

## CHAPTER 3

# Regulation of electronic communications market competition

## A. Market analysis in France in 2007

In 2007, the Authority launched a second cycle of market analysis devoted to:

- ◆ voice call termination on individual mobile networks in Metropolitan France and in the overseas départements and territories for the period running from 2008 to 2010;
- ◆ broadband and ultra-fast broadband for the period running from 2008 to 2010.

The Authority also continued to relax the regulation imposed on the incumbent carrier in residential retail calling markets. The new cycle of analysis of the fixed telephony market will be launched in 2008.

Furthermore, in late 2007, the European Commission adopted a new recommendation on relevant telecommunications markets, which reduces the number of markets likely to be subject to regulation from the original 18 listed in the Recommendation of 11 July 2003 to seven.

On 31 December 2007, the Authority performed its analysis of the 18 markets contained in the European Commission Recommendation of 11 July 2003, and launched two new analysis cycles for 2008 to 2010 (corresponding to three markets listed in the new Commission Recommendation of 17 December 2007<sup>1</sup>). It also conducted an analysis of the SMS call termination market, which is not included in the Recommendation.

<sup>1</sup> - See below.

## 1. An adapted regulatory mechanism

The Law of 9 July 2004 – which transposes the “Telecom Package” Directives adopted in 2002 – enacted a shift in regulatory methods and concepts towards common competition law.

As a result, it is the regulator's responsibility to define the scope of a market and to verify whether sector-specific regulation is relevant, and to determine which player(s) enjoy significant market power (SMP) and to prove it. To achieve this, ARCEP performs a detailed analysis of the market which involves, in order, carrying out a public consultation, obtaining the opinion of the competition authority (*Conseil de la Concurrence*), and then notifying the European Commission of its analysis. The Commission has the power to veto a market definition if it is not part of the predefined list, as well as SMP operator designation, notably for the purpose of achieving Europe-wide harmonisation. In addition, as part of its market analysis the regulator must specify remedies, in other words the obligations that it plans to impose on SMP players. Here, from among the obligations listed in the Law<sup>2</sup>, the NRA must choose those that are the most appropriate to the competition issues revealed by the market analysis, and to ensure that they are proportionate to the regulatory objectives.

2 - Cf. CPCE Article L.38.

This logic involves a shift in the focus of regulation to wholesale markets. First, the NRA has powers that allow it to develop new regulatory mechanisms for wholesale markets. Then, once these mechanisms are in place and proven to be working effectively, retail market regulation becomes less justified and is relaxed, or even done away with altogether. Regulation therefore evolves: as competition increases, the list of remedies gets shorter. If the market becomes fully competitive, sector-specific regulation disappears and is replaced by common competition law whose application is the responsibility of the competition authority (*Conseil de la concurrence*). It is thus entirely natural that regulation imposed on a given market will change over time, according to national regulatory authorities' assessment of it.

The framework put into place in 2004 is more flexible as it allows the regulator to adapt regulation to the actual state of competition in a given market and, when suitable, to lift it. The Commission confirmed the relevance of this framework by adopting a new recommendation<sup>3</sup> in late 2007 which lists the markets that must be analysed. This new list is shorter than the previous one, taking into account the manner in which competition has developed in each of the markets that were identified in 2003.

3 - See below.

## 2. The new market analysis cycles

### 2.1 Mobile call termination

In March 2007, the Authority began a new cycle of analysis of the voice call termination market on individual mobile networks in Metropolitan France and French overseas markets, pursuant to the European Commission Recommendation of 11 July 2003 (former Market 16)<sup>4</sup>.

4 - See below.

At the outcome of the analysis, ARCEP qualified as relevant the wholesale voice call termination markets for each mobile operator's individual network in each of the geographical zones for which a mobile licence has been awarded (Metropolitan

France, Antilles-Guyana, Mayotte, Reunion, Saint-Pierre and Miquelon). Each mobile operator was also designated as enjoying significant market power (SMP) in the call termination market on its own network for a period of three years (2008-2010).

As a result, in October 2007, the Authority adopted two decisions:

- ◆ concerning the markets to be deemed relevant to voice call termination on French mobile networks in Metropolitan France; the designation of operators enjoying significant power in these markets and the ensuing obligations to which they will be subject in 2008-2010<sup>5</sup>;
- ◆ concerning the definition of relevant wholesale voice call termination markets on French mobile networks in the overseas départements and territories; the designation of operators enjoying significant power in these markets and the ensuing obligations to which they will be subject<sup>6</sup>.

*5 - ARCEP Decision  
No. 07-0810  
of 4 October 2007.*

*6 - ARCEP Decision  
No. 07-0811  
of 16 October 2007.*

## 2.2 Broadband and ultra-fast broadband

The first cycle of market analysis led the Authority to implement a broadband regulation mechanism that would be in effect until 1 May 2008.

In late 2007, the Authority thus launched a new cycle of analysis of both the broadband and ultra-fast broadband markets for 2008 to 2011. The principal change in this area is the implementation of regulation concerning France Telecom civil engineering infrastructure which, for alternative operators, constitutes infrastructure that is essential to the deployment of a fibre optic local loop so that they can supply end users with ultra-fast broadband services.

As concerns broadband, ARCEP has suggested maintaining existing regulations by and large, albeit adapting them to take account of previous and future changes in the market: enhancement of retail offers (notably with television services), better quality of service as demanded by consumers, extension of collection networks and the migration to Ethernet.

In its public consultation held in December 2007, the Authority thus proposed that analysis be devoted to the wholesale physical network infrastructure access market and the wholesale broadband market, pursuant to the new European Commission Recommendation of 17 December 2007 (Markets 4 and 5, respectively).

As concerns ultra-fast broadband, the Authority has indicated that a system should be put into place to ensure sharing of the last mile. This system would apply to all operators (symmetrical regulation) and not only those that have significant market power. It is therefore not covered by the ARCEP market analysis that pertains to asymmetrical regulation<sup>7</sup>.

The Authority will adopt its broadband and ultra-fast broadband market analysis decisions in 2008.

*7 - Cf. Part 1, Chapter 3, B.*

*8 - The Framework Directive includes the provision that the European Commission will re-examine on a regular basis the list of electronic communication product and services markets likely to be subject to ex ante regulation.*

## 3. 3. Markets defined by the new European recommendation

As provided for by the Framework Directive<sup>8</sup>, the European Commission adopted a new recommendation on relevant markets, which came into force on 17 December 2007. This is a relaxed version of the Recommendation of 13 July 2003, which takes account of changes in the state of competition in telecommunications markets in the European Union.

9 - Cf. Part 4, Chapter 5, D.

The Recommendation of 17 December 2007 also takes account of: the European Regulation of June 2006 concerning the international roaming market<sup>9</sup> (former Market 17), the development of competition in retail markets (removal of former Markets 3 to 7) and the transit services market and wholesale trunk segments of leased lines (former Markets 10 and 14). Also removed from the list are access and call origination on public mobile telephone networks (former Market 15) and broadcasting transmission services (former Market 18).

Furthermore, an explanatory memorandum associated with the directive describes the principles that a national regulatory authority (NRA) must apply when performing its analysis of markets, whether they are listed in the recommendation or not. It specifies that a market can be regulated *ex-ante* if it meets all three of these criteria:

- ◆ the presence of barriers to market entry and to the development of competition;
- ◆ lack of prospects for a shift towards effective competition;
- ◆ the inefficiency of existing competition laws.

Of the 18 markets listed in the Recommendation of 2003, seven continue to be relevant for analysis by national NRAs in view of potential *ex-ante* regulation:

- 1- access to the public telephone network at a fixed location for residential and non-residential customers (combination of former Markets 1 and 2);
- 2- call origination on the public telephone network provided at a fixed location (former Market 8);
- 3- call termination on individual public telephone networks provided at a fixed location (former Market 9);
- 4- wholesale unbundled access to physical network infrastructure (including full unbundling and shared access) for the purpose of providing broadband and/or voice services at a fixed location (former Market 11 expanded);
- 5- wholesale broadband, or bitstream, access (former Market 12);
- 6- wholesale terminating segments of leased lines (former Market 13);
- 7- voice call termination on individual mobile networks (former Market 16).

The Authority supports the Commission's decision to:

- ◆ maintain a retail fixed telephony access market (new Market 1);
- ◆ expand former Market 11 (the new Market 4) to include access to passive infrastructure such as ducts, which are essential to stimulating facilities-based competition at a time when new fibre-to-the-home (FTTH) access networks are beginning to develop.

It nevertheless regrets that, without creating an additional market, the mobile call termination market was not explicitly expanded to include SMS call termination, as both products are offered by the same players and subject to the same competition constraints.

## B. Broadband markets

### 1. Retail market

Although the retail market is not regulated, its momentum is affected by wholesale market regulation, and particularly the Authority's implementation of unbundling in 2002

The broadband retail market was still enjoying a healthy momentum in 2007, reporting 22% growth during the year (+2.85 million subscribers).

As of 31 December 2007, there were 15.5 millions broadband connections in France, of which 14.8 million via DSL and close to 0.7 million via cable<sup>10</sup>. DSL thus remains by far and away the dominant access technology, accounting for 95% of broadband connections.

*10 - Source: ARCEP  
Broadband Observatory,  
figures as of  
31 December 2007,  
available at [www.arcep.fr](http://www.arcep.fr).*

The success of DSL can be attributed to an exceptional rate of national coverage – 98.2% of the population at the end of 2007, compared to around 40% for cable – and to the dynamic development of DSL market competition, fuelled by local loop unbundling. The state of competition that exists in this market is the direct result of the state of upstream wholesale markets, and particularly of wholesale LLU and broadband access delivered at the regional level, a.k.a. bitstream offers.

#### 1.1 Sector consolidation

The profile of the players involved in the broadband value chain has evolved over the past few years.

Since 2005 the broadband Internet sector has been undergoing a massive consolidation, characterised by takeovers and merger-acquisitions between France Telecom's rival operators. Two of the most outstanding events of 2005 were the mergers of Tiscali and Telecom Italia France, and of Neuf Télécom and Cegetel.

This market concentration continued throughout 2006: Neuf Cegetel took control of AOL's Internet Access business and of Club-Internet (T-Online France) and, in 2007, Altice took over Completel with a view to merging operations with those of Numéricâble, of which it is a shareholder.

A similar trend has taken hold in the cable market: since July 2006, the Ypso holding company (owned by Cinven, Altice and Carlyle) have controlled virtually all cable networks in France (ex-UPC, ex-Noos, ex-France Telecom Cable, ex-NC Numericable), consolidated under the Numericable brand.

In addition to this consolidation trend, two new types of player have recently entered the broadband market:

- ◆ **retailers**, relying on partnerships with operators. Consumer electronics retail chain, Darty, joined forces with Completel to market bundled offers for residential customers, which have been available since 31 October 2006. The Phone House was offering residential ADSL services in partnership with Telecom Italia France, up to the first half of 2007;
- ◆ **mobile operators**, marketing fixed-mobile convergence solutions. The European Commission's approval of the SFR takeover of Tele2 France's fixed telephony and Internet access business allowed the mobile operator to roll

*11 - These offers are based on the Tele2 network and on wholesale offers provided by its subsidiary, Neuf Cegetel.*

out convergence offers<sup>11</sup>. In a similar vein, Bouygues Telecom negotiated the purchase of a portion of the T-Online France infrastructure from Neuf Cegetel, combined with a commercial wholesale offer. France's third largest mobile operator is planning on introducing residential fixed-mobile convergence offers in 2008.

## 1.2 Success of bundled offers

### 1.2.1 Developing offers

Over the past few years, triple play bundles have become standard fare in the broadband access market. Virtually all ISPs now market a selection of service bundles which include:

- ◆ the highest available speed of Internet access, thanks in large part to the growing use of ADSL2+ (25 Mbps);
- ◆ IP telephony, which allows customers to do away with their phone subscription with France Telecom and enjoy free calls to over 40 international destinations;
- ◆ access to television services (TV channels and video on-demand)<sup>12</sup>;
- ◆ 40% of French households<sup>13</sup> currently have access to TV over IP services, primarily over an ADSL connection. The length of the copper pair allows two thirds of households to receive TV over ADSL, although the offer still remains confined to unbundled zones only.

