



## NGN Access

# Results of public consultations and directions

Press conference of 28 November 2007



## Context

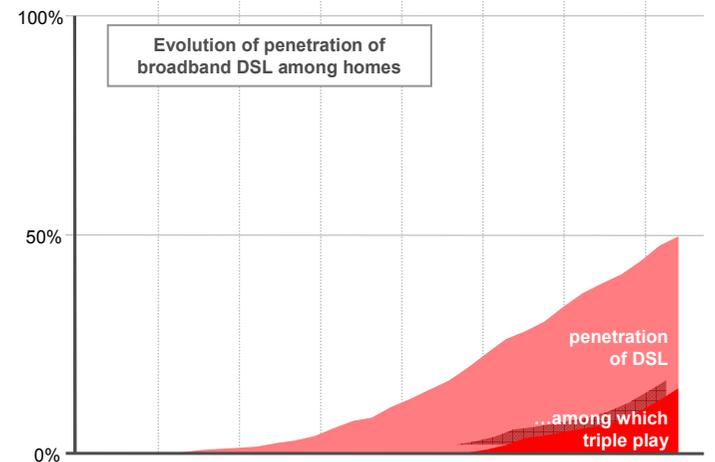
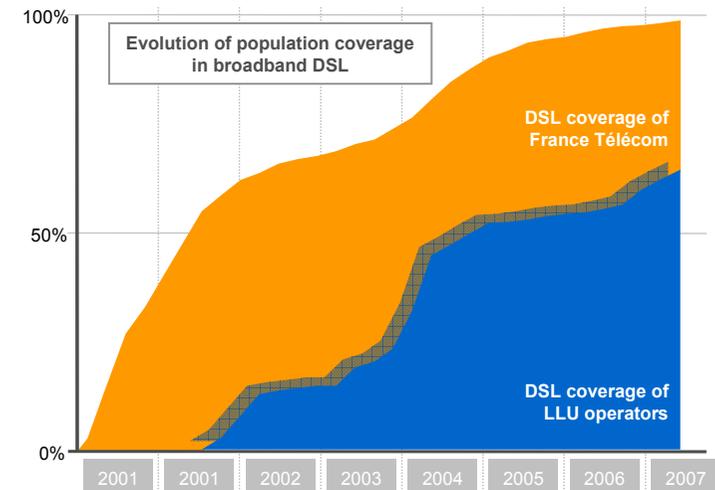
Sharing of the last part

Access to civil engineering

Conclusion

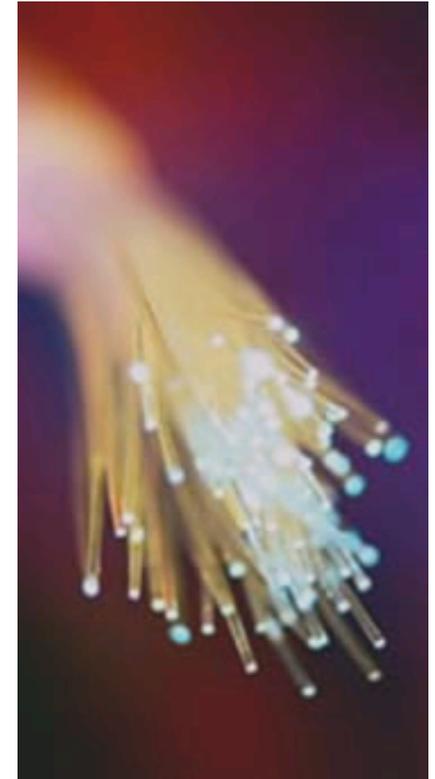
# The regulation of broadband has encouraged investment by all operators

- Competition through infrastructures is the main impetus behind the development of broadband:
  - the geographic extension of local loop unbundling has encouraged France Telecom to equip all of its MDF (Metallic Distribution Frames) for ADSL
  - France has joined European leaders in terms of penetration...
  - ...and is in first place for "triple play"
- Regulation has made this increase in investments possible
  - local loop unbundling gives operators technical and economic control
  - "bitstream" serves as a geographic complement
- Municipal intervention assists this dynamic in low density regions



## Very high bandwidth opens a new investment cycle

- Very high bandwidth is an inescapable technological evolution in the medium term
  - to meet growing demand for content
  - to assist the concomitant rise in speeds
- Major players have announced fibre deployments
  - with respect to other European countries, the challenge here is to bring the fibre as close to the subscriber as possible (right to the base of the house or building)
- Investments are significant and will need to be spread over several years
  - several hundred euros per connectable home
  - at a rate of one to two million homes per year
- The concern is to ensure that this investment is borne by all operators as much as possible





