



ART's Annual Report Summary

2004

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2004, A YEAR OF TRANSITION

2004 will be remembered as a year of transition: from regulation that enabled the market's opening up to competition, to a system aimed at strengthening and developing that competition. The legislative and regulatory framework's evolution, which included the adoption of laws for transposing European directives into French national law, endowed the sector with a legal framework entirely coherent with European texts. The regulator's power and independence were thus reaffirmed and consolidated.

ART now has the proper mechanisms in place for implementing more dynamic regulation in the sector, based on forward-thinking market analysis. Retail market regulation comes into play only when wholesale market regulation proves insufficient for ensuring lasting competition. This regulatory methodology must allow the marketplace to evolve gradually towards a state of effective and durable competition whereby, ultimately, general competition laws will suffice to correct any eventual problems that arise.

All of the market analyses were engaged in 2004, with the process for some being more advanced than for others. ART fully intends to be among the first regulators to notify the European Commission on its analyses of the largest markets - which will subsequently allow us to play a role in shaping European laws on the matter. This is why ART is committed to maintaining the pace of notifying the Commission on its decisions.

These market analyses will enable ART to define the rules of the game for the medium term, in other words for at least the next three years: up to the end of 2007. The sector's regulation therefore depends on the quality of the analyses performed - a quality which derives a great deal from the regulator's consultation with the sector's players. Public consultations, the Competition Council's recommendations and the Commission's control are guarantors of the regulator's transparency and fairness.

The year 2004 was also a time of transition in many other respects, both for consumers who adopted new ways to communicate and for operators themselves.

As in the previous year, the market's growth in value of close to 3% in 2004 was driven by mobiles and broadband, while fixed telephony fell by 5.4%. In a situation of dropping prices, particularly in the broadband market, increases in volume were significantly higher than increases in turnover.

Mobile sustained the healthy momentum begun in the last months of 2003. France was home to 44.5 M cellular phone customers at the end of 2004, or close to three million more than the previous year. Turnover for mobile services for the entire year exceeded fixed telephony revenues. Measured in minutes of use, mobile consumption rose by 13% to account for 42% of total voice calling traffic in 2004.

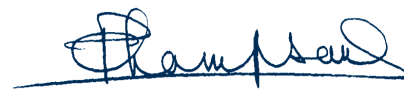
The younger generation's eagerness for new ways to use their mobile shows no signs of waning. In addition to sending SMS and MMS, and downloading ringtones and screensavers, came photography. The popularity of this new mobile phone application points optimistically to the future success of UMTS, which was launched commercially late in the year by SFR and Orange France. The arrival of new MVNO players in 2005 is also expected to stimulate innovation, and the prospects of convergent fixed-mobile offerings.

As to broadband, it has won over more than half of all Internet users, with a base now totalling 6.5 million subscriptions, chiefly via ADSL - putting France amongst Europe's leading countries, in terms of both number of ADSL connections and penetration rates. A sign of lively competition in the retail market, at the end of 2004 alternative operators had a roughly 52% share of the ADSL user base, compared to 45% at the start of the year, and were operating 1.6 million unbundled lines, versus 270,000 at the beginning of the year.

Several underlying trends shaped 2004: first, ADSL retail tariffs have dropped overall by 2.5 times over the past two years, making the French market among the most competitive in Europe, while bitrates have increased under the same flat rate prices. And, second, thanks to the use of ADSL, consumer demand for the multimedia services being offered by operators and Internet service providers is rising. Through the use of the various bundled service devices (e.g. Freebox, Livebox and 9box), they are gaining access to service packages which, in addition to broadband Internet, include telephony, videophony, TV and video on demand.

On the operator side of things, France Telecom continued to reintegrate its subsidiaries. After regaining control of its mobile subsidiary (Orange), the incumbent carrier bought up the minority shares in its ISP subsidiary, Wanadoo, in 2004, and in its corporate global services arm, Equant, in early 2005 - bringing the State's share of France Telecom down to 41%. ART will be careful to ensure that this vertical integration does not have an adverse effect on competition. Meanwhile, new entrants, and particularly ISPs and unbundled operators, have announced major investments and have increased development funding, with some turning to the marketplace itself by launching IPOs. Mergers have been announced by operators both in the fixed sector and in the broadband Internet sector.

Faced with this new electronic communications landscape that is taking shape, and with the support of local authorities which are working to expand broadband coverage, ART will continue to be vigilant in ensuring that competition develops under conditions that guarantee its true durability. Whether in the mobile market, with the advent of virtual operators, or the broadband market, with the geographic expansion of unbundling and the onset of full unbundling, ART's actions in 2005 will be aimed at enabling alternative operators to innovate, and at ensuring that both mobile operators and the incumbent are properly remunerated for use of their infrastructure. It is in the interest of everyone: operators, industry players and consumers alike. It is in the entire market's interest. It is in this same spirit that ART is preparing regulations for the postal market, as entrusted to it by government mandate.



Paul Champsaur
President

ORGANISATION CHART

1st June 2005

Executive Board

President

**Paul
CHAMPSAUR**

Members

**Jacques
DOUFFIAGUES**

**Michel
FENEYROL**

**Gabrielle
GAUTHEY**

**Édouard
BRIDOUX**

EU framework Implementation

**Auréli
DOUTRIAUX**

Director General

**Philippe
DISTLER**

Deputy Director General

**François
LIONS**

Communication

**Jean-François
HERNANDEZ**

Deputy:
**Ingrid VIOLET-
APPENZELLER**

Economic & Forecasting

Coordination of economic analyses.
Universal service and directories.
Observatories and external studies.
Forecasting.

François LIONS
Deputy : **François VARLOOT**

Economic and Competition Analyses

Nicolas DEFFIEUX

Economy of networks and services

François VARLOOT

Forecasting

Didier CHAÛVEAU

Market observatories & external reports

Sylvie DUMARTIN

Regulation of fixed & mobile markets

Regulation of wholesale and retail markets for fixed (switched and leased line) and mobile services.
Tariff regulation and portability

Benoît LOUTREL
Deputy : **Antoine MAUCORPS**

Fixed Network Retail Markets

Rémi PERTHUISOT

Fixed Network Wholesale Markets

Gweltas QUENTREC

Mobile Markets

Sébastien SORIANO

Local authorities & regulation of broadband markets

Regulation of wholesale and retail markets for broadband networks and services and broadcasting.
Relations with local authorities for regional digital development.

Laurent LAGANIER
Deputy : **Jean-Claude BEAUCHEMIN**

Broadband Access

Cécile GAUBERT

Broadcast Transmission & Broadband Services

Bernard CELLI

Local authorities

Jean-Claude BEAUCHEMIN

Operators & Regulation of Scarce Resources

Point of entry for operators (notifications, framework for new technologies).
Planning and regulation of scarce resources (numbers and frequencies).
Monitoring of licence obligations (notably QoS and coverage).

Jérôme ROUSSEAU
Deputy : **Olivier BLONDEAU**

Operators & Resource planning

Anne HUGