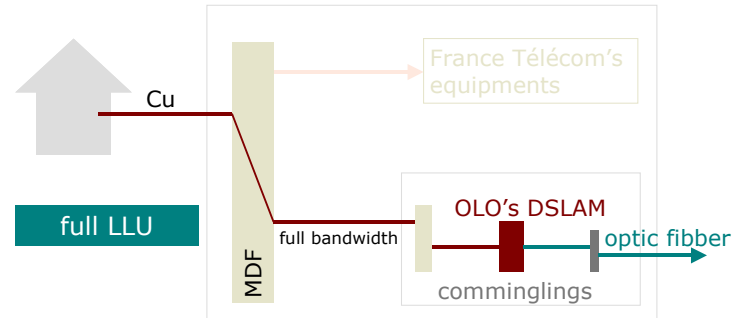
Local Loop Unbundling

- need to bring optical fiber till the central exchanges
- need for a national and regional capillar networks

Brief view of LLU offers

Rental of the local loop

- copper local loop = essential facilities that cannot be duplicated
- direct access to the end user
- no more bundled with other services of the incumbent

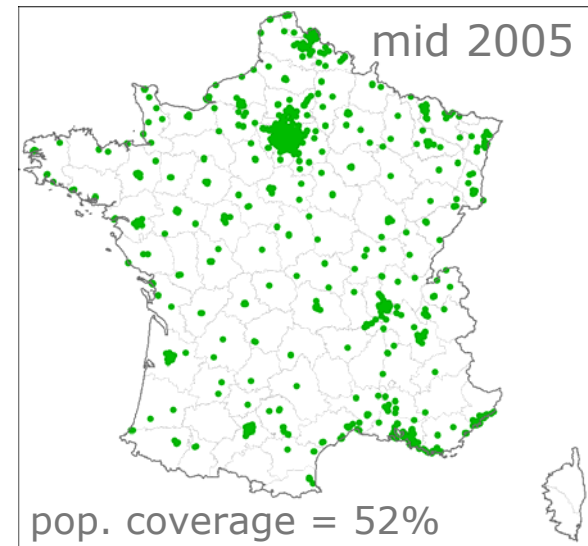


Two kinds of LLU

- shared access
- full LLU

Collocation in Central Exchanges

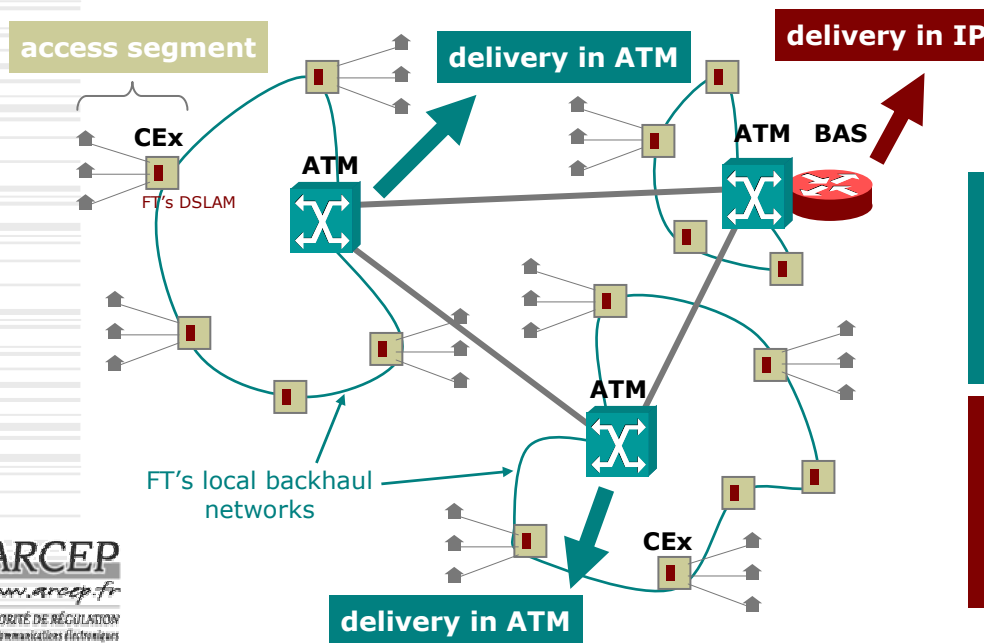
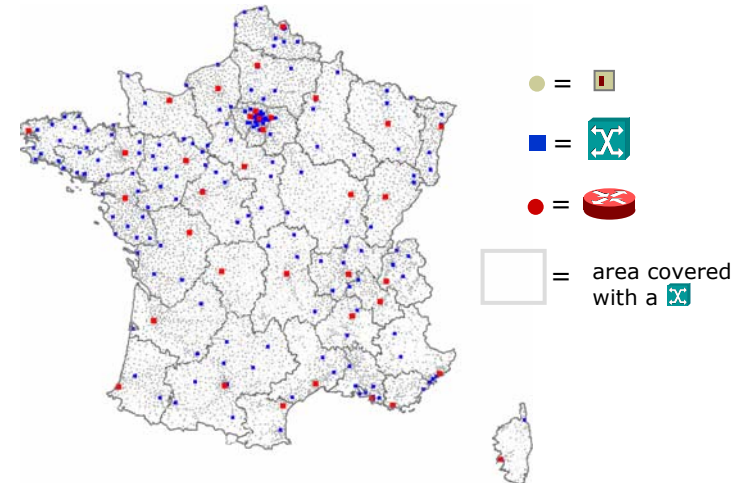
- the OLO installs its equipments in France Télécom's premises
- all collocation's tariffs are described in a Reference Offer



