

15 March 2010



Scorecard for fixed broadband and ultra-fast  
broadband offers  
– wholesale market –

Q4 2009

## Scorecard for wholesale fixed broadband and ultra-fast broadband offers - figures as of 31 December 2009 -

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### I. Fixed ultra-fast broadband

In April 2009, ARCEP produced the first scorecard for fixed ultra-fast broadband which makes it possible to track the status of fibre rollouts across the country, the use of France Telecom civil engineering offers and the implementation of fibre-to-the-home (FTTH) network sharing by all operators.

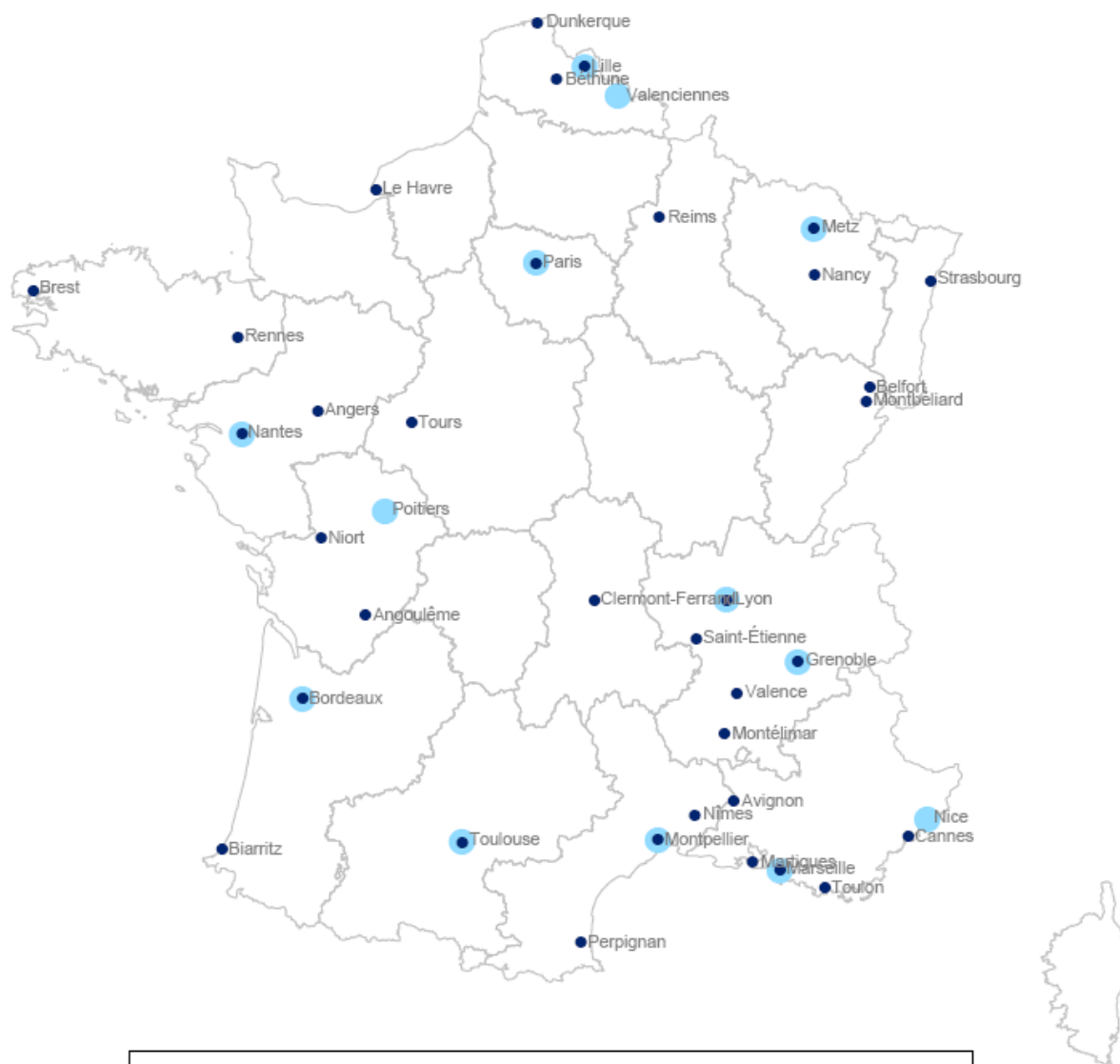
This scorecard covers both FTTH and hybrid fibre-coaxial cable ultra-fast broadband offers. Both of these technologies enable the supply of very high-speed fixed solutions that deliver different levels of performance, especially in terms of available upstream speeds.

#### Optical fibre rollouts continue in the horizontal portion of the network

For over two years now, the country's leading carriers have been involved in optical fibre rollouts in the horizontal portion of the network, i.e. the portion located on public land. Some 40 towns and metropolitan areas are now concerned by these rollouts.

A distinction needs to be made between FTTH (Fibre-to-the-home) technology, which is being deployed by France Telecom, SFR and Free in particular, and which consists of bringing fibre to the customer premises, and FTTLA (Fibre-to-the-last-amplifier) technology which is being deployed by Numericable and which consists of replacing a portion of the coaxial cable located on public property with optical fibre up to the last amplifier – with coaxial cable being used to complete the connection to customer premises.

The map below illustrates the status of the rollouts of both of these technologies that are currently underway across the country. ARCEP estimates that, in all, there were **more than 4.5 million households** located within reach of an optical fibre network as of 31 December 2009.



**Légende**

- agglomération avec au moins un réseau FttH en cours de déploiement
- agglomération avec au moins un réseau FttLA en cours de déploiement

**Legend**  
 Municipality where at least one FTTH network is currently being deployed  
 Municipality where at least one FTTLA network is currently being deployed

Alternative carriers performing a number of surveys to take advantage of the France Telecom offer for accessing its civil engineering infrastructure.

In accordance with the ARCEP market analysis Decision No. 08-0835 that was adopted in July 2008, France Telecom now has a wholesale offer for accessing its civil engineering ducts which allows alternative operators to deploy their own fibre-to-the-home networks.

The optical fibre rollouts that alternative carriers have performed to date thanks to this wholesale offer involve some 20 municipalities, chiefly Paris and its inner suburbs and the cities of Lyon, Villeurbanne, Marseille and Grenoble.

At the end of 2009, alternative operators were leasing a total of around 560 km<sup>1</sup> of civil engineering infrastructure from France Telecom.

### **Buildings and households being equipped with optical fibre**

As of 31 December 2009, there were over **40,000** buildings equipped for fibre-to-the-home and connected to at least one operator's network, which marks an 11 % increase compared to 30 September 2009.

**Around 800,000 households** are located in these buildings and are now eligible to receive an FTTH service. The number of eligible households has increased by roughly 8% since 30 September 2009.

### **Progress being made with infrastructure sharing but it is still little used compared to the total number of eligible subscribers and households**

As of 31 December 2009, there were around 300 ultra-fast broadband subscribers whose service was being delivered thanks to a network sharing agreement between their service provider and a competing operator – from among close to 10,000 eligible households located in some 100 buildings equipped with optical fibre-to-the-home (FTTH) and connected to at least two operators' network.

This figure is still very low but is expected to increase substantially thanks to the shared rollouts that have begun in application of the ARCEP decision that was published in the *Journal Officiel* of 17 January 2010, concerning the terms for accessing optical fibre ultra-fast broadband electronic communications lines.

### **Summary of the main developments in Q4 2009**

	31 December 2008	31 March 2009	30 June 2009	30 September 2009	31 December 2009	Quarterly growth
<b>Subscriptions based on a network sharing agreement</b>	50	100	200	250	<b>350</b>	<b>+40%</b>
<b>Buildings equipped for FTTH</b>	20,000	27,000	33,000	36,000	<b>40,000</b>	<b>+11%</b>
<b>Households eligible for FTTH</b>	440,000	550,000	650,000	740,000	<b>800,000</b>	<b>+8%</b>

<sup>1</sup> Note that this is a linear measurement of the civil engineering infrastructure being employed for the rollouts and not of the optical cable deployed, which is the measurement ARCEP had been using for the purposes of this scorecard up to now. An operator may, in fact, install several optical cables along the same section of civil engineering.

## II. Fixed broadband

There were 9.7 million wholesale broadband DSL connections sold at the end of 2009, which marks an increase of 1.1 million compared to the year before.

As of 31 December 2009, alternative carriers had bought 9.7 million wholesale connections from France Telecom. They then market these connections to customers in retail DSL broadband markets, both residential and enterprise.

The base of wholesale connections is broken down as follows\*:

	LLU <i>Regulated offer</i>	Bitstream (ATM and regional IP) <i>Regulated offer</i>	National IP <i>Non regulated offer</i>	Total
<b><i>With a subscription to a POTS service</i></b>	Shared access 1,309,000 connections <i>(-14,000)</i>	Classic ADSL 588,000 connections <i>(-64,000)</i>	59,000 connections <i>(-5,000)</i>	1,956,000 connections <i>(-83,000)</i>
<b><i>Without a subscription to a POTS service</i></b>	Full unbundling (residential + business) 6,414,000 connections <i>(+412,000)</i>	Naked DSL + enterprise bitstream (DSL-E) 1,330,000 connections <i>(+16,000)</i>		7,744,000 connections <i>(+428,000)</i>
<b>Total</b>	7,723,000 connections <i>(+398,000)</i>	1,918,000 connections <i>(-48,000)</i>	59,000 connections <i>(-5,000)</i>	9,700,000 connections <i>(+345,000)</i>

\*in brackets: net growth in volume during the last quarter

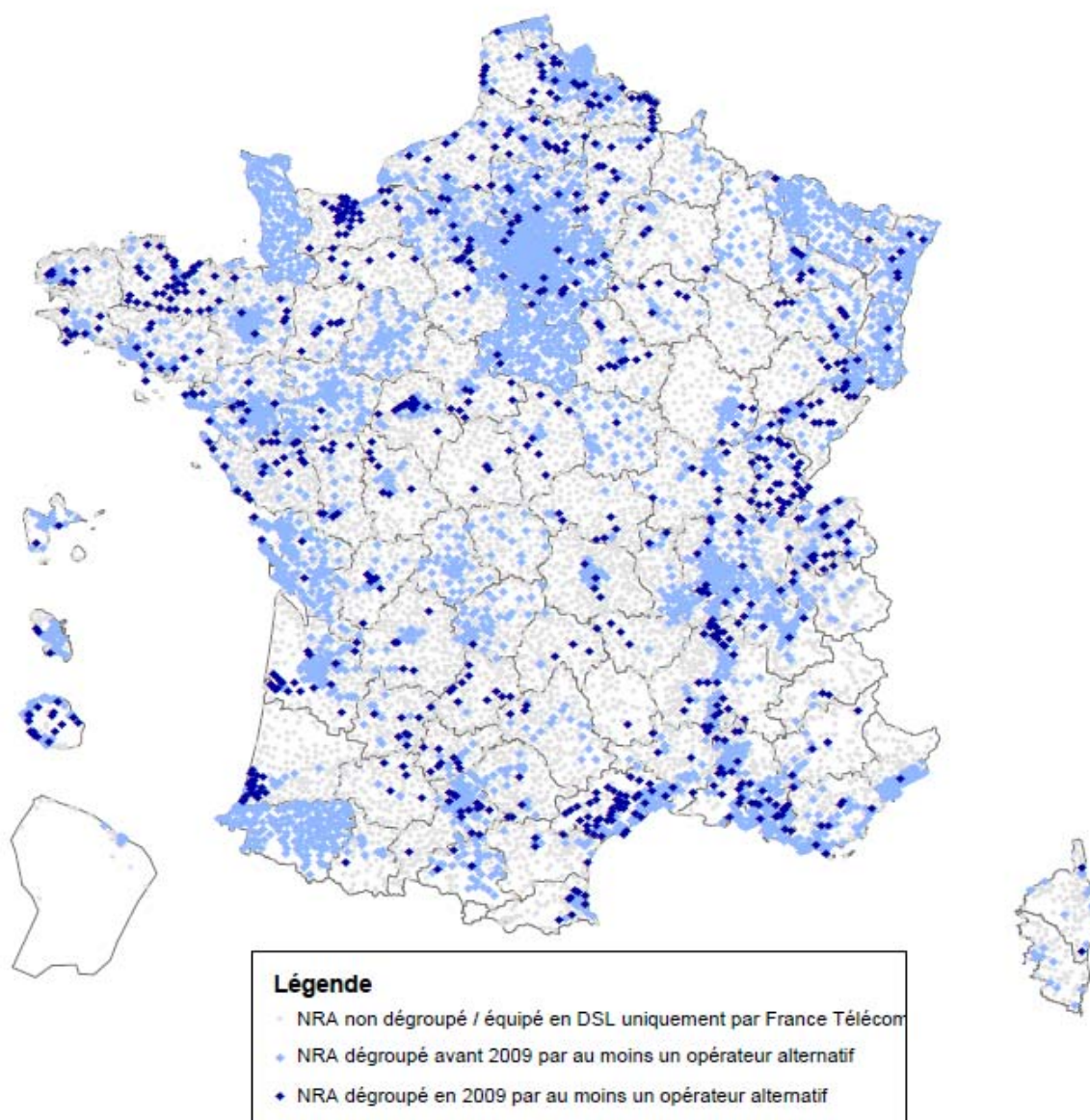
Full unbundling is by far the most popular offer in the wholesale DSL broadband market, accounting for 6.41 million connections at the end of 2009, or close to 1.48 million more than the year before. Of particular note is the fact that the base of fully unbundled lines has grown at a greater rate than the wholesale DSL market taken in its entirety, due to the different migration patterns and the expanded size of the LLU coverage area.

**This expansion of LLU coverage continues to be sustained by network rollouts initiated by local authorities and by France Telecom's "Liaison Fibre Optique" fibre optic link offer for connecting distant exchanges.**

As a result, close to 800 more exchanges were unbundled during the year gone by, of which a substantial portion through public service contracts. At the end of 2009, alternative operators had connected 4,660 central offices, covering 76% of the population.

**It should also be noted that unbundling now concerns all départements in mainland France and overseas.**

DSL broadband coverage by France Telecom and LLU operators  
as of 31 December 2009



**Legend**

Non unbundled exchange/DSL-equipped by France Telecom only  
Exchange unbundled before 2009 by at least one alternative operator  
Exchange unbundled in 2009 by at least one alternative operator

## **Definitions**

**Ultra-fast broadband offers:** electronic communications offers provided to retail market customers and which include an Internet access service with a peak downstream bitrate of over 50 Mbps and a peak upstream speed of over 5 Mbps. They include two types of offer:

- fibre-to-the-home (FTTH) ultra high-speed offers;
- hybrid fibre-coaxial (HFC) ultra high-speed offer (last mile in coax).

**Number of households eligible for fibre-to-the-home (FTTH) ultra-fast broadband offers:** number of residential or business units which can subscribe to ultra high-speed commercial offers from at least one Internet service provider based on FTTH (fibre to the home) technology. To avoid double accounting, each operator reports the number of residential or business units in the buildings in which it has installed optical fibre (at least for the core part of the network, as last drop connections to the customer premises can be installed at a later time) and which are connected to an optical fibre network, except for buildings that contain only office space.

**Number of households eligible for hybrid fibre-coaxial (HFC) ultra-fast broadband offers:** number of individual residential or office units that can subscribe to an ultra-fast broadband commercial offer with at least one Internet service provider, based on a technology which reuses the building's indoor connection to cable networks. To avoid double accounting, each operator reports the number of residential or business units in the buildings in which it has installed coaxial cable or which it manages, and which are connected to an optical fibre network, except for buildings that contain only office space.

**Number of buildings equipped with optical fibre and connected by at least one operator:** number of buildings in which residential or office units are eligible for fibre-to-the-home (FTTH) ultra-fast broadband offers. To avoid double accounting, each operator reports the number of residential or business units in the buildings in which it has installed optical fibre (at least for the core part of the network, as last drop connections to the customer premises can be installed at a later time) and which are connected to an optical fibre network, except for buildings that contain only office space. This refers only to the number of addresses and not the number of signed agreements, since an agreement with a given property owner can cover several addresses.

**Total number of ultra-fast broadband subscriptions:** total number of residential or business subscriptions to an ultra-fast broadband offer. This is the number of subscriptions and not the number of subscribers, since a single household can have more than one subscription.

**Number of shared ultra-fast broadband subscriptions at the shared access point:** number of ultra-fast broadband subscriptions delivered by a service provider accessing a competing operator's network at the shared access point, possibly through a third party – in application of Article L. 34-8-3 of the French *Postal and Electronic Communications Code*.

**Number of households in buildings equipped with FTTH and connected by at least two operators:** number of households eligible for fibre-to-the-home ultra-fast broadband services (cf. definition above) whose optical fibre lines are connected to at least two operators' ultra fast-broadband networks at the shared access point, on which ultra-fast broadband services are available.

**Unbundling:** Unbundling is a regulated France Telecom wholesale offering that allows alternative carriers to have direct access to the copper pair. To do so, they must first install their own equipment in France Telecom exchanges. They are then able to have end-to-end control over broadband connections and to market services that are distinct from those offered by the incumbent carrier.

There are two kinds of unbundling:

- shared access wherein subscribers continue to have a subscription to a classic telephone service;
- fully unbundled access wherein subscribers no longer have a subscription to a classic telephone service.

**Bitstream:** refers to wholesale offers which enable alternative operators to rent broadband connections that have been activated by France Telecom. To do so, they must first have connected one or more connection points in the France Telecom network. They are then in a position to market retail broadband services in areas where they are not present through unbundling.

France Telecom offers two types of wholesale bitstream offer:

- the regulated regional bitstream offer which supposes that the operator has connected several regional connections points, and which includes three forms of access:
  - “classic bitstream” if the customer keeps a subscription to a classic telephone service;
  - “naked ADSL bitstream” if the customer no longer has a subscription to a classic telephone service;
  - “DSL-E” (DSL-Entreprise), which is a guaranteed bitrate offer aimed at business customers, over a connection without a subscription to a classic telephone service.
- The national bitstream offer, delivered in the Paris region for ISPs that have not deployed their own network. This offer has not been regulated since September 2006, and its connection base is shrinking rapidly.

**ATM (Asynchronous Transfer Mode):** broadband transmission technique enabling the multiplexing of data streams in packet form (referred to as ATM cells), in connected mode with a guaranteed quality of service.

**DSL (Digital Subscriber Line):** technology that makes it possible to use the copper lines that connect customers to the public switched telephony network (PSTN) for delivering high-speed data streams in packet mode.

**IP (Internet Protocol):** The basic data transmission protocol used on the Internet. It defines the way in which data packets are organized to be able to transport them over the Web.