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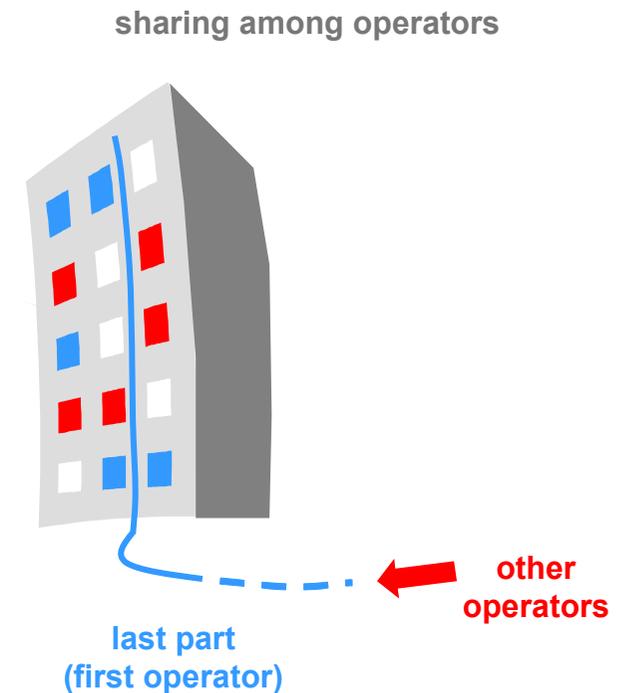
Conclusion



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## For all players, access to buildings is the main problem

- Fibre deployment to the home means that private properties have to be equipped
- Operators are prepared to bear the cost of this installation in the centres of major cities
- However, condominium owners, landlords and building managers fear that monopolies will be created by building or neighbourhood
  - they want to limit the number of agents in common areas...
  - ...but want to be able to choose their operator, without having to move house
- So, sharing among operators is necessary
  - the first operator installs the fibre in the building then gives other operators access to its network
- In practice, operators have not yet applied sharing



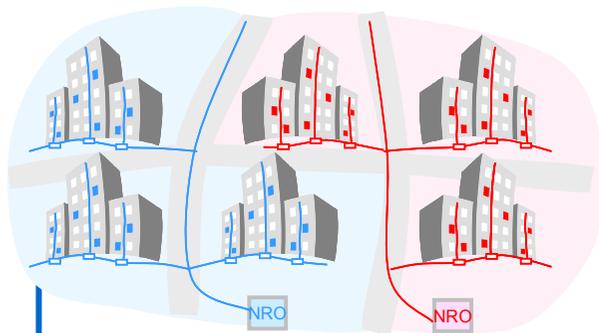
## Legislative measures are needed

- The current framework doesn't include sharing
  - Condominium owners and landlords can demand it from the operators contacting them...
  - ...but it is often difficult to establish the means or verify its application
- Regulation appears to be a relevant tool, which the law could assign to ARCEP
  - require operators to share the last part of their fibre network
  - make ARCEP responsible for defining clear means of sharing and guarantee operators respect them
  - this would be like extending "symmetrical" regulation (obligations applicable to all operators), which is currently limited to interconnection
- A balance needs to be found between operators' rights and obligations, so that fibre deployment in buildings can be simplified
  - "antenna rights" could be extended to fibre
  - in new buildings, pre-equipment standards will have to be changed in the medium term

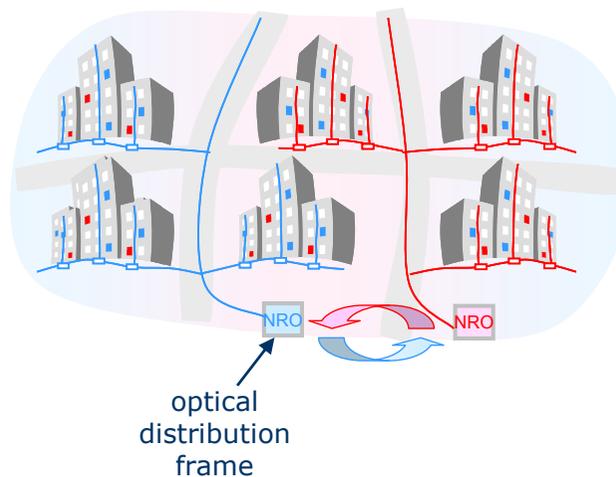
# Means of sharing must encourage competition through infrastructures while answering short-term concerns

- The base-of-building sharing option appears necessary...
  - target option of competition through infrastructures on the horizontal part and sharing inside buildings
  - complementing access to civil engineering
- ...but alone is not sufficient in the start-up phase
  - probable differences among operators in their deployment plans
  - uncertainties concerning the timetable and access possibilities to France Telecom's civil engineering

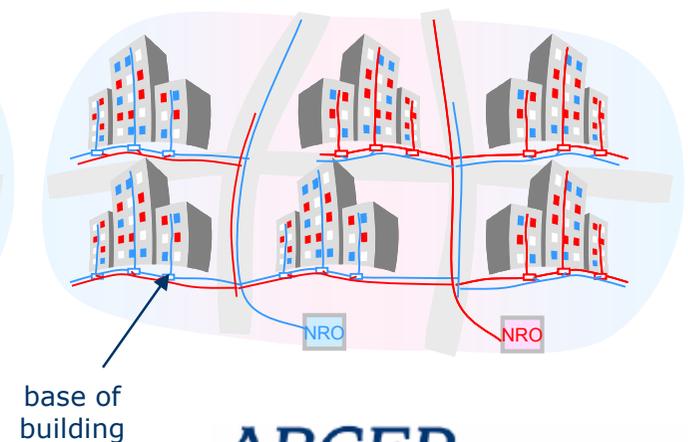
local monopolies



sharing necessary at start-up

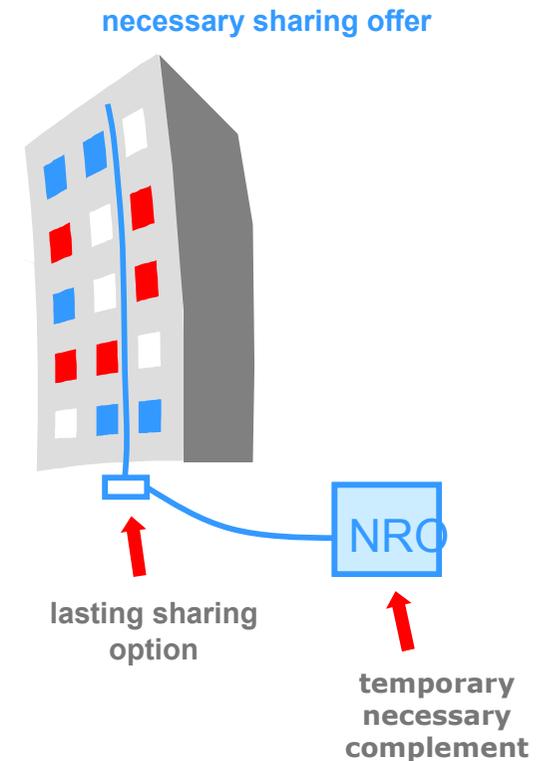


sharing target



## ARCEP is initiating technical work with operators

- Operators will have to allow sharing:
  - for the long term, at the base of building
  - temporarily, at the optical distribution frame
    - to limit the risk of local monopolies...
    - ... while encouraging investment
- ARCEP is now initiating multi-lateral work to discuss how sharing can be done...
- ... and will issue recommendations for landlords and building managers
  - practical guide
  - model agreement
- The goal is to anticipate the “symmetrical” regulation framework and to provide guarantees so that fibre can be installed in buildings



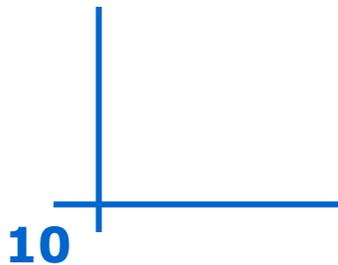


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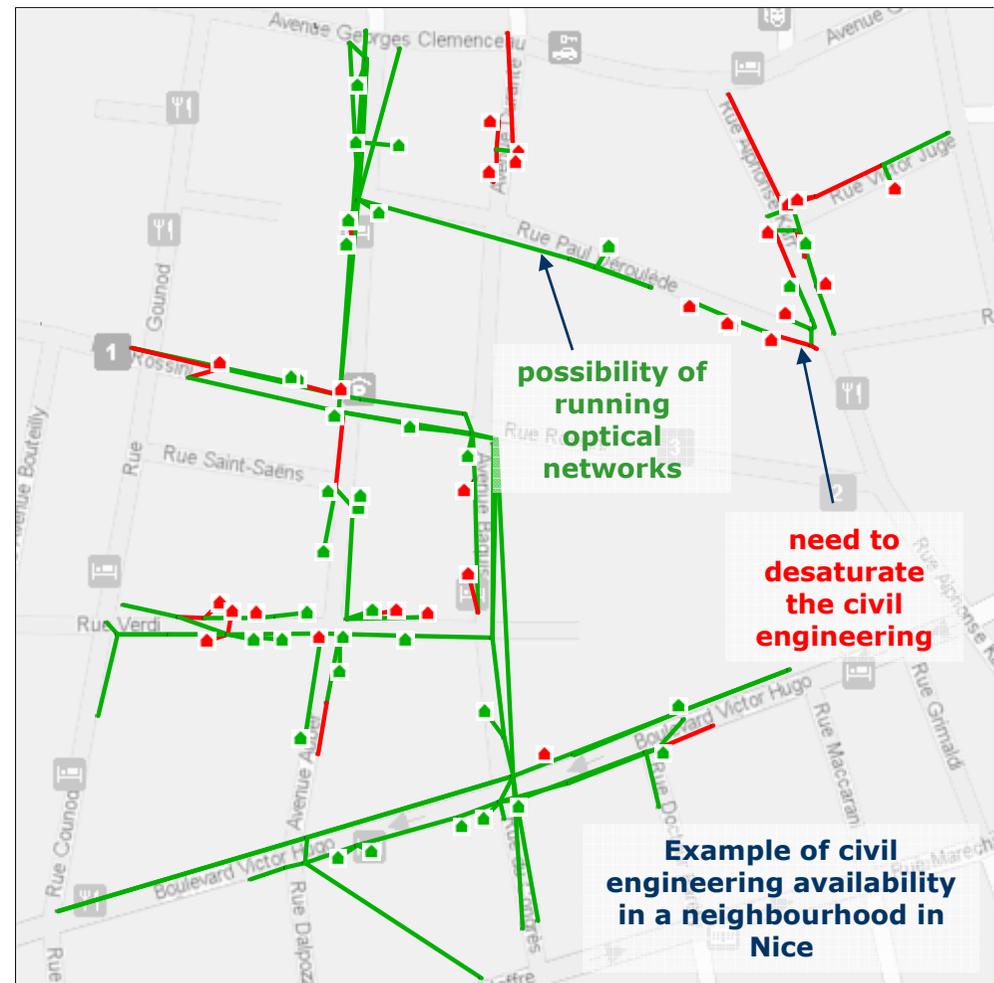
## Alternative operators require access to civil engineering

- For an operator deploying a very high bandwidth network, access to existing civil engineering changes the economic equation considerably
- All operators are not on an equal footing
  - alternative operators can deploy only in limited cases like Paris, where sewers can be visited and pass under every building
  - France Telecom deploys optical fibre in its civil engineering ducts inherited from the former monopoly
  - Numericable is progressively replacing coaxial cable with optical fibre
- France Telecom's ducts are an essential infrastructure
- Access to France Telecom's civil engineering must be guaranteed to allow all operators to invest



# France Telecom's civil engineering has availabilities

- ARCEP has audited France Telecom's ducts in some ten cities
- The audit shows that civil engineering is available ...
- ...although availability is heterogeneous...
- ...and will depend on engineering rules, in particular for desaturation



## Regulation of France Telecom's ducts has been initiated

- The regulation framework is that of the market analysis
  - to guarantee access to the essential infrastructure: France Telecom's civil engineering
  - the new Commission recommendation includes ducts regulation
- France Telecom has announced that it will publish a duct offer...
  - by the end of the year
  - the offer's principles are encouraging
- ...although experience shows that operational aspects are crucial for a wholesale offer to work on the ground...
  - multi-lateral work begun in October is progressing well
  - experiments are about to begin
- ...and time will be needed to move from a "paper" offer to an actual one
- ARCEP will be vigilant to ensure that all operators have access quickly to civil engineering under equivalent conditions



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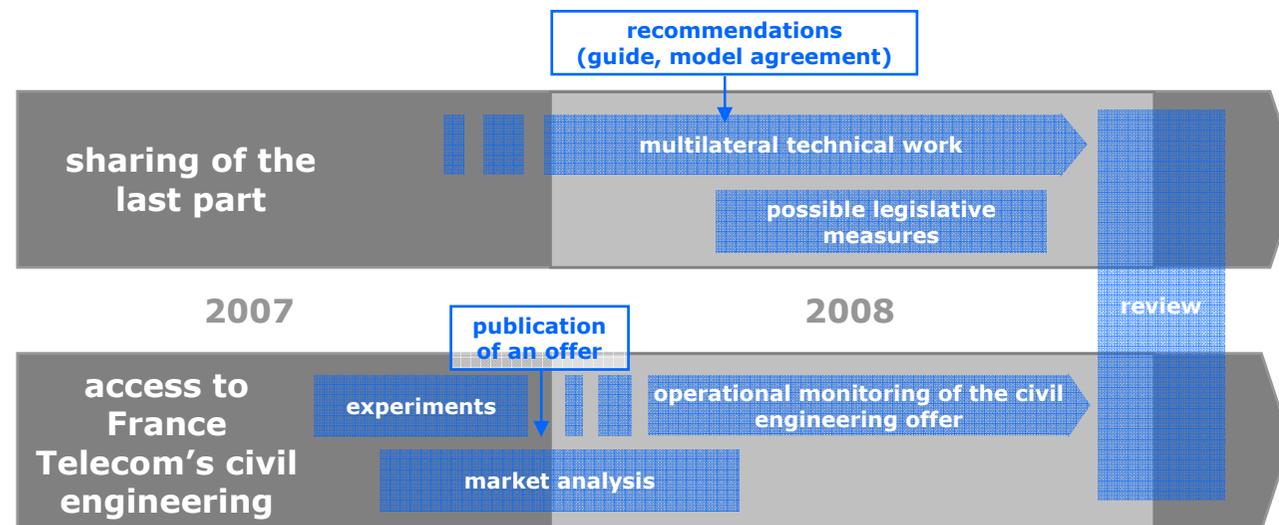
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## The measure includes two tools, which can be adapted to market developments

- Two tools are needed
  - regulation of the ducts inherited from the former public monopoly, which concerns France Telecom (“asymmetrical” regulation)
  - sharing of the last part of the fibre networks, which concerns all operators (“symmetrical” regulation)
- A good balance needs to be found between encouraging investment and preventing the creation of local monopolies
  - the initial situation is different with respect to the regulation of broadband because France Telecom’s dominant position is on the civil engineering and not on the local fibre loop
  - there is very little feedback from Europe, given France’s head start in deploying fibre to the home
- ARCEP will evaluate this measure in one year
  - France Telecom’s wholesale civil engineering offer
  - the implementation of sharing
  - based on operator deployments on the horizontal and vertical parts

## Work will take shape in 2008

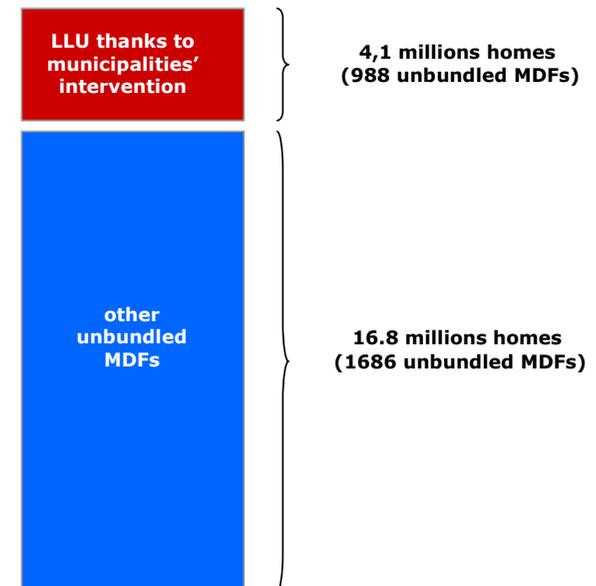
- Legislative measures are needed for access to buildings and the obligation to share the last part
- ARCEP is launching technical work to implement sharing and will issue recommendations for landlords and building managers
- Access to France Telecom's civil engineering has now entered the operational stage
- The measure will be evaluated in one year



## Municipalities can play a key role

- In recent years, municipalities have played a key role in the digital development of their regions
- Their intervention can be just as essential on very high bandwidth
  - by providing local information: site surveys and geographic information systems for public land
  - on civil engineering: by coordinating work, laying remaining ducts and authorising lightweight civil engineering
  - on the last part: with social landlords, by authorising wiring on facades and encouraging pre-fibring in new buildings and major renovations
  - cities wired under public service delegations have an essential asset for very high bandwidth

**20,9 millions homes (64% of population)  
covered by LLU in June 2007**



The goal of having several operators cover a major part of the country can be met in the medium term