Brief view of Bitstream offers

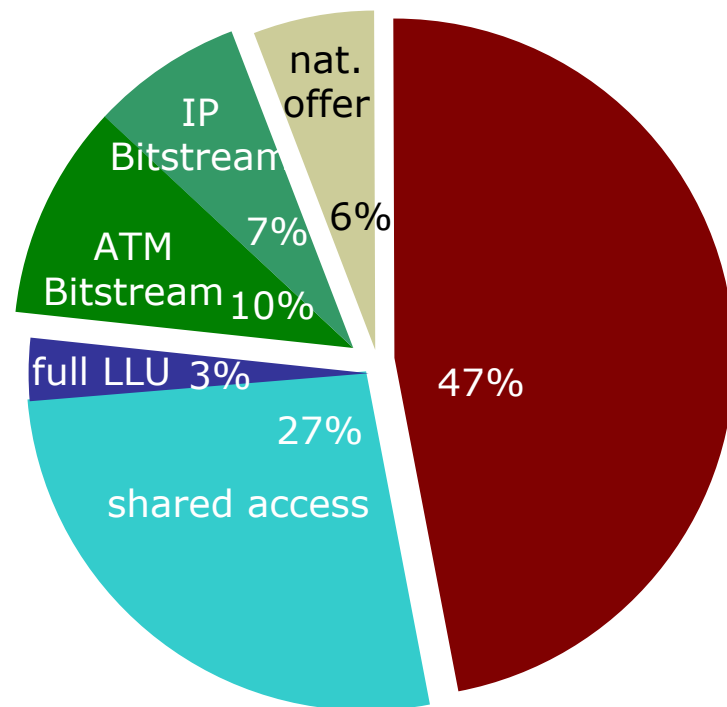
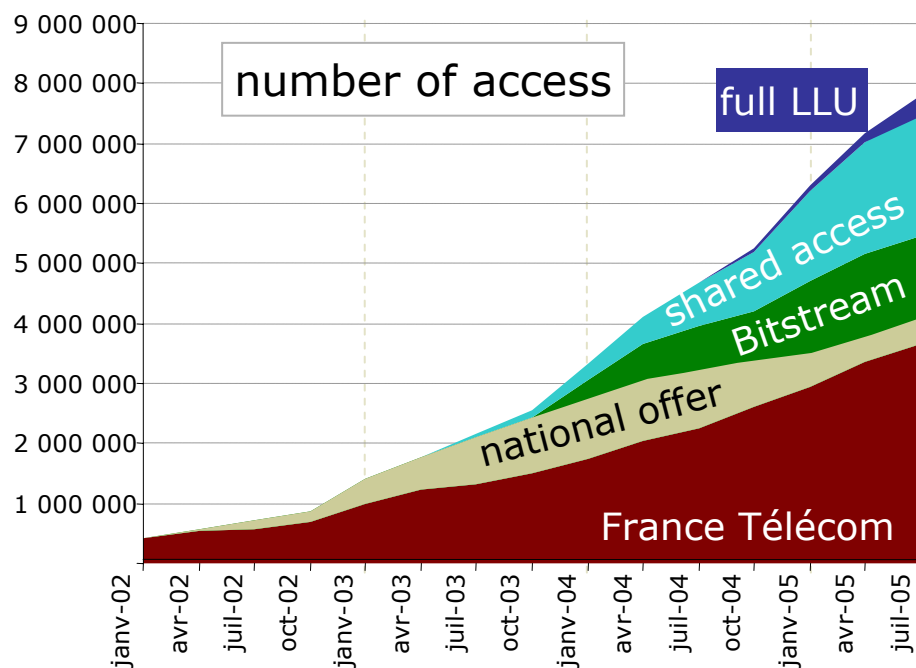
France Télécom's Bitstream's offers differ with:

- the number of delivery points
- the technology (ATM or IP)
- the characteristics of the access (guaranteed bandwidth ,QoS)



	residential	professional
ATM	"DSL Access + DSL Collecte ATM" 40 to 130 delivery points = ATM switches	"DSL Entreprises" 40 to 130 delivery points = ATM switches
IP	"DSL Access + DSL Collecte IP" 20 delivery points = BAS	

Evolution of the wholesale DSL market



situation at Q3 2005



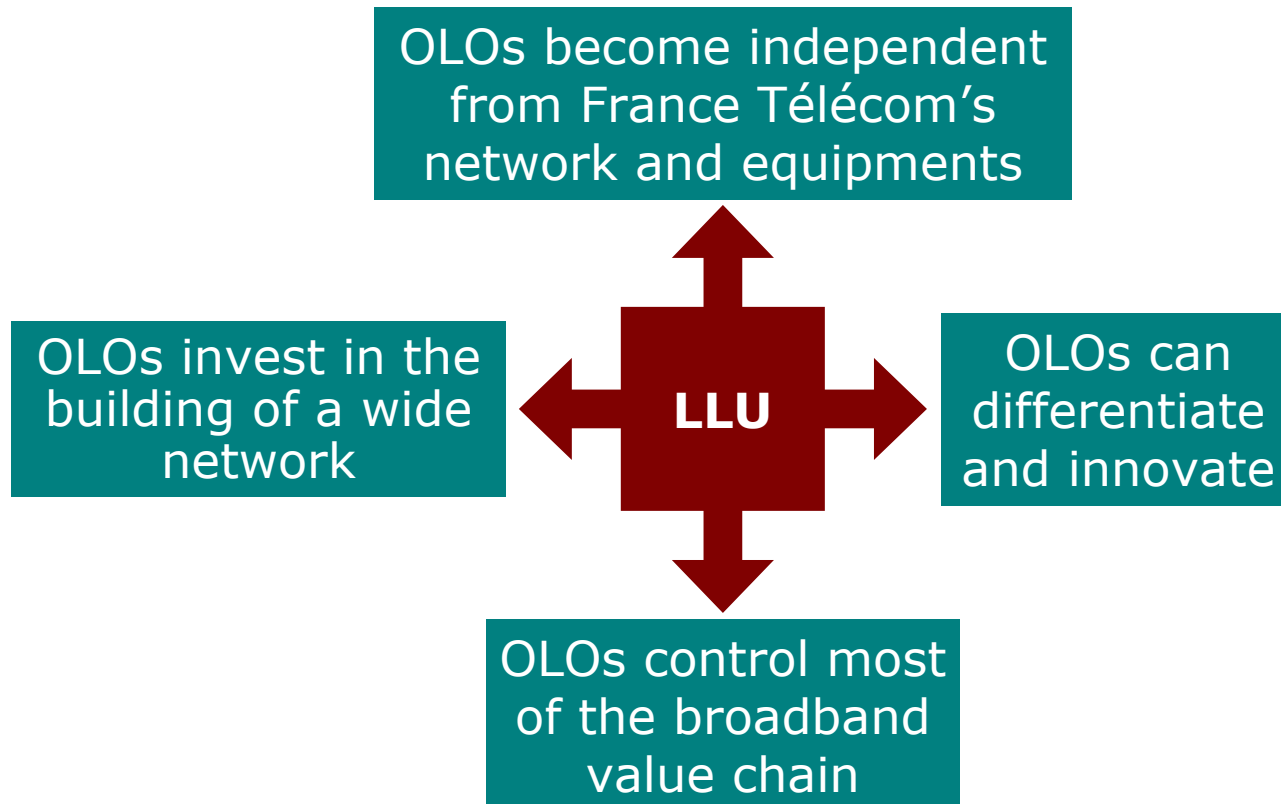
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LLU: keystone of competition on the broadband markets

Strategic offer for OLOs, and for ARCEP, because it allows long term competition:



Action of ARCEP focused on LLU

ARCEP's regulation of the wholesale broadband markets is focused on LLU

- extension of infrastructure-based competition
- LLU is high on Cave's *ladder of investments*
- new entrants climb up this *ladder of infrastructure competition* by migrating from one form of access to the next higher step

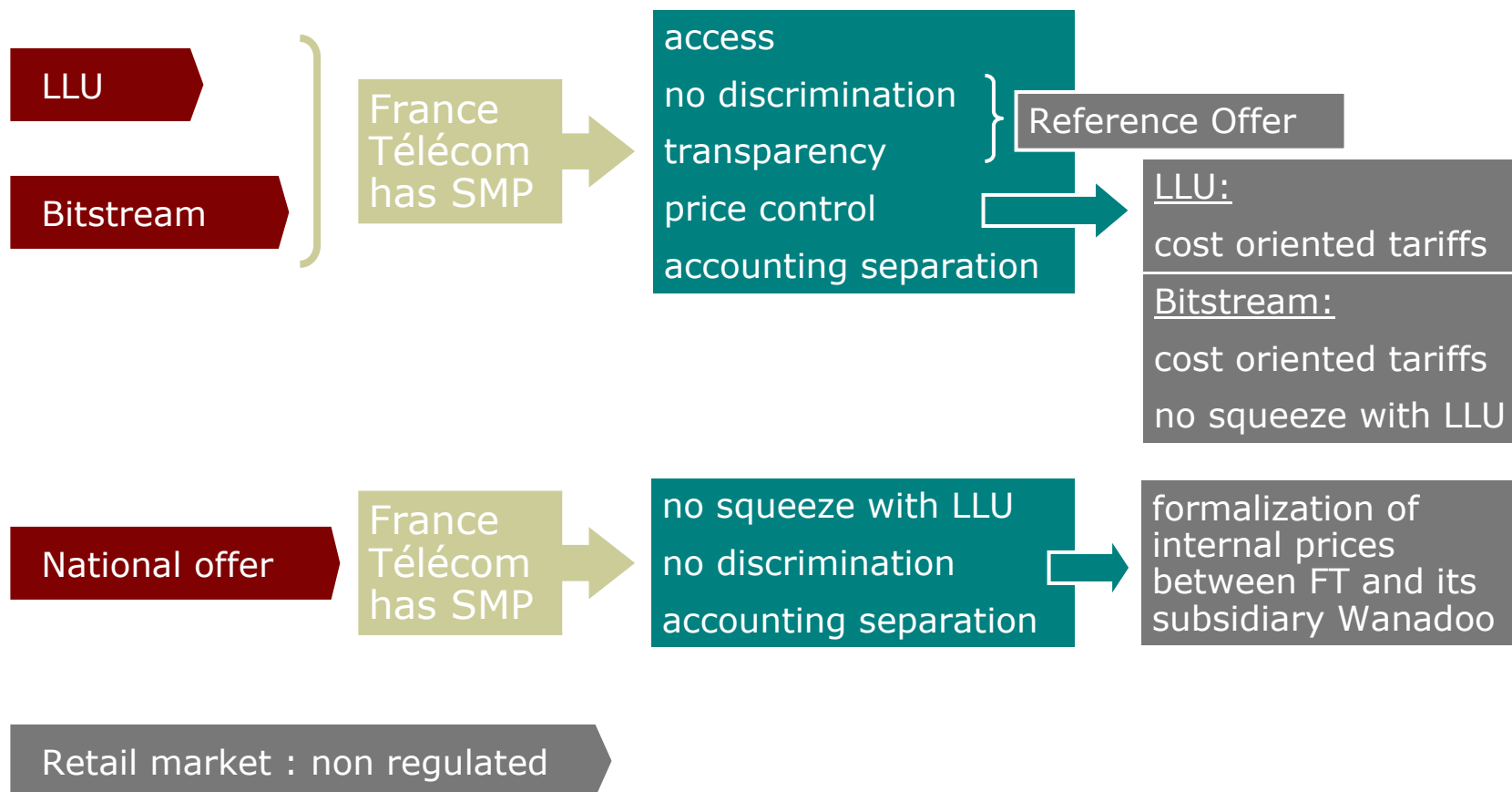
ARCEP considers Bitstream as the geographical complement to LLU

- OLOs address the retail market at a national scale
- Bitstream prices are regulated in such a way as to guarantee sufficient margins to offers based on LLU

ARCEP's working program:

- control LLU's tariffs
- preserve LLU's economical margin
- promote LLU's extension
- improve LLU's quality of service

Market analysis of the broadband market



Control LLU's tariffs

Monthly cost of the copper line

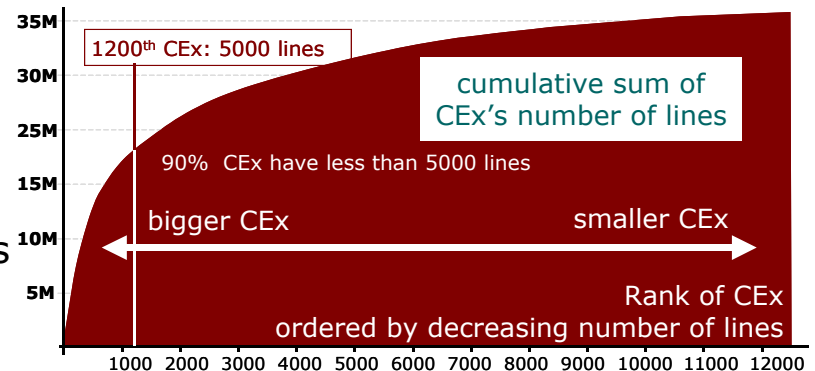
- new cost methodology = **Economic current costs**
- evolution of CCA (current cost accounting) which integrates economic annuities
- based on France Télécom's actual investments (real time series since the 50s)
- take into account price evolutions (and thus progress rate)
- provides stable cost measures

Objectives

- to develop long term competition
- to pay for France Télécom's investments in its local network
- to give visibility to the industry

Review of the collocation tariffs

- OLOs install their equipments in France Télécom's premises
- OLOs' rental include collocation fares, energy, ventilation, etc. (+ one-off fees)
- the amount of costs per line increases drastically for smaller CEx
- Summer'05, average drop of 1 € per unbundled access was negotiated



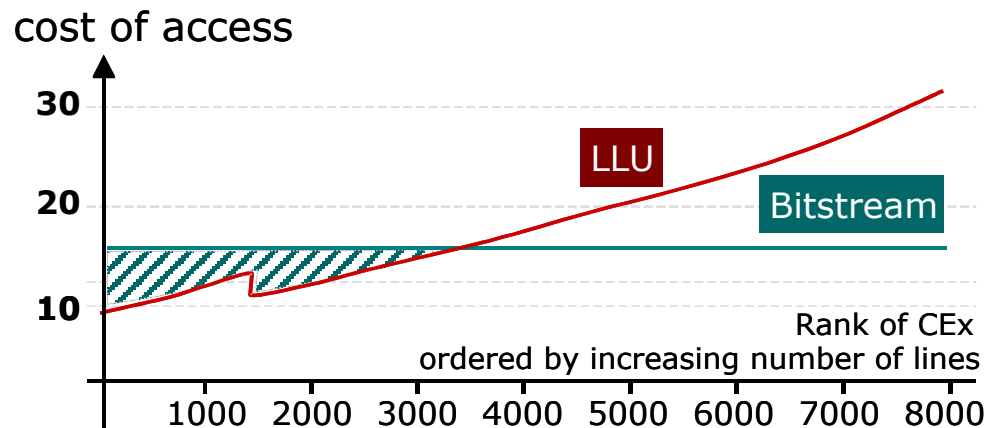
Preserve LLU's economical margin

Model of the cost of an unbundled access

- developed by ARCEP in a multilateral approach
- computes the tariffs of the Reference Order
- parameters: DSL penetration, market share, rank of the CEx, etc.

Used as a squeeze model

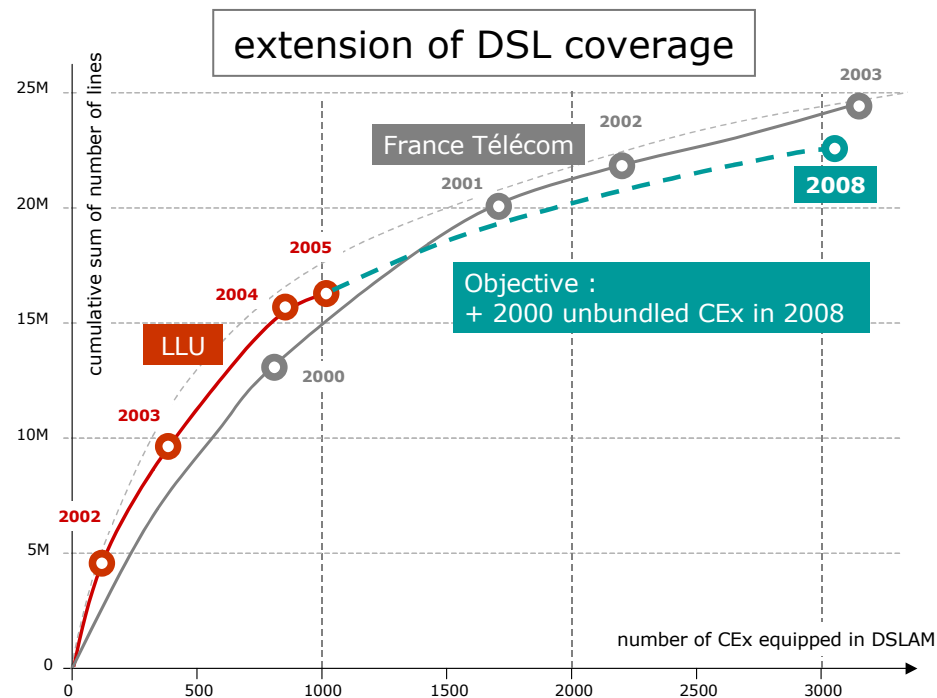
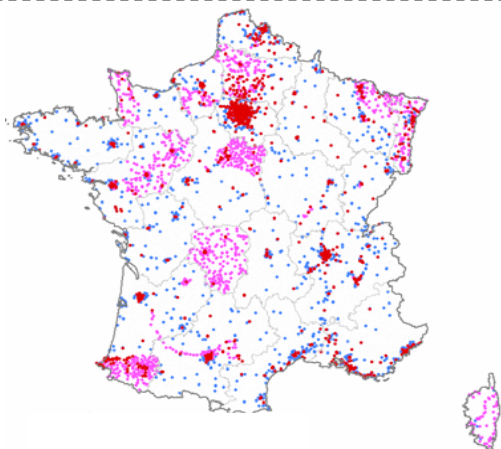
- in order to ensure that there are sufficient margins between offers based on LLU and Bitstream access prices
- a drop of the collocation prices enables mechanically the economical viability of smaller CEx



Promote LLU's extension

Three steps

- to lower collocation costs : Summer'05 drop allows the unbundling of small CEx to become profitable
- to advise local authorities in their action in electronic communications
- to implement a France Télécom offer of passive optical fiber enabling the OLOs to link new unbundled CEx



Prospective situation of LLU in 2008:

- local authorities' projects
- unbundled CEx thanks to FT's fiber offer

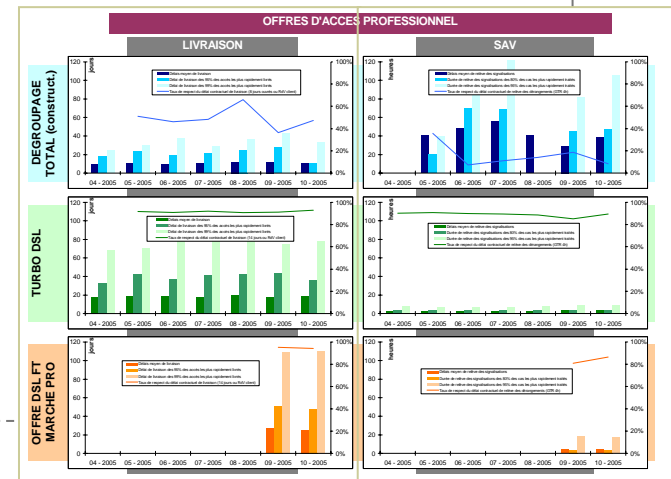
Improve LLU's quality of service

QoS, a major topic for LLU

- competition shall not develop at the expense of quality for the end user
- OLOs must have access to a high QoS on the wholesale market, allowing them to compete with the quality of France Télécom's retail products
- this is particularly crucial on the **professional market**, where the end user ask for Guaranteed Time of Repair

Since Spring'05, France Télécom publishes key QoS indicators

- asked by ARCEP in its market analysis
- enables comparisons between LLU, Bitstream and retail offers



Thank you very much for your attention