*12 - Subject to eligibility, in other words provided that available bitrates – which are generally determined by the customer's distance from the distribution frame – permit.*

*13 - ARCEP estimate.*

The television services offered by ISPs generally include:

- ◆ access to a basic package distributed by the ISP and including several dozen channels. It is generally included in subscribers' monthly subscriptions, at no additional charge;
- ◆ access to optional pay-TV channels (either individually or in packages), distributed directly by the ISP;
- ◆ access to one or several pay-TV packages distributed by third parties (e.g. Canal+ or AB);
- ◆ video on-demand (VOD) offers.

For each of these television services, ISPs may also offer customers high-definition programmes, in other words with a picture quality that is three to four times that of DVD quality. Some ISPs also offer customers the ability to watch certain channels on both their computer and TV screens ("multi-set" service)

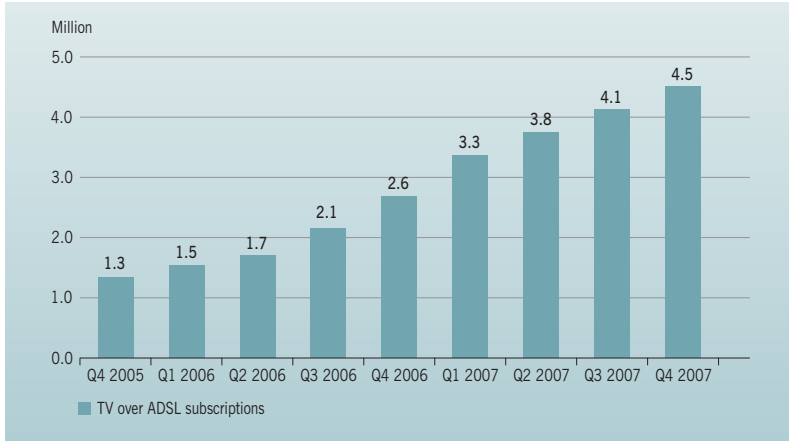
In 2007, triple play bundles were further enhanced with these new services:

- ◆ unlimited legal music downloads. Examples include the offer from Neuf Cegetel which has an agreement with Universal to market a selection of titles, and the Alice offer, in partnership with EMI;
- ◆ the first fixed-mobile convergence offers, generally combining a mobile and a broadband subscription, with cases in point that include the Unik offer from Orange, the Twin offer from Neuf Cegetel and SFR's Home Zone service. Other operators – Free, Numericable and Bouygues Telecom – have announced plans to introduce similar offers.

### 1.2.2 Growing interest in receiving content over ADSL

The number of consumers subscribing to a TV over ADSL service continues to rise, with ADSL now being the chief driving force behind the growth in pay-TV distribution.

#### Internet and TV over ADSL subscriptions



Source: ARCEP – Market Observatory.

Video on-demand (VOD) has also made considerable strides, offering viewers the ability to watch television programmes directly through an “IP box”.

According to GfK and NPA Conseil, the VOD market in France grew by 25.4% in the third quarter of 2007. In the first nine months of the year, 5.8 million programmes (67% of films) were viewed in VOD mode, which corresponds to turnover of €19.9 million.

The relationship between operators, distributors and copyright holders could nevertheless be improved:

- ◆ the most popular specialty channels are not included in the offers that are distributed directly by DSL operators;
- ◆ the average revenue per user (ARPU) generated by content is below €3 a month for DSL operators, whereas total household spending on multimedia services is ten times that (€30 a month, on average, for a subscription to a triple play bundle);
- ◆ ISPs' VOD catalogues are limited to around one hundred titles, and prices are often higher than the cost of renting a DVD.

Reworking the current models that govern relations between content suppliers and network operators appears a necessary step to furthering the development of ultra-fast broadband, and one that will benefit all parties, particularly consumers.

## 2. Regulation of broadband wholesale markets

In France, broadband regulation concerns only wholesale markets, as the retail market – which is sufficiently competitive – is not regulated.

### 2.1 Wholesale broadband offers

France Telecom offers alternative operators and ISPs several wholesale solutions based on xDSL technologies that allow them to access the incumbent's network at different levels, and to design their own offers.

Alternative operators can therefore:

- ◆ access the local loop directly via unbundling;
- ◆ subscribe to a bitstream offering (i.e. a wholesale offering activated and delivered at either the, regional or departmental level);
- ◆ subscribe to a wholesale broadband access service at the national level, delivering broadband traffic to a single point nationwide.

#### 2.1.1 Local loop unbundling

Unbundled access is a France Telecom wholesale offer that allows alternative operators to gain direct access to the copper pair. To benefit, alternative operators must install their own equipment in the incumbent carrier's premises, at the MDF level and, naturally, must remunerate France Telecom for use of its local network.

There are two types of unbundling:

- ◆ full unbundling, or fully unbundled access to the local loop, which involves making all of the copper pair frequencies available to third parties. The end user is thus no longer connected to the France Telecom network, but rather to the new entrant operator's;
- ◆ shared access, or partially unbundled access to the local loop, which consists of making the "high" frequency bands of the copper pair available to the alternative operator, on which the latter can then build an ADSL service, for instance. The low frequency band (the one used traditionally for telephony) continues to be managed by France Telecom, which continues to supply subscribers with its telephone services, without any effect on the service being caused by the unbundling.

#### 2.1.2 Bitstream offers, delivered at the sub-national level

Bitstream can be delivered in IP or ATM mode, and allows alternative operators to collect Internet traffic at various regional points on the France Telecom network (17 IP points and 40 to 95 ATM points) and then use their own complementary transport infrastructure.

Alternative operators can use bitstream offerings to serve subscribers on any France Telecom exchange equipped with DSL. In practice, this means that the population covered by regional offerings is identical to the population covered by France Telecom's retail DSL offerings, which was over 98% at the end of 2007.

Even though other alternative operators market offers based on unbundled access that compete with France Telecom's wholesale bitstream offerings, only France Telecom is subject to regulation in this market as it enjoys SMP (significant market power).



From a regulatory standpoint, the provisions<sup>14</sup> applied are similar to those that govern unbundling, in particular the obligation for France Telecom to publish a reference offer<sup>15</sup>. The bitstream offers that France Telecom supplies are broken down into:

- ◆ *DSL Access*, an access offering for the residential market, which allows users with a PSTN subscription to be connected to a France Telecom DSLAM by means of DSL technologies;
- ◆ *DSL Access Only*, also a residential market access offering that allows users who do not have a PSTN subscription to connect to a France Telecom DSLAM by means of DSL technologies (this offer has been available in the wholesale market since 17 July 2006);
- ◆ *DSL Collect ATM*, a collection offering for the residential market which allows the client operator to take delivery of ATM broadband streams at the regional level, and *DSL Collect IP*, a residential market collection offering which allows the client operator to take delivery of IP broadband streams at the regional level;
- ◆ *DSL Entreprises*, an access and collection offering for the business market, which allows delivery of ATM broadband streams to be taken at the regional level. This offering is used by operators to serve the business market and, thanks to SDSL technology, allows them to offer their customers guaranteed and symmetrical bitrates.

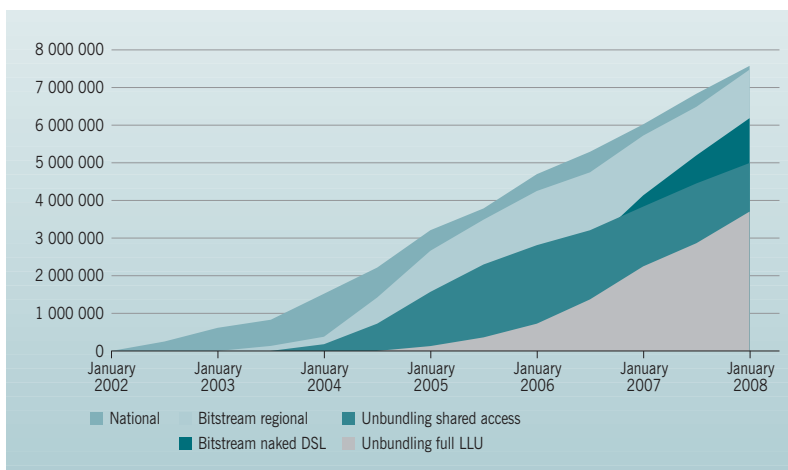
**14 - ARCEP Decisions**  
No. 05-0278 and  
No. 05-0280  
of 19 May 2005.

**15 - Available on the**  
France Telecom website.

## 2.2 Status of wholesale offers

For more than two years, full unbundling has been the main source of increase in the use of wholesale offers acquired from France Telecom. **The number of fully unbundled connections rose by 70% in 2007.**

### Growth of the base of wholesale offers purchased from France Telecom



These figures reveal the growing propensity among households to choose a single operator for all of their fixed services (including phone subscription). Thanks to the availability of wholesale line creation offers, this option is now open to residential users as soon as they move into a new residence.

2.2.1 The challenge of expanding unbundling nationwide

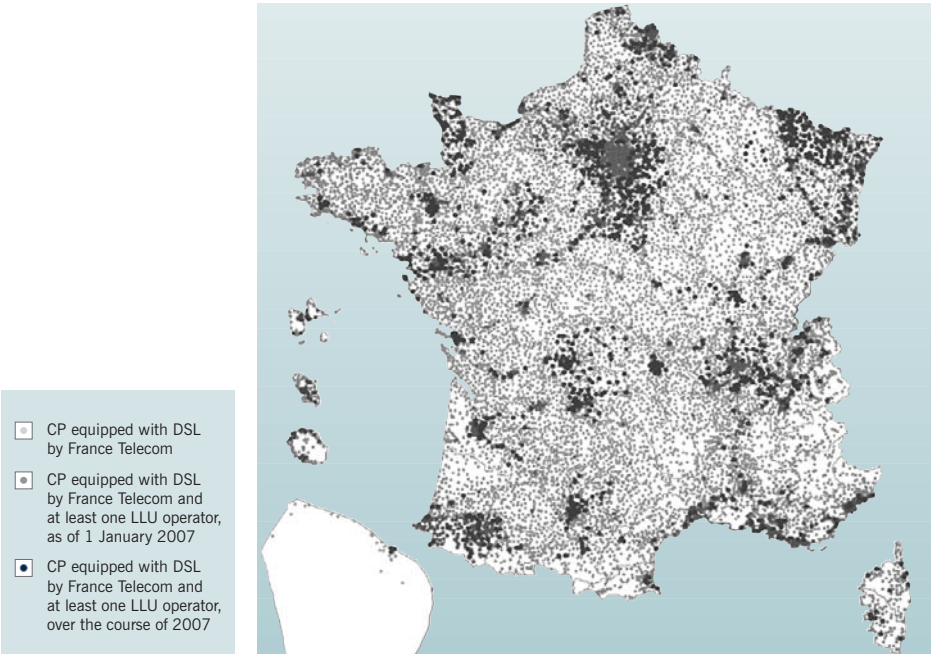
As of 31 December 2007, France Telecom had equipped all 12,915 subscriber connection points in France with DSL: **100% of phone lines are now connected to the incumbent carrier's broadband network**. Some lines cannot deliver high-speed DSL services, however, as the length of the line causes excessive signal attenuation. **This means that, currently, the actual rate of coverage of France Telecom broadband offers is thus slightly over 98%.**

To expand the geographical coverage of broadband, France Telecom has built new subscriber connection points:

- ◆ broadband subscriber connection points (CP), referred to as NRA-HD (*Noeud de raccordement d'abonnés haut débit*), which make it possible to deliver higher speeds, particularly in residential neighbourhoods and outlying business centres;
- ◆ dead zone subscriber connection points, referred to as NRA-ZO (*Noeud de raccordement d'abonnés Zone d'Ombre*), which make it possible to cover broadband dead zones by bringing DSL equipment closer to end users.

At the end of 2007, 2,956 exchanges were unbundled, thus allowing alternative operators to connect 68% of the population. During the year, 1,167 exchanges were “unbundled”, which corresponds to coverage for an additional 2.7 million households and enterprises.

**DSL broadband coverage in France by France Telecom and unbundling operators, over the course of 2007 and as of 31 December 2007**



Extending broadband coverage across the country is central to furthering the development of competition. The Authority devoted a considerable portion of its efforts to this topic in 2007, particularly in the work performed with local authorities<sup>16</sup> and in its approach to the France Telecom optical fibre link (LFO) offer.

16 - Cf. Part 4, Chapter 6.

### 2.2.2 Impact of unbundling on broadband development

In the account of the work performed by the public-initiative networks committee, CRIP<sup>17</sup>, (*Comité des réseaux d'initiative publique*) published on 19 March 2007<sup>18</sup>, the Authority presented an analysis of the economic impact that unbundling has on broadband penetration. It consisted of measuring the correlation between LLU and the penetration rate in the zone in question, then of correcting the data based on a set of variables (e.g. average household income, the presence of waterways, etc.).

This analysis reveals that unbundling has contributed directly to the increase in broadband penetration in France, and so proving that competition stimulates investment and market development.

### 2.2.3 Naked ASDL to complete full unbundling

Two France Telecom wholesale offers now enable alternative operators to offer their customers the option of doing away with their subscription to the classic PSTN:

- ◆ full unbundling in zones unbundled by France Telecom;
- ◆ the “Access Only” DSL offer, also called naked ASDL, which has been available in non-unbundled zones since the second half of 2006.

These offers are currently sustaining the market's growth, and gradually replacing the wholesale offers that require customers to keep a distinct telephone subscription with France Telecom (shared access and the “DSL Access” offer). In the wholesale market, 4.6 million connections were purchased from France Telecom in three years, of which 3.5 million without a subscription to a telephone service.

### 2.3 Guiding principles of broadband regulation

Generally speaking, an alternative operator has access to several levels of wholesale offering. For an alternative operator, the cost of deploying its own network is made even more costly by having to connect to the last mile of the France Telecom network. In the case of unbundling in particular, even though it provides greater independence from France Telecom, it still requires significant investments on the part of alternative carriers. This means that unbundling can only be a profitable venture on MDFs to which the largest number of potential customers are connected or which provide the greatest economies of scale. As a result, extending unbundling geographically has its economic limitations: a complementary solution is needed in the rest of the country, where operators generally prefer to employ bitstream offers.

It is the Authority's view that unbundling is the wholesale offer that enables the most lasting development of competition, and which provides client operators with the greatest degree of technical and economic independence from France Telecom. Over time, the development of competition via unbundling helps bring down prices in a lasting fashion and stimulates an innovation momentum that is beneficial to consumers.

In terms of the obligations to which France Telecom is subject, this objective translates into greater regulation of the upper portion of the broadband market

17 - Cf. Part 4, Chapter 6.

18 - Available on the ARCEP website: [www.arcep.fr](http://www.arcep.fr).



value chain (i.e. in the unbundling market) and more relaxed regulation as we move towards the retail end of the market which, itself, is not regulated.

## 2.4 Market analysis

In 2005, the Authority adopted four market analysis decisions, setting the framework for *ex ante* regulation of broadband markets. This market analysis is in effect until May 2008.

It defines the relevant broadband markets as follows:

- ◆ the unbundling market is independent of the type of unbundling used (shared access or full unbundling, at the local loop or sub-loop level);
- ◆ the bitstream market is independent of the type of end customer being targeted (residential or business) and of the delivery interface used (notably ATM or IP).

These two markets were defined throughout the national territory (with the exception of Saint-Pierre and Miquelon) and solely for DSL access technologies (cable is thus excluded).

The ARCEP market analysis also concluded that France Telecom enjoys significant power in both of these markets, notably in terms of its market share and because of the nature of its infrastructure which is difficult to duplicate. As the SMP operator, the incumbent carrier is subject to several obligations, which include the obligation to:

- ◆ grant reasonable requests for access under non-discriminatory conditions;
- ◆ publish a set of indicators (QoS indicators, etc.) and other information, including a reference offer that the Authority has the power to modify;

19 - See below. ◆ comply with transparency and accounting separation obligations<sup>19</sup>.

As concerns France Telecom wholesale offers tariffs, unbundling tariffs must reflect the cost of providing the service. Pursuant to bitstream market regulation, tariff obligations incumbent on France Telecom aim to provide a geographical complement to unbundling without competing with it directly. More specifically, bitstream tariffs must be:

- ◆ sufficiently low to guarantee dynamic competition in the retail market;
- ◆ but sufficiently high so that it is not economically appealing for an alternative operator to subscribe to a wholesale bitstream offer in a zone where unbundling is due to expand.

20 - ARCEP Decision  
No. 07-0089  
of 30 January 2007.

21 - ARCEP Decision  
No. 05-0281  
of 28 July 2005.

Furthermore, in early 2007, the Authority lifted<sup>20</sup>, the *ex ante* regulatory provision that it had defined for broadband market offers activated and delivered at the national level<sup>21</sup>. ARCEP determined that the three conditions that justified market regulation (i.e. existence of high and permanent entry barriers, lack of prospects for a shift towards effective competition and the inability of competition law to remedy market failures single-handedly) no longer existed.

As the decisions governing broadband market regulation are due to expire in May 2008, the Authority launched a new cycle of analysis in December 2007. This new

ARCEP market analysis will cover the period from 2008 to 2011 and will concern both broadband and ultra-fast broadband<sup>22</sup>.

22 - See below.

## 2.5 Operational and technical regulation of wholesale broadband offers

### 2.5.1 Multilateral working groups

In 2007, the Authority altered the scope of the issues addressed by multilateral meetings devoted to broadband, as a result of which two new working groups were formed:

- ◆ the Order-processing and residential bitstream group (*Processus de commande dégroupage et "bitstream" résidentiel*) which focuses on all of the issues pertaining to unbundling and residential bitstream;
- ◆ the Enterprise DSL and capacity services group (*DSL professionnel et Services de capacité*), which is responsible for examining the issues pertaining to wholesale offers aimed at the enterprise market – “*DSL Entreprises*”, wholesale Ethernet (*CE20*) and leased capacity (*LA/LPT*) – as well as business market unbundling issues.

The scope of the work performed by these groups includes operational and technical implementation issues as well as the new features of the reference offers. These groups are discussion forums devoted to finding consensual and pragmatic solutions to the problems identified by alternative operators. They also provide France Telecom with the opportunity to present the changes and improvements made to its reference offers.

Among the topics addressed by these working groups in 2007, of particular note were:

- ◆ the relaxation of operational restrictions on line creation and setting appointments with end users;
- ◆ adapting processes to new outstanding issues (implementation of dead zone connection points (NRA-ZO), MDF saturation, local authority involvement);
- ◆ adapting production resources and monitoring mechanisms to reduce instances of slamming and increasing the quality of service for end users;
- ◆ quantitative analysis of the problems encountered with after-sales services and service restoration, which led to the implementation of dedicated trials on the issue, to improve the quality of the service delivered to end users;
- ◆ in the enterprise market, improvements to the ordering process along with trials and implementation of flat-rate pricing for MDF upgrades;
- ◆ more generally, achieving increasing uniformity of the France Telecom DSL access and collection (*Accès et collecte DSL*) and unbundling offers.

### 2.5.2 Line creation

The principle of providing wholesale line creation offers is to allow alternative operators to market, as France Telecom does, services to customers who do not have a telephone line – because they have just moved into a new home, for instance. This can include any wholesale offer that involves the whole of the copper pair, full unbundling, naked DSL or wholesale line rental (VGAST).

In 2007, the Order-processing and residential bitstream group (*Processus de commande dégroupage et "bitstream" résidentiel*) continued its work on implementing efficient line creation processes, including the implementation of a system that allows alternative operators to make appointments between their customers and a France Telecom technician in as short a time as possible, and ensure that the appointment is kept.

Efforts are currently being devoted to the various causes of delays, and their impact on alternative operators' service set-up times and customer relations.

These efforts will be made concrete in 2008 with the implementation of a system that allows alternative operators to manage all customer relations directly, and particularly to set up line creation appointments, based on information supplied by France Telecom (technicians' appointment schedule, for instance)

### 2.5.3 Broadband order process and slamming

#### Ordering a broadband connection

When customers want to subscribe to a LLU subscription, they mandate their selected operator to order the unbundling of their line from France Telecom. Previously, France Telecom would check all mandates systematically beforehand, but it soon became apparent that this process was incompatible with a large volume of orders. It has thus switched to a principle of post-order verification, on a case by case basis.

#### Designation number: a necessary ordering tool

When an alternative operator wants to order an unbundled line for one of its customers, it must get information from the customer that allows it to obtain the line designation number contained in the France Telecom database.

This information is the designation number (DN). Under the old public monopoly, France Telecom had the same designation for a copper pair (which existed because it satisfied a request for phone service) and the phone number of the telephone service it delivered (or had delivered). France Telecom still uses the same system as the work needed to dissociate line designations and numbers would have required a massive overhaul of the incumbent's information system.

Nevertheless, there are two processes which make it difficult for this system to operate properly in a competitive environment:

- ◆ geographic number retention: France Telecom subscribers can keep the same number when moving inside the same geographical zone;
- ◆ the arrival of copper pairs not used for any analogue phone service since they are fully unbundled.

#### Overriding

When a customer who already subscribes to one or several fixed services (telephone, Internet access, etc.) subscribes to a new service provider, establishing this new service can, in some cases, override the service to which the customer already subscribes.

For instance, when residential customers sign up for a full unbundling offer with a service provider, they mandate their new provider to order the cancellation of all existing services that had been delivered up until then via their telephone line,

notably their telephone subscription and their broadband access: the implementation of full unbundling on their line will “override” these services, when applicable.

To guarantee efficient competition, the Authority has opted for a principle whereby any broadband connection can be overridden by an order for shared access, and where any access to the full pair can be overridden by a full unbundling order.

## 2.6 Creation and use of cost models

The Authority is in the process of implementing tariff obligations imposed on France Telecom for its bitstream offers, based on cost models published by ARCEP to provide market players with some insight into the decisions that it is likely to take.

In 2004, the Authority, in cooperation with France Telecom and LLU operators, developed a cost model for unbundled access. The model allows the monthly cost of unbundled access to be evaluated, for an alternative operator, according to the size of the exchange involved. It thereby provides an overall view of the principal services that make up the France Telecom reference offer for unbundled access.

On 30 January 2007, the Authority submitted to public consultation a regulatory cost model for collection networks that makes it possible to calculate an alternative operator’s monthly collection cost per unbundled subscriber.

Among other things, these regulatory models enable an estimation of the economic leeway that operators have between unbundling and France Telecom bitstream tariffs. The Authority can thus rely on these models to ensure that the incumbent carrier is not charging excessive prices for its bitstream offer, compared to unbundling.

## 2.7 Settling the dispute between Free and France Telecom

Internet service provider Free felt that the regional IP collection tariff planned for the incumbent carrier’s DSL access and collection reference offer (Accès et collecte DSL) was too high, given the obligations to which France Telecom was subject. As a result, it petitioned ARCEP to resolve its complaint against France Telecom in February 2007.

In accordance with its regulatory obligations<sup>23</sup>, France Telecom is indeed required to offer cost-oriented tariffs for its services in this market, provided these tariffs do not create a price squeeze for unbundling.

**23 - ARCEP Decision**  
No. 05-0280  
of 19 May 2005.

The Authority thus performed a dual analysis: of IP collection services tariffs, to assess France Telecom costs, and of the collection costs paid by an alternative operator using unbundling.

These analyses led to a change in the tariff structure and levels applied to the IP collection offer – which are now €3.9 per connection, per month, and €75.1 per Mbps, per month – and which replace the old pricing practice which was entirely proportionate to bitrate.



## Changes made to the France Telecom unbundling and bitstream reference offers

In 2007, France Telecom made changes to its reference offers on several occasions.

Changes were made to several services included in the “Unbundling” reference offer, notably with respect to prices:

- ◆ new tariff for accessing unbundled exchanges (badges): €1,050/month for a maximum 50 badges (compared to €1,500 €/month for 10 badges and €500/month for each additional set of 10 badges);
- ◆ implementation of flat rate local loop upgrade services for single pair and multi-pair access;
- ◆ implementation of a process for alleviating saturation in exchanges by upgrading, on a pro-rated basis, all operators' tie cables (including Orange);
- ◆ flat rate pricing for civil engineering work to upgrade MDF, in the case of remote sites.

France Telecom also made changes to its DSL access and collection (i.e. bitstream) offer, by implementing:

- ◆ a decrease in recurring monthly DSL Access tariffs from €13.3 to €12.9 and in DSL Access Only tariffs from €21.5 to €20 starting on 1 January 2008;
- ◆ a decrease in the fee for accessing the DSL Access Only service from €66 to €54 for new connections and from €24 to €17 for customers switching operators, starting on 15 September 2007;
- ◆ extension of the four-hour response time, 24/7, for DSL Entreprises customers in the overseas départements since 1 April 2007;
- ◆ changes to regional IP collection tariffs which are now €3.9 per connection, per month, and €75.1 per Mbps a month, as of 1 November 2007.

## C. Mobiles

### 1. Mobile call termination

#### 1.1 The second cycle of market analysis

##### 1.1.1 Establishing market scope and designating SMP operators

Voice call termination is an interconnection service offered by each mobile operator to all other operators, fixed and mobile. It is the bottleneck through which every call for a mobile customer must pass, whether the call is fixed-to-mobile or mobile-to-mobile.



In accordance with the European Commission's Recommendation of 11 February 2003<sup>24</sup>, the Authority renewed its analysis of the market for mobile voice call termination in Metropolitan France and the overseas territories. In the process, ARCEP qualified as relevant the wholesale market for voice call termination on each individual mobile operator's network in each of these markets, which are segmented geographically by licence area (Metropolitan France, Antilles-Guyana, Mayotte, Reunion, and Saint-Pierre and Miquelon)<sup>25</sup>. The Authority has also declared that each mobile operator enjoys significant power in the market for call termination on its own network, for a period of three years (2008-2011).

The analysis performed by ARCEP identified four types of competition problems which justify maintaining existing obligations:

- ◆ without regulation, mobile operators will tend to increase their call termination tariffs and are not subject to any pressure to decrease them;
- ◆ the main consequence of the way in which voice call termination has been structured historically – born of a practice of financing mobile networks with fixed-to-mobile calls in a bill-and-keep situation – is that mobile voice call termination prices are well above those charged for fixed call termination, reaching structurally high absolute levels. These high wholesale tariffs translate into high retail market prices for fixed-to-mobile calls, which creates a risk of affecting consumer choices and, ultimately, of shifting value between fixed and mobile consumers;
- ◆ if a mobile operator charges call termination prices that are significantly higher than its competitors' – which could occur if the operator is not subject to call termination market regulation, whereas its competitors' are – it will enjoy a competitive advantage. The mobile operator would thus be able to earn substantial interconnection revenue from its competitors, thanks to which it can then charge lower retail prices and so increase its market share. This is why the Authority intends regulating all operators with commercial operations in this market;
- ◆ the on-net/off-net distinction practiced by mobile operators — and which constitutes a general trend in today's market – has an impact on competition. This practice is presented in the form of high-volume, or unmetered on-net calling offers, which allow customers subscribing to the same operator to call one another for a flat monthly rate, regardless of the number or length of the calls. From a competition perspective, however, it is the Authority's view that differentiating on-net and off-net prices has the effect of favouring calls between same-operator customers, to the detriment of inter-operator calls, and so giving a *de facto* advantage to the operator with the largest customer base. This is all the more true when the offer applies to calls to a maximum number of a customer's correspondents. Furthermore, the impact of this differentiation will be all the more significant when call termination tariffs are not cost-oriented.

*24 - The new European Commission recommendation came into effect on 17 December 2007, after which the Authority performed a new analysis of the market for mobile call termination.*

*25 - ARCEP Decision No. 07-0810 of 4 October 2007 and ARCEP Decision No. 07-0811 of 16 October 2007.*

1.1.2 Obligations in Metropolitan France

26 - ARCEP Decision  
No. 07-0810  
of 4 October 2007.

In Metropolitan France, the Authority has imposed the following obligations on the three mobile operators<sup>26</sup>:

- ◆ the obligation to grant all reasonable requests for access and interconnection services relating to voice call termination;
- ◆ the obligation to provide voice call termination services under non-discriminatory conditions;
- ◆ the obligation to provide voice call termination services under transparent conditions;
- ◆ the obligation to apply a rate structure to these voice call services reflective of the service rendered (the structure cannot contain an indivisible time period);
- ◆ the obligation to publish a reference offer for voice call termination;
- ◆ the obligation to maintain accounting separation and perform cost accounting.

In addition, ARCEP has imposed a tariff control obligation on operators, requiring their tariffs to reflect the cost of providing the mobile call termination service.

Ceiling tariffs

As part of its second round of market analysis, the Authority set the ceiling tariffs for the period running from January 2008 to June 2009. It will set the ceiling tariffs for the period running from July 2009 to December 2010 at a later time.

Tariff ceiling set by the Authority (eurocents/min, excl. VAT)

Units	2005*	2006*	2007**	2008 - mid-2009
Orange / SFR	12.50	9.50	7.50	6.50
Bouygues Telecom	14.79	11.24	9.24	8.50

Sources: ARCEP.  
\* Tariff ceiling set by the Authority in December 2004.  
\*\* Tariff ceiling set by the Authority in September 2006.

1.1.3 Obligations in overseas markets

27 - ARCEP Decision  
No. 07-0811  
of 16 October 2007.

The Authority has imposed the following obligations on operators in the overseas territories and départements<sup>27</sup>:

- ◆ the obligation to grant all reasonable requests for access and interconnection services relating to voice call termination;
- ◆ the obligation to provide voice call termination services under non-discriminatory conditions;
- ◆ the obligation to provide voice call termination services under transparent conditions;
- ◆ the obligation to apply a rate structure to these voice call services reflective of the service rendered (the structure cannot contain an indivisible time period).

Furthermore, ARCEP has required that Orange Caraïbe and SRR maintain accounting separation and perform cost accounting, and charge cost-oriented mobile-call-termination tariffs.

As a result of its second round of market analysis, the tariff ceilings up to 2009 set by the Authority correspond to a decrease of close to 33% over two years.

**Tariff ceiling set by the Authority (eurocents/min, excl. VAT)**

Unités	April to december 2005	2006	2007	2008	2009
Orange / Caraïbe	20.56	16.44	13.16	11.0	8.7
SFR	19.65	15.72	12.57	10.5	8.5

Sources: ARCEP.

The other smaller operators (Digicel – ex Bouygues Telecom Caraïbe – Dauphin Telecom, Saint-Martin Mobile in the Antilles-Guyana region; Orange Réunion in Reunion, and SPM Telecom in Saint Pierre and Miquelon) are subject to an obligation not to charge excessive prices. The Authority nevertheless specified its definition of non-excessive.

**Call termination tariffs for “small” operators in the overseas départements and territories for 2008 and 2009**

**Digicel**

- ◆ starting on 1 January 2008, the maximum call termination price charged by Digicel will not exceed 16 eurocents/minute and the annual price of a primary digital block (BPN: bloc primaire numérique) will not exceed €3,800.
- ◆ starting on 1 January 2009, the maximum call termination price charged by Digicel will not exceed 12.2 eurocents/minute and the annual price of a primary digital block not exceed €3,600.

**Orange Réunion**

- ◆ starting on 1 January 2008, the maximum call termination price charged by Orange Réunion will not exceed 13 eurocents/minute and the annual price of a primary digital block will not exceed €5,000.
- ◆ starting on 1 January 2009, the maximum call termination price charged by Orange Réunion will not exceed 11 eurocents/minute and the annual price of a primary digital block will not exceed €4,200.

**Outremer Télécom**

**In Guyana :**

- ◆ starting on 1 January 2008, the maximum call termination price charged by Outremer Télécom will not exceed 19.2 eurocents/minute.
- ◆ starting on 1 January 2009, the maximum call termination price charged by Outremer Télécom will not exceed 13.7 eurocents/minute.

**In Martinique and Guadeloupe :**

- ◆ starting on 1 January 2008, the maximum call termination price charged by Outremer Télécom will not exceed 22.9 eurocents/minute.
- ◆ starting on 1 January 2009, the maximum call termination price charged by Outremer Télécom will not exceed 15.7 eurocents/minute.

**In Reunion and Mayotte :**

- ◆ starting on 1 January 2008, the maximum call termination price charged by Outremer Télécom will not exceed 27.2 eurocents/minute.
- ◆ starting on 1 January 2009, the maximum call termination price charged by Outremer Télécom will not exceed 17.5 eurocents/minute.

**Dauphin Télécom**

- ◆ starting on 1 January 2008, the maximum call termination price charged by Dauphin Télécom will not exceed 24.9 eurocents/minute.
- ◆ starting on 1 January 2009, the maximum call termination price charged by Dauphin Télécom will not exceed 16.7 eurocents/minute.

**UTS Caraïbe**

- ◆ starting on 1 January 2008, the maximum call termination price charged by UTS Caraïbes will not exceed 25.9 eurocents/minute.
- ◆ starting on 1 January 2009, the maximum call termination price charged by UTS Caraïbes will not exceed 17.7 eurocents/minute.

**1.1.4 Implementing obligations****1.1.4.1 Reference offers**

**28 - ARCEP Decision**  
No. 07-0810  
of 4 October 2007 and  
ARCEP Decision  
No. 07-0811  
of 16 October 2007.

In accordance with their obligations<sup>28</sup>, the operators have published reference offers for voice call termination, interconnection and access on their respective websites, and which include all of the changes that have come into effect in 2008. It should nevertheless be remembered that the publication of a reference offer does not automatically equal ARCEP's approval.

**1.1.4.2 Accounting obligations****Regulatory framework for cost accounting**

In 2007, the Authority completed the regulatory framework governing cost accounting practices for operators in Metropolitan France by introducing provisions relating to text messaging (SMS).

**29 - ARCEP Decision**  
No. 07-0128  
of 5 April 2007.

It thus adopted a decision<sup>29</sup> that specifies the methods for applying the obligation to perform accounting separation and cost accounting, and requires that the operators concerned submit three separate accounts:

- ◆ a specific account for voice services, comprising the historic cost of voice services, including the cost of mobile voice call termination;
- ◆ a specific account for SMS services, comprising the historic cost of SMS services, including the cost of SMS call termination;
- ◆ a specific account called "*compte de bouclage*", comprising the historic cost of services other than voice, which enables ARCEP to evaluate the completeness of the costs.

For operators in the overseas départements and territories, the Authority adopted another decision<sup>30</sup> which requires them to submit two separate accounts:

**30 - ARCEP Decision**  
No. 07-0129 of 5 April 2007.

- ◆ a specific account for voice services, comprising the historic cost of voice services, including the cost of mobile voice call termination;
- ◆ a specific account called “compte de bouclage”, comprising the historic cost of services other than voice, which enables ARCEP to evaluate the completeness of the costs.

These two decisions came into effect in 2007, and apply to the submission of regulatory accounts for fiscal 2006.

#### Audit of 2006 accounts

Following the regulatory account audits for fiscal year 2006 which were performed in 2007, the Authority published attestations of conformity for the statements of accounts and income from each of the three mobile operators in Metropolitan France, delivered by the accounting firm appointed by ARCEP<sup>31</sup>. The goal of these audits is to obtain reliable accounting information which is consistent across the three operators, so that it may be taken into account when setting call termination tariffs. The reliability of this accounting information is further ensured by ARCEP's appointment of a single auditor for all three mobile operators.

**31 - ARCEP Decisions**  
No. 07-1155,  
No. 07-1156,  
No. 07-1157,  
No. 07-1158 and  
No. 07-1159, concerning  
Orange France, SFR,  
Bouygues Telecom,  
Orange Caraïbe and SRR,  
respectively.

#### Timetable

On 1 July 2008, Orange France, SFR, Bouygues Telecom, Orange Caraïbe and SRR will submit to the Authority their non-audited statements of cost and revenue for fiscal year 2007. They will be audited in view of delivering, when applicable, evidence of conformity (with the audit report) by 29 September 2008.

#### Construction of a bottom-up technical-economic cost model for an efficient mobile operator in Metropolitan France

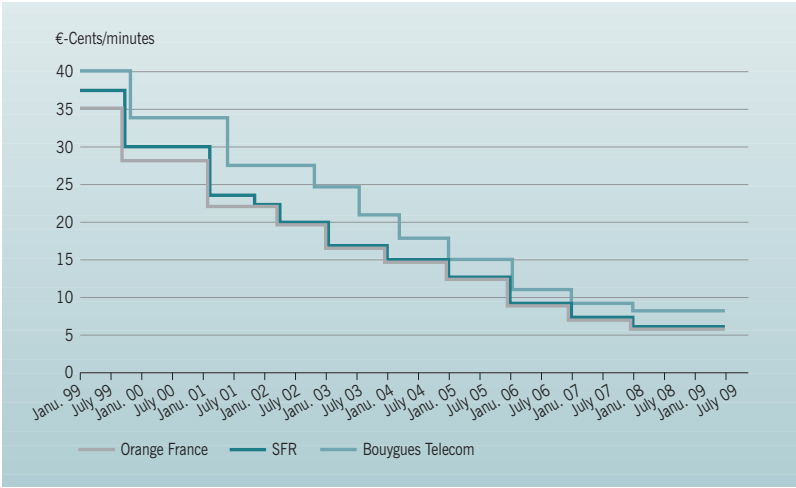
In 2007, in concert with mobile operators in Metropolitan France, the Authority developed a bottom-up technical-economic cost model for a mobile operator. This model makes it possible to determine the mobile call termination costs (voice and SMS) for an efficient, generic operator, and for operators possessing the market characteristics of mobile operators in mainland France. It also helped shed some additional light on the differences between the cost levels observed in the regulatory accounts submissions, particularly when setting the voice call termination tariffs for 2008 to mid-2009.

##### 1.1.4.3 Tariff supervision

Wholesale call termination tariffs are an important component of a call's retail tariff since they represent two-thirds of the price of a fixed-to-mobile call in Metropolitan France. The decrease in the wholesale tariff should thus lead to a corresponding decrease in the retail price of fixed-to-mobile calls, which will benefit fixed customers.

For the past ten years, ARCEP has been undertaking actions that have enabled a substantial decrease in call termination tariffs: fixed-to-mobile call termination tariffs in Metropolitan France have gone down by more than 80% since 1999.

Average price of a mobile call termination minute in Metropolitan France



Source: ARCEP

The wholesale tariffs charged by operators which are subject to a price cap comply with the ceiling tariff set by the Authority, as indicated in the following table.

Ceiling tariffs applied by ARCEP for 2007 and 2008 (€/min)

Units	Tariff in €-cents per minute in 2007	Tariff in €-cents per minute in 2008
Orange France	7.50	6.50
SFR	7.50	6.50
Bouygues télécom	9.24	8.50
Orange Caraïbe	13.16	11.00
SRR	12.57	10.50

Sources: ARCEP.

1.2 Outlook

The significance that mobile call termination has in the way the sector operates requires that a consistent regulatory policy be implemented across Europe. The price of a call termination minute currently varies from 2 to 18 eurocents, depending on the European Union Member State. Differences in geography and usage are not enough to justify such disparities in price.

ARCEP feels it is not only necessary but also essential to begin work immediately on strengthening the harmonisation of call termination regulatory policies at the European level. It is of the opinion that this harmonisation process must be undertaken by the European Regulators Group (ERG), which comprises the European Commission and national regulator authorities.

As concerns the overseas territories, in 2008 the Authority will establish a bottom-up technical-economic cost model for an efficient operator operating in the overseas *départements*, based on the model developed in 2007 for Metropolitan France. Established in tandem with mobile operators in the overseas *départements*, this model will allow ARCEP to acquire greater knowledge of operator cost structures

and the specifics of the overseas markets. It will shed additional light on the cost levels found in the regulatory accounts that Orange Caraïbe and SRR are required to submit. It will also help in estimating the costs of the other mobile operators in the overseas *départements* that do not enjoy the same economies of scale due to their smaller market share. The Authority will thus be able to make a more precise assessment of what constitutes non-excessive tariffs – a remedy that applies to these operators.

## 2. SMS call termination

### SMS

As its name implies, a text message (also referred to as SMS: short message service) is a typed message composed of a maximum 160 characters, each with seven-bit encoding. This service is available on all mobile handsets currently in circulation, and is compatible with all types of network (GSM, GPRS, UMTS).

In 2007, 18.7 billion text messages were exchanged in France, with French users sending an average 29 SMS a month<sup>32</sup>.

**32** - Source ARCEP, *Electronic Communications Observatory, provisional estimate. Cf. Part 4, Chapter 2.*

### 2.1 Market analysis performed by ARCEP in 2006

In 2006, the Authority defined the wholesale market for SMS call termination on mobile networks as a relevant market, in the same way as the market for wholesale voice call termination on mobile networks<sup>33</sup>.

To resolve the various competition issues identified in the SMS call termination market, the Authority imposed several obligations on Metropolitan France's three mobile operators<sup>34</sup>:

- ◆ grant all reasonable requests for access and interconnection services relating to SMS call termination;
- ◆ provide SMS call termination services under non-discriminatory conditions;
- ◆ provide SMS call termination services under transparent conditions;
- ◆ perform accounting separation and cost accounting;
- ◆ submit to tariff supervision measures in the form of cost-oriented pricing.

**33** - ARCEP Decision No. 06-0593 of 27 July 2006.

**34** - ARCEP Decision No. 06-0593 of 27 July 2006.

As concerns the last remedy, ARCEP has set the maximum tariff for SMS call termination in Metropolitan France:

- ◆ at 3 eurocents per SMS for Orange France and SFR;
- ◆ at 3.5 eurocents per SMS for Bouygues Telecom.

### 2.2 Implementation of a cost accounting methodology

In 2007, following its analysis of the SMS call termination market, the Authority specified in a decision<sup>35</sup> the means for applying the obligation that mobile operators in Metropolitan France have to perform accounting separation and cost accounting for SMS service costs.

**35** - ARCEP Decision No. 07-0128 of 5 April 2007.

The Authority implemented its decision in 2007, for the submission of regulatory accounts for the fiscal year 2006. The first audited cost elements for SMS call termination were submitted to ARCEP on 30 September 2007.

### 3. The market for access and call origination on mobile networks and mobile virtual network operators (MVNO)

#### Reminder

On 14 April 2005, the Authority notified the European Commission and other European regulators (NRAs) of its analysis of the wholesale market for mobile access and mobile call origination (Market 15 of the Commission's Relevant Markets Recommendation – a market in which the service providers are MNOs and the clients are MVNOs).

In this document, ARCEP emphasised that the MVNO agreements might not be sufficient to improve the unsatisfactory situation in the retail market. In effect, it seemed that the agreements neither offered MVNOs sufficient and sustainable economic leeway nor allowed them to differentiate themselves except by price.

Because the agreements had only recently been implemented and because they could change, the Authority concluded that the competitive situation in the mobile market was too unclear to judge with certainty, especially with respect to the future.

As a result, the Authority suspended its analysis of Market 15. It nevertheless continues to monitor the market to be able to assess the true impact of MVNO agreements on the retail market, and committed to notifying a new analysis to the Commission by the end of 2006.

Subsequently, because of the interest market players expressed in acquiring the fourth 3G licence, hence the possibility of a new operator coming to alter the state of competition, the Authority deferred this notification once again.

#### 3.1 Retail market trends

With a penetration rate that totalled 87.1% on 31 December 2007, the French mobile market has virtually reached maturity.

In 2007, in addition to the underlying trend of rolling out unmetered (or high volume) offers, the mobile virtual network operator (MVNO) market showed the first signs of consolidation (Debitel, Ten Mobile<sup>36</sup> and Neufmobile were taken over by their host operator).

<sup>36</sup> - Since the start of 2008, Ten is no longer an MVNO but a licensed Orange brand.

<sup>37</sup> - ARCEP Decision No. 06-0406 dated 4 April 2006.

<sup>38</sup> - Order No. 2006/07964 of the Paris Court of Appeal, First Chamber, Section H, of 30 January 2007.

Unlike mobile network operators, MVNOs have no spectrum resources of their own. To provide end customers with a mobile service, they use the radio network owned by a mobile network operator (MNO), referred to as the “host” operator.

In 2007, a new MVNO – Afone, using the SFR network – began operations in the mobile market, following a dispute between SFR and Afone that was settled by the Authority in 2006<sup>37</sup>, and upheld by the Paris Court of Appeal in 2007<sup>38</sup>.

In addition, Bouygues Telecom signed agreements with Noos-Numericable on the one hand, and with Altitude Telecom, on the other, for the establishment of future MVNOs in the French market.



Meanwhile, MVNO Transatel launched prepaid calling card offers, notably for overseas calls.

New co-branded offers have also been launched. These are offers based on partnerships whereby a network operator supplies end users with a mobile service that bears its partner’s brand<sup>39</sup>. A case in point is retail supermarket chain, Système U, which signed a protocol agreement that allows it to launch a branded mobile operator business on the Orange network.

2007 marked the first of these types of agreements for MVNOs: retail chains Casino and Leclerc both introduced services based on agreements with Tele2 mobile and Afone, respectively.

*39 - Unlike MVNOs which manage their own subscriber bases, in the case of a branded licence, subscribers continue to be managed by the mobile network operator.*

13 MVNOs were operating in France as of 10 April 2008

Player	Commercial launch date
Transatel	2001
Debitel	2004
Breizh Mobile	2004
Futur Telecom	2005
NRJ Mobile	2005
Neuf Télécom/Cegetel	2006
Tele2	2005
Coriolis Telecom	2006
Virgin Mobile	2006
Mobisud	2006
A-mobile	2006
Carrefour Mobile	2006
Afone	2007

3.2 Analysis of the state of competition

3.2.1 Monitoring mobile market indicators (SIM)

In accordance with its commitment to the European Commission, and to better appreciate how the competitive situation in the market was evolving, particularly in terms of pricing and market share, ARCEP began collecting statistical data by means of a quarterly questionnaire addressed to mobile operators (network operators and MVNOs in Metropolitan France): the *Suivi des Indicateurs Mobiles (SIM)*, which is published on the Authority’s website. It includes indicators that make it possible to measure the vitality of market competition. In addition to close monitoring of the respective performance of network operators and virtual operators, the *SIM* aims to quantify a certain number of market characteristics, notably with respect to its fluidity, in other words the propensity of demand to be able to express itself as freely as possible, particularly through the ability to switch operators without being bound by excessive contract periods

### 3.2.2 Measuring market fluidity

The mobile market indicators measure the portion of customers who are no longer contractually bound to their operator, and thus in a position to switch operators without penalty. As of 31 December 2007, only 23.7% of mobile customers were free of contractual obligations and thus able to change operators without penalty.

Gross sales tracking, both prepaid and post-paid, combined with quarterly cancellation level monitoring, makes it possible to evaluate the vitality of competition in the retail market more precisely than with net sales – as a low level of net sales could indicate either a stagnant market or a healthy market with a high rate of cancellations. Furthermore, monitoring gross market share makes it possible to determine the share of customers subscribing to MVNOs. As of 31 December 2007, the quarterly rate of cancellation for post-paid subscribers totalled 3.9%, compared to 9.4% for prepaid customers. It should be remembered that these cancellation figures include operators' cancellations of unpaid accounts, which represented roughly 30% to 40% of cancellations. The average lifespan of a post-paid customer's account, which is not cancelled for defaulting on payment, is around ten years.

As concerns MVNOs' customer acquisition performance – in other words their gross sales – the Authority's figures indicate that, as of 31 December, they had a 9.7% share of the post-paid segment, and a 14.2% share of the prepaid segment – which means that close to one in ten mobile subscribers chooses an MVNO offer. As an aside, it should be mentioned that calculating market share in net sales is relative, to the extent that such an indicator would imply that MVNOs do not target existing mobile customers but only first-time subscribers, which is not the case.

### 3.2.3 Scorecard for the European Commission

In addition, since late May 2005 ARCEP has been establishing a scorecard for the mobile market in Metropolitan France, which it transmits every six months to the European Commission. The scorecard is not made public.

### 3.3 Market share in Metropolitan France

As of 31 December 2007, the market share for the three mobile network operators in Metropolitan France was: 43.78% for Orange France, 33.96% for SFR and 17.38% for Bouygues Telecom.

At that time, **MVNOs had a 4.88% share of the mobile telephony market** (or close to 2.6 million lines).

Mobile operator market share in Metropolitan France as of 31 December 2007

Metropolitan France	Total market		Prepaid base		Post-paid base	
	Total customers	Market share	Customers	Market share	Customers	Market share
Orange France	23 323 859	43.78	8 129 023	45.17	15 194 836	43.08
SFR	18 088 866	33.96	6 073 940	33.75	12 014 926	34.06
Bouygues Télécom	9 256 116	17.38	2 489 515	13.83	6 766 601	19.18
Total MVNO base	2 601 016	4.88	1 305 974	7.26	1 295 042	3.67
Total	53 269 857	100	17 998 452	100	35 271 405	100

Source: ARCEP.

Change in mobile operator market share in Metropolitan France since 2005

		2005	2006	2007
Orange France	total market	46.49	45.11	43.78
	prepaid base	48.98	47.74	45.17
	post-paid base	45.09	43.73	43.08
SFR	total market	35.75	34.59	33.96
	prepaid base	35.53	34.19	33.75
	post-paid base	35.87	34.80	34.06
Bouygues Télécom	total market	17.16	17.51	17.38
	prepaid base	15.02	14.42	13.83
	post-paid base	18.36	19.13	19.18
Total MVNO base	total market	0.60	2.79	4.88
	prepaid base	0.48	3.65	7.26
	post-paid base	0.67	2.35	3.67

Source: ARCEP.

D. Fixed telephony

As the first cycle of analysis of the fixed telephony market is in effect until September 2008, the Authority launched a second round of analysis of the sector in 2007. This process led to a public consultation in February 2008<sup>40</sup> at which the Authority issued the sector with a scorecard for the asymmetrical regulation that had been applied to fixed telephony markets since 2005, and on how the state of competition has evolved. It also presented its proposed regulation of fixed telephony for the coming years.

40 - Cf. ARCEP public consultation of 22 February 2008, available on [www.arcep.fr](http://www.arcep.fr).

1. First cycle of market analysis: regulation of all fixed telephony markets

During the first cycle of market analysis, i.e. since 2005, the Authority regulated all fixed telephony markets. At the wholesale market level, ARCEP made France Telecom subject to obligations to be transparent and to charge cost-oriented prices for its call origination, call termination and transit services.

The incumbent carrier was also required to offer its competitors carrier selection services, and later wholesale line rental (VGAST) services, which have been available since April 2006.

These actions concerning the interconnection and access markets were completed by remedies applied directly to retail access and calling markets, such as the ban on predatory pricing, the obligation to act in a non-discriminatory fashion and the obligation for France Telecom to inform ARCEP of the details of its retail offers before launching them in the marketplace.

The Authority decided to introduce these different remedies in light of the state of competition in the fixed telephony market in 2005, and of its outlook. But the way that fixed telephony markets operate and their competitive structure have evolved a great deal over the past few years, which is why, in 2007, the Authority relaxed its regulation of the transit markets and the residential retail markets.

## 2. Changing state of competition

### 2.1 In residential retail markets: competitive pressure created by triple play bundles

The increasing use of Voice over broadband (VoB) services included in double play (Internet access and telephony) and triple play (Internet access, telephony and TV) bundles has had a sizeable impact on the residential segment. In terms of both connections and calls, the growing take-up of these offers is exerting real competitive pressure on the “traditional” phone services marketed by France Telecom. At the end of 2007, close to 3.7 million consumers had opted for a fully unbundled offer that includes VoB, and so doing away with their France Telecom subscription<sup>41</sup>.

However, it is only those customers wanting to have a broadband connection that can take advantage of the development of the offers marketed by alternative ISPs. Those that only want a phone service have the choice between the France Telecom narrowband offers (“traditional” phone line) and those supplied by alternative operator that have implemented wholesale line rental (VGAST), which has been available since April 2006. At the end of 2006, France Telecom had a 99% share of the dedicated telephony access market. Wholesale line rental made strides in 2007, achieving a 2.5% market share by the end of the year (or a base of around 700,000 lines).

Competition has developed in an even fashion across the residential calling market. Most broadband customers also have access to VoB as part of their service, which generally includes a flat rate for unmetered calls to fixed lines in France and to several dozen international destinations. As France Telecom competitors have a significant share of the broadband services market, the development of VoB calls is having positive impact on competition in calling markets.

Meanwhile, consumers who are not interested in subscribing to a broadband offer can subscribe to one of the carrier selection offers marketed by alternative operators. Despite a decline in the residential segment, due to the increasing use of VoB, carrier selection still represents a very sizeable share of the market<sup>42</sup>.

**41** - At the end of 2006, VoB calls accounted for 28% of total residential customer calling volume (20% of which are routed by alternative operators). Figures for 2007 are not available.

**42** - At the end of 2007, calls made via carrier selection accounted for 38% of the total volume of residential calls.

## 2.2 Non-residential retail market: large enterprise advantage and highly sensitive to quality of service

In non-residential markets, VoB services have not been adopted to the same extent as they have in the residential segment<sup>43</sup>. This slower take-up is undoubtedly due to the high quality of service expectations of non-residential customers. As any possible malfunctions could be very detrimental to their business, a portion of professional and enterprise customers are also reluctant to change technologies. This is why carrier selection services have been maintained in non-residential markets<sup>44</sup>.

The non-residential segment can be broken down into several tiers, according to the number of customers (business, corporate) and the volume of traffic they generate.

On the upper end of the market, the largest businesses benefit the most from competition. Alternative operators can offer customers direct connection (unbundling), a France Telecom capacity services offer or the installation of dedicated infrastructure, such as optical fibre. This degree of competition exists chiefly for the largest corporate premises and in the most densely populated business parks and districts.

Customer behaviour in the lower end of the market, on the other hand – comprised of small and micro businesses – is more akin to the residential market, and competition at the access level is developing more slowly. The creation of the wholesale line rental (VGAST) offer, whose base totalled roughly 50,000 lines at the end of 2007, should eventually enable all customers to take advantage of alternatives to France Telecom access offers.

## 3. Towards deregulation of retail and transit markets

As the markets were opened up to competition, the Authority deemed it necessary to regulate fixed telephony retail markets. Regulation made it possible to create a positive competition environment that allowed alternative operators to develop and acquire market share<sup>45</sup>. Tariff supervision in particular enabled the Authority to implement, then calibrate with the sector's assistance, a considerable number of wholesale offers tailored to the needs of operators. Currently, carrier selection, VGAST, unbundling, bitstream and capacity services make up the operational solutions that enable operators to compete effectively with the incumbent carrier.

It is the Authority's view that these operators are now capable of engaging in a competitive environment free of *ex ante* regulation and, in cases where they are victims of anti-competitive practices, to defend their interests under the terms of common competition law.

**43** - At the end of 2006, VoB calls accounted for 12% of total non-residential calling traffic. Figures for 2007 are not available.

**44** - At the end of 2006, calls made via carrier selection accounted for 27% of the total volume of non-residential calls. Figures for 2007 are not available.

**45** - At the end of 2006, alternative operators accounted for a 41% share of the total volume of all residential and non-residential calls. Figures for 2007 are not available.

46 - ARCEP Decision  
No. 06-0840  
of 28 September 2006.

47 - ARCEP Decision  
No. 07-0636  
of 26 July 2007.

The Authority thus began the process of deregulating retail markets during the first cycle of market analysis. In 2006, the first relaxation of regulation concerned the residential retail calling market<sup>46</sup>. Then, in 2007, the Authority began relaxing the regulations governing residential retail access markets<sup>47</sup>.

**In light of the manner in which fixed telephony markets have evolved, it is the Authority's view that maintaining retail market regulation is no longer justified. Deregulation of retail markets should thus be completed in 2008.**

ARCEP elected to maintain regulation of non-residential retail markets until the end of the first cycle of market analysis, as a precautionary measure tied to quality of service. As France Telecom wholesale offers ensure an overall satisfactory quality of service, the Authority plans on extending deregulation to all fixed telephony retail markets. It will nevertheless continue to play particularly close attention to the quality of the services associated with each France Telecom wholesale offer.

**Asymmetrical regulation will thus now focus on fixed telephony wholesale markets.**

Within wholesale markets, the development of alternative operators' core network infrastructure has helped to create an increasingly competitive intra-regional transit market. The offer has also helped flesh out inter-regional transit markets thanks to the upstream regulation of capacity markets.

This is why the Authority decided to begin deregulating transit markets in 2007. It thus lifted most of the obligations imposed on France Telecom in inter-regional transit markets, before undertaking its second cycle of analysis of fixed telephony markets.

With no obstacle to the development of market competition, it no longer seems necessary, in principle, to continue to regulate the sector. As a result, ARCEP plans on fully deregulating transit markets during its second cycle of analysis of fixed telephony markets.

#### **4. Regulation concentrated on bottlenecks in the access and interconnection markets**

Some interconnection services constitute lasting bottlenecks that require sector regulation to be maintained for some time, namely: telephone network access, call origination and call termination services. As concerns access and call origination, it does appear necessary to maintain carrier selection and wholesale line rental (VGAST) so that alternative operators can compete with France Telecom in all markets.

Furthermore, as call termination services cannot be replicated by another operator, regulation and pricing supervision are essential to the development of competition. The development of alternative local loops reinforces the significance of alternative operators' call termination services in particular. These services will eventually be subject to symmetrical regulation. As part of multilateral talks, ARCEP also began work in 2007 that will lead to symmetrical fixed call termination tariffs.

In fixed telephony markets, asymmetrical regulation will focus progressively on access, call origination and call termination only. If the first analysis of the fixed telephony market addressed the issue of regulating wholesale services in a technologically neutral fashion, the Authority nevertheless hopes that the second cycle of market analysis will include discussions on tariff structures and interconnection architectures. ARCEP will also need to take the convergence of networks and services into account. It will pay particular attention to ensuring that there can be fair competition between fixed and mobile operators, particularly with respect to call termination prices and definitions.

## E. The enterprise market: capacity services

### Definition

Capacity services, once referred to as leased lines, consist of an operator providing telecommunications capacity between several network points to a business, a corporation or another operator. There are two types of leased line: “conventional” leased lines based on ETSI (analogue and digital) standards, and capacity services that use alternative interfaces (Ethernet, ATM, etc.).

### 1. Market analysis

In 2006 ARCEP adopted a market analysis decision concerning capacity services <sup>48</sup>, whose provisions include:

- ◆ the publication by France Telecom of a reference offer describing the products sold in the intermediate terminal segment market, the trunk circuit market and the market for undersea cables between the overseas *départements* and Metropolitan France;
- ◆ the implementation of a framework that provides incentives for the incumbent carrier and alternative operators to invest in ultra-fast broadband networks (fibre to the premises);
- ◆ easing the retail market regulation for leased lines, with removal of the tariff approval mechanism;
- ◆ modalities for supervising the fairness of wholesale and retail market operators’ competition practices, particularly in terms of the ability to replicate offers.

This regulatory framework will be reviewed by autumn 2009 at the latest, but could be re-examined sooner should a major change in the market require it.

**48 - ARCEP Decision**  
No.06-0592  
of 26 September 2006.

## 2. Operational implementation

49 - France  
Telecom website:  
[www.orange.fr](http://www.orange.fr).

As concerns wholesale markets, on 14 November 2006 France Telecom published the first reference offer for capacity services on its website .

The Authority has also formed an operator working group devoted to capacity services, in the same way it has done for the unbundling and bitstream markets. Following a redefinition of the scope of the work performed by the groups dedicated to DSL wholesale markets, capacity services will be addressed by the Enterprise DSL and capacity services (*DSL professionnel et services de capacité*) working group, which will also be responsible for examining all wholesale DSL offers aimed at the enterprise market.

This is also the group that will provide a forum for discussing wholesale capacity services (partial leased line terminating segments and tie lines (*LA/LPT*) and wholesale Ethernet collection services (*CE2O*)). In 2007, discussions focused on the implementation of an automated process for the *CE2O* offer, and on the introduction of an Ethernet over SDH wholesale offer, whose scope was set in late 2007 and which will be operational in the first half of 2008.

In 2007, the Authority also undertook the first review of wholesale capacity services, notably those serving Reunion Island.

As concerns retail markets, ARCEP called on alternative operators to inform it of any France Telecom offers marketed to business customers that may cause replication issues from a pricing or technical standpoint. The Authority has not yet been required to issue any statements on such offers.

## 3. Changes to tariffs

On 1 January 2008, France Telecom applied changes to the tariffs of its capacity services reference offer. These changes primarily concern:

- ◆ partial leased line terminating segments and tie lines operating at a speed of 2 Mbps or less;
- ◆ leased lines for transport between Metropolitan France and Reunion.

## F. Wholesale market for audiovisual broadcasting services

### 1. The regulatory framework

On 6 April 2006, the Authority completed its analysis of the wholesale market for audiovisual broadcasting services (Market 18), after having gone through the process of consulting the sector, the audiovisual authority, CSA (*Conseil supérieur de l'audiovisuel*), the competition authority (*Conseil de la concurrence*), the European Commission and NRAs from the other European Union Member States.

This resulted in the adoption of the two decisions concerning:

50 - ARCEP Decision  
No. 06-0160  
of 6 April 2006.

- ◆ the definition of the relevant wholesale market for terrestrial television broadcasting services and the designation of an SMP operator in this market<sup>50</sup>;



- ◆ the obligations imposed on TDF as the SMP operator in this relevant wholesale market for terrestrial television broadcasting services<sup>51</sup>.

**51 - ARCEP Decision**  
No. 06-0161  
of 6 April 2006.

Based on the outcome of its analysis, the Authority deemed it necessary to implement a provision of *ex ante* regulation for the upstream wholesale market that supplies terrestrial broadcasting services, both analogue and digital. All of the suppliers and customers in this market are broadcasters (TDF, Towercast, OneCast, Emettel and multiplex operator, CNH, which performs some of its own broadcasting).

The Authority has also designated TDF, the enterprise that owns virtually all of the terrestrial broadcasting infrastructure, as the SMP operator in this market.

In the entire relevant wholesale market, TDF is thus subject to cost accounting and separate accounting obligations, as well as several obligations concerning the market segment of wholesale digital terrestrial broadcasting offers<sup>52</sup>:

**52 - ARCEP Decision**  
No.06-0161  
of 6 April 2006.

- ◆ the obligation to grant reasonable requests for access;
- ◆ the obligation to provide access under non-discriminatory conditions;
- ◆ the obligation for transparency (publication of a reference offer);
- ◆ the obligation to comply with tariff controls (proscription against excessive and predatory pricing);
- ◆ the obligation to formalise, in the form of agreements, the terms and tariffs applicable to internal TDF services, while awaiting the application of accounting separation obligations.

These market analysis decisions will be in effect up to 1 April 2009. The Authority must nevertheless continue to monitor the state of competition in the market, and may review its analysis ahead of time if the situation evolves significantly in the interim.

## 2. Implementation of TDF cost accounting and accounting separation obligations

In its market analysis, ARCEP noted that any possible anti-competitive behaviour on the part of TDF could be monitored thanks to cost accounting and accounting separation obligations. The chief goal of these obligations is to make it possible to check that accounting and non-discrimination obligations are being satisfied, and to ensure the absence of abusive cross-subsidisation.

In late 2007, ARCEP launched a public consultation on the draft decision that specifies the cost accounting and accounting separation obligations imposed on TDF<sup>53</sup>. At the outcome of this public consultation, the ARCEP draft decision was notified to the European Commission and the national regulatory authorities in other European Union Member States on 28 February 2008. At the same time, the Authority launched a second public consultation concerning the mechanisms for implementing these accounting obligations.

**53 - ARCEP public consultation of 30 November 2007 on cost accounting and accounting separation obligations imposed on TDF.**

## G. Implementation of accounting separation

54 - ARCEP Decision  
No. 06-1007  
of 7 December 2006.

In 2007, the submission of regulatory accounts in accordance with the accounting separation obligation imposed on France Telecom in most of the fixed telephony and broadband market analyses, and whose modalities have been specified by ARCEP<sup>54</sup>, were implemented by France Telecom, audited, submitted to ARCEP and published on the France Telecom website on 28 December 2007.

The implementation of the accounting separation obligation and application of its results are currently in effect.

### 1. Reminder of the economic and regulatory founding principles of accounting separation

#### 1.1 Electronic communications market structure

When the telecommunications sector was opened up to competition ten years ago, the former France Telecom monopoly gave way to a set of wholesale and retail markets where the intensity of competition varied.

In access and interconnection wholesale markets, France Telecom enjoys a dominant position in most cases – owning infrastructure that is more or less replicable, if not essential, such as the local copper loop. In retail markets, France Telecom faces a greater degree of competitive pressure from alternative operators, but the latter's retail business is based, at least partially, on the offers for accessing infrastructure that are supplied by the incumbent carrier in the wholesale market.

#### 1.2 Preventing discrimination and abusive cross-subsidisation

The underlying economic rationale for imposing an accounting separation obligation derives from the natural and logical impulses of an enterprise with an integrated vertical structure to exploit the advantages of such a structure, particularly as a substantial portion of the value chain depends on the ownership of essential infrastructure.

Such an enterprise benefits from market power that it can leverage, notably to maintain a strong position in the market segments where competitive pressure is at its greatest.

Cross-subsidisation allows an integrated enterprise to allocate a portion of the cost from those business areas where it faces the greatest competition to those areas where it enjoys a substantial market share. This practice allows it to charge low prices in highly competitive markets, which naturally undermines the profitability outlook of rival companies in these markets, and may even prevent competition from existing (e.g. by discouraging new players from entering the market).

Furthermore, in the matter of wholesale offer tariffs, discriminating between the retail operations of a vertically integrated enterprise and the rival operations of alternative companies is likely to allow the integrated operator to charge lower retail market prices than its competitors.

In a sector where the regulator is authorised to intervene (with the goal of stimulating effective competition), these practices can be forbidden<sup>55</sup>.

### 1.3 Mechanism provided for by the regulatory framework

Accounting separation is one of the obligations provided for by the European regulatory framework. The NRA can impose it on an operator deemed to have significant power in a relevant market, to avoid abusive cross-subsidisation and to prevent discrimination against third-party operators.

This remedy cannot be defined in an isolated fashion. It is based on regulatory accounting data and must thus correlate and be consistent with the operator's cost accounting obligation which, at the very least, requires that a system of regulatory cost accounting be established. It is also tied to the non-discrimination obligation as it helps to ensure that it has been properly implemented, in addition to guaranteeing a degree of transparency.

Accounting separation is also a remedy that crosses horizontally and vertically through all concerned markets, via non-discrimination obligations and in the prevention of abusive cross-subsidisation. As a result, the scope of its impact is not confined to the markets where it has been imposed, but rather extends to related downstream markets where a certain visibility needs to be achieved to ensure that these obligations are being met, in those areas where they have been imposed.

### 1.4 Simulation of several distinct entities from an accounting perspective

Accounting separation makes it possible to avoid having the development of competition distorted by France Telecom's vertical structure by creating several entities that are distinct from an accounting perspective, for wholesale and retail business areas. This means that, from an accounting standpoint, the incumbent carrier is comprised of several operators: those operating in regulated wholesale markets and those operating in regulated retail markets.

It also makes it possible to ensure that the incumbent's downstream retail operations are not benefiting from preferential treatment in their use of wholesale offers, when compared to the provision restrictions to which alternative operators are subject, and that costs are fairly distributed and collected between those business areas where the operator still enjoys significant market power, and those where competition is more lively.

## 2. Concrete application of France Telecom's obligation to perform accounting separation

To comply with its accounting separation obligation, France Telecom must submit its accounts to ARCEP, in accordance with the modalities and formats specified by the regulator<sup>56</sup>.

The accounting separation provision that applies to France Telecom is based on two sets of submissions in particular: internal sales agreements and accounts separated by market.

*55 - In a non ex-ante regulated environment, such practices can also be called into question by applying the rules of competition law (ex-post regulation) when they constitute an abuse of dominant position.*

*56 - ARCEP Decision No. 06-1007 of 7 December 2006.*

## 2.1 Internal sales agreements

Internal sales agreements are the documents in which France Telecom commits to using its own wholesale offers – for building its retail offers – under terms equivalent to those offered to competing operators.

In these agreements (which are not published in their entirety for reasons of professional secrecy), France Telecom specifies the “terms and conditions” – in other words the modalities and quantities – of its wholesale purchases, at the tariffs charged for its wholesale offers. To give an example: to produce residential analogue connections, France Telecom relies on its own telephone subscription wholesale reference offer, which includes service access fees and subscriptions to the associated services, under the same conditions as an alternative operator that wants to offer its customers both an access and a telephone service.

Internal sales agreements are not implemented systematically. They result from the application of the obligation to perform accounting separation imposed by the regulator’s market analysis decisions. An internal sales agreement is required only when a retail offer is based on a regulated wholesale offering to which accounting separation and non-discrimination obligations apply. As a result, an agreement can pertain to retail offers in markets that are non-relevant from a regulatory perspective, such as broadband retail market services.

Flexibility and adjustments are allowed, particularly when positioning France Telecom downstream operations under terms equivalent to those offered alternative operators. Those operators that have deployed their own infrastructure no longer rely on France Telecom offers to operate in downstream retail markets. Such is the case with transit services, for instance, which is becoming an increasingly competitive market: most alternative operators, which are former clients of France Telecom transit offers, now use their own network infrastructure and may even themselves market wholesale transit offers. In this case, like its competitors, France Telecom is authorised not to use its own wholesale offers, and is thus not obligated to formalise its internal sales agreements. This means that it can access its internal services directly, in the same manner as an integrated operator that is not subject to the accounting separation obligation.

## 2.2 Separate market accounts

Most accounts that are separated by market correspond to the scope of the relevant markets considered in the analyses of regulated wholesale and retail markets. Others correspond to unregulated markets for which an *ad hoc* definition is adopted – one example being the broadband retail market – for the purposes of verifying compliance with obligations in upstream markets (unbundling and bitstream).

In the complete version of these accounts, costs and income are retraced for each type of offer in each market. In the case of a separated wholesale account, the costs for constructing the wholesale offer – assessed if necessary based on existing methods for calculating regulatory costs – correspond to outgoings, and the income corresponds to the revenue earned from competing operators and from France Telecom retail operations, in accordance with the commitments made in the internal sales agreements. This income thus derives directly from France Telecom wholesale tariffs.

In the case of a separated retail account, costs refers to wholesale supply costs as well as the additional costs specific to the construction of retail offers, while the revenue earned in retail markets corresponds to the products.

On the whole, there are limits to the granularity of the information that is transmitted and published, in accordance with the principle of applying proportionate remedies to observed competition issues, and depending on the scope of the Authority’s power to intervene. The incumbent carrier thus publishes the list of agreements that specify on which wholesale offer each France Telecom retail offer is based, and the balance of the separated accounts in cases where they correspond to a market where France Telecom is regulated<sup>57</sup>.

57 - Available on the France Telecom website: <http://www.francetelecom.com/fr/groupe/initiatives/savoirplus/documentation/>

3. Results of the accounting separation exercise in 2006

3.1 Internal sales agreements

Pursuant to the decision concerning its obligation to perform accounting separation, France Telecom submitted its agreements concerning the wholesale supply of its retail operations to ARCEP in April 2007 , and posted the list of these agreements online. Each creation or modification of an agreement is communicated to ARCEP. The list of agreements is published and updated in real time.

Sample agreement

Agreement 2: Agreement for the supply of residential analogue access
----------------------------------------------------------------------

- 1 – Summary description of the offer:  
Residential customer subscription for accessing the France Telecom PSTN and associated services.
- 2 – Wholesale supply:

Telephone subscription wholesale reference offer
- Wholesale subscription
- Analogue service access fees
- Line rental service access fees (per single line or set of lines)
- Subscriptions to associated services

3.2 Separated accounts, by market

In December 2007, France Telecom published the balance of the separated wholesale accounts to which the accounting separation obligations applies. This document revealed positive balances in wholesale markets, as defined by the market analyses performed by the Authority, and particularly in the markets for call origination and call termination on fixed networks (Markets 8 and 9, as listed in the European Commission Recommendation on relevant markets from 2002) and in the regional bitstream market (Market 12).

	Costs*	Income	Balance	Margin
Market 8 Fixed call origination	406	603	198	33%
Market 9 Fixed call termination	398	556	158	28%
Market 10 Intra-regional transit	224	254	31	12%
Market 10, extended Inter-regional transit	3	5	2	44%
Market 11 Unbundling	709	786	77	10%
Market 12 Regional bitstream	565	832	267	32%
Market 12, extended National bitstream	75	125	50	40%
Market 13 Capacity services terminating segments	71	109	38	35%
Market 14 Intra-regional trunk segments	21	34	13	37%
Market 14, extended Inter-regional trunk segments	12	7	-5	-71%
VGAST (wholesale line rental)	3211	3047	-164	-5%
			Average margin	10.4%

\* In million €.

Certain considerations must nevertheless be factored in when looking at these margins.

The margins presented are calculated after remuneration of fixed capital

Among the cost items in separated wholesale accounts are the costs incurred by France Telecom for the construction and supply of its wholesale products and services. These costs, are assessed in accordance with ARCEP decisions specifying the assessment methods (current economic costs, for instance, for local copper loop assets). They include a normal rate of return on capital, in accordance with the French postal and electronic communications code, CPCE. The regulatory rate of return for 2006 was 10%<sup>58</sup>.

58 - ARCEP Decision  
No. 07-0834  
of 10 October 2007.

Not all of the wholesale offers included in wholesale markets are subject to cost-oriented pricing obligations

The published accounts are aggregated at the market level: the figures they contain are thus the sum of the balances that correspond to the different France Telecom offers, which are themselves subject to different tariff obligations.

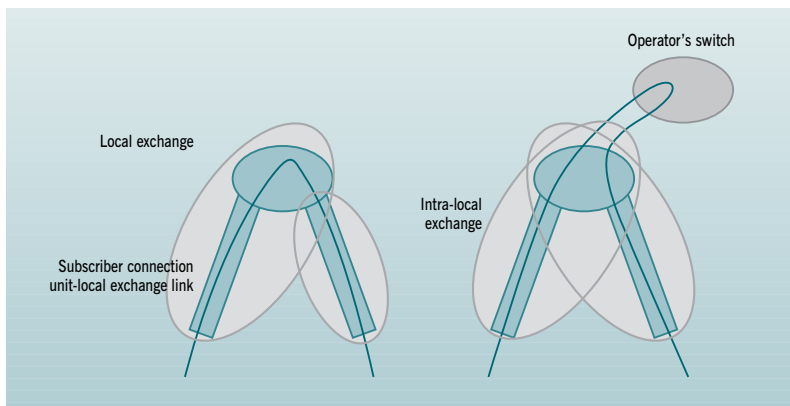
As a reminder, and notably as concerns 2006, the products and services of the call origination market (8), the call termination market (9) and the fixed network and transit markets (10 and 10 extended) are subject to a **cost-oriented pricing obligation**. The same is true for the products and services of the unbundling wholesale market (11) which, for the accounting separation exercise, includes miscellaneous products referred to as *petits tarifs*.

The other broadband markets are subject to cost-oriented pricing obligations for the bitstream products and services market (12 and 12 extended), provided that the corresponding tariffs do not constitute predatory pricing, in which case only the obligation not to engage in predatory pricing applies. Worth noting is that regulation of Market 12 ended in September 2006, so the figures for September to December of that year, when there were no longer any restrictions on tariffs, were nevertheless factored in to the balance published for the year.

As to the products and services of capacity services markets (13 and 14), most are subject to a ban on excessive and predatory pricing, with an obligation to charge cost-oriented tariffs – provided they do not lead to predatory pricing – being imposed on all services running at less than 10 Mbps and on trunk circuit, inter- and intra-regional services between Metropolitan France and Reunion.

In each wholesale market, the margin presented is in fact the average of the margins generated on internal sales (to France Telecom retail operations) and on external sales (to third-party operators)

The accounting separation mechanism requires France Telecom to use its own wholesale offers, but there are cases where this obligation reveals cost disparities arising from differences at the engineering level between France Telecom and its competitors. For instance, to route a local phone call, integrated operator France Telecom physically employs two subscriber connection unit-local exchange (URA-CA) links and one local exchange transit (CA). In its separate accounting, France Telecom will simulate the costs it would have to bear if it were not an integrated operator, and would thus employ the services that all alternative operators must employ: a local call is executed based on two intra-local exchange interconnection services. This is therefore what the France Telecom retail branch must pay for, and what its wholesale branch charges for. Combining the reality of an integrated France Telecom and the typical engineering constraints to which alternative operators are subject translates into a positive balance in the wholesale account: the wholesale division receives payment from France Telecom retail (for two intra-local exchange interconnection services), but its expenditures are only for an intra-local exchange and a subscriber connection unit-local exchange link.



Although this last consideration helps to explain the positive margins, it nevertheless remains that they are still relatively high, particularly in wholesale markets where a cost-oriented pricing obligation applies (e.g. fixed call origination and termination markets). Following publication of these financial results, a re-examination of the France Telecom reference offers, and particularly of inter-connection tariffs and “miscellaneous items” or *petits tarifs* was undertaken.

## 4. Audit of France Telecom accounting obligations

In accordance with the obligations imposed by the Authority, the regulatory cost accounting system and the accounting separation mechanism implemented by France Telecom are subject to an annual audit<sup>59</sup>.

59 - ARCEP Decision  
No. 06-1007  
of 7 December 2006.

In accordance with the regulatory framework<sup>60</sup>, the Authority demands that this audit be performed each year and requests verification of all of the elements that affect the application of these obligations. The Authority thus issued France Telecom with the specifications of the audit procedure in July 2006, and particularly the specificities of the regulatory cost accounting system and the accounting separation exercise for 2006. The results of the audit for this fiscal year were submitted to ARCEP, which published a summary of it in early 2008<sup>61</sup>.

60 - Cf. CPCE Articles L.38 I,  
Para. 5, L.38-1 I, Para. 3 and  
D.312.

61 - ARCEP Decision  
No. 08-0003  
of 8 January 2008.

From a general perspective, the implementation of the accounting separation mechanism complies with the principles decreed by ARCEP.

### 4.1 Principal results of the audit of France Telecom's cost accounting system

The establishment of regulatory accounts submission, derived from a cost accounting system, is based on:

- ◆ a dedicated France Telecom division DRG/PCCR (Regulation department/Regulatory cost calculation unit) composed of teams that are specialised in key elements of the model (cost calculation engine maintenance and monitoring, tracking changes to analytical organisation, network, sales and support function modelling, etc.) and which have a good understanding of France Telecom's organisation as well as direct access to certain operational and accounting information systems;
- ◆ a cost calculation model and a dedicated information system designed to guarantee the quality of the data processing, and which is progressively expanded and refined to improve the production of the regulatory accounts submissions;
- ◆ substantial efforts on collecting a range of input data for the cost calculation model. This data collection is based on the knowledge of the DRG/PCCR teams, each of which, in its own area of expertise, selects, extracts and adapts data from multiple operational information systems for this model. It is also based on several dedicated studies which refine the allocation when the data from operational information systems are too aggregated or poorly adapted to the purpose.

The work performed by the auditor focused on the implementation of a system of production cost calculation (*système de calcul des coûts de revient*: France Telecom terminology for its cost accounting system) in 2006, used to produce operating accounts per product (CEP)<sup>62</sup> for that same year. Efforts were also devoted to the relevance of the cost allocation applied to cost calculation figures and the rules used to establish them.

62 - The CEP are the principal outputs of the cost accounting system; most of them are submitted to ARCEP in accordance with France Telecom's obligation to perform cost accounting, and used in particular for the purposes of tariff supervision.

Auditing these figures consisted notably of assessing the reasonable nature, economic justification and compliance – with respect to the provisions contained in the different legislative and regulatory texts listed in the audit specifications – of the options for allocating costs to the products and services, which had



previously been identified by the accounting, system, as well as the allocation of the restated costs in France Telecom's financial accounting.

Audit tests of the regulatory cost accounting system makes it possible to ensure conformity with the specifications indicated in the texts.

The goal was not, however, to assess internal verification of the specific information system – in other words assessment of the verification of data preparation and entry, of data processing, of data integrity checks, of the exactitude and authorisation of the operations to be recorded, the quality of the documentation, or the changes made during the execution of the different programmes, particularly in terms of recording and assessment methods.

The system used for establishing operating accounts per product was adapted in 2006 to comply with the regulator's demands, which include distinguishing products by wholesale and retail markets and implementing an accounting separation mechanism. Inputs to and construction of these operating accounts are nevertheless based on the same principles as those used in 2005.

The auditor reported that considerable work has been done to improve the model, particularly in the following areas:

- ◆ achieving the model's compliance with the aforementioned decision, resulting in a more precise breakdown of business areas;
- ◆ taking into account the integration of Transpac starting on 1 January 2006, in the France Telecom S.A accounts;
- ◆ greater precision in the modelling of certain costs, particularly:
  - for network costs, a new study made it possible to update the relationship between "ducts" and "direct burial" at the civil engineering level as well as the ratio of "aerial" to "buried" in local loop cable;
  - for support costs, a new study of the allocation of premises surface area replaced the old "premises" study performed in 2001;
- ◆ modification of the number of operating accounts per product, which increased from 96 to 139 between 2005 and 2006 to satisfy ARCEP demands..

As concerns the establishment process for regulatory accounts submissions, the auditor indicated certain areas of the auditing environment that could be improved, and the following three in particular:

- ◆ **audit trail provided for most of the data** but which, in a number of cases, is non verifiable, notably for so-called "exogenous" data which are internal France Telecom data supplied to the DRG/PCCR by other departments;
- ◆ **functional documentation providing details on the overall processing mechanisms for costs and products** was not updated thoroughly for fiscal year 2006;
- ◆ **in the data processing performed outside the cost calculating model, per se**, substantive errors were identified in the different steps of the model. These anomalies identified in the different processing stages executed parallel to the model itself reveal the need to consolidate internal verification of the system.

#### 4.2 Principal results of the audit of the France Telecom accounting separation mechanism

##### Concerning the accounting separation mechanism as a whole

The auditor reported no significant anomalies in the calculation of the accounting separation model applied by France Telecom for the fiscal year 2006.

##### Concerning internal sales agreements

In its agreements, France Telecom is required to formalise the procurement of wholesale offers by its retail operations, when relevant.

The list of the 21 France Telecom agreements, along with the detailed explanatory notes, were submitted to the Authority on 18 April 2007, and an amended version in May 2007.

The auditor reports that the six retail products in the relevant markets were not subject to agreements, and this for several reasons according to France Telecom:

- ◆ either they were considered to be at the end of their lifecycle, and so not likely to create a demand for the supply of appropriate wholesale offers in order to allow alternative operators to reproduce them in the retail market;
- ◆ or they were not composed of wholesale offers;
- ◆ or it was considered that they did not rely on an essential facility. The costs relating to these products were thus calculated based on regulatory costs for 2006 and not on wholesale tariffs.

The auditor also underscored the fact that, for agreements pertaining to relevant calling markets (agreements 14 through 21), France Telecom hypothesised the non-use of wholesale transit offers, and thus valorised transit services based on production costs. In fact, as did the majority (in minutes) of its competitors, France Telecom considered that, for telephone calls, only wholesale services are used for interconnection of the subscriber switch and operators' connection links.

##### Concerning the format of the separate accounts

France Telecom is required to create accounts that are separated by markets, as specified by the Authority.

The format that France Telecom chose for its separate accounts for the wholesale market, the retail market and the residual account, as well as for the fixed capital balances is in accordance with the regulatory requirements.

As concerns the identification and allocation of contributions to joint and common costs, the format of the submitted accounts is also in accordance with the regulatory requirements

##### Concerning the scope of the residual account

To guarantee the completeness of the accounting separation mechanism, all operations falling within the scope of regulation, but not within the scope of separate accounts, must be included in the residual account.

The residual account can be broken down into four types of product operating account (*CEP*): operating accounts for products outside the scope of accounting separation, for non-regulated wholesale services, for products at the end of their lifecycle and operating accounts for other products.

The approach taken by France Telecom for classifying the operating accounts for products outside the scope of accounting separation is correct. As concerns operating accounts for non-regulated wholesale services, France Telecom considered that, apart from partial leased lines, only operators' very high-speed leased lines (running at more than 34 Mbps) fell under the heading of the relevant wholesale market for intra-regional trunk segments, and that operators' other leased lines fell under the scope of the residual account.

While being the downstream result of wholesale products, a certain number of product operating accounts were classified in the residual account, as France Telecom considered that these products, nearing the end of their commercial lifecycle, were no longer part of the competition dynamic with other operators.

Lastly, a certain number of product operating accounts should theoretically be subject to sales agreements and be classified in the category of retail products resulting from wholesale products.

#### **Concerning joint commercial retail costs**

The manner in which joint commercial retail costs are allocated to the different retail operations is open to interpretation to some degree, provided that it is properly justified by France Telecom.

The auditor reports that the analysis of the joint commercial retail costs was performed based on the nomenclature of 2005 and that certain commercial operations, which were newly created in 2006, were not taken into account in the analysis process. It recommends that for the next accounting separation exercise, these operations be integrated into the joint commercial retail costs identification process.

If, in the measurement of the set of costs that correspond to joint costs, the approach taken by France Telecom appears satisfactory as a preliminary approach, and acceptable for this first exercise, the auditor recommends that complementary studies and analyses be undertaken when performing the next accounting separation exercise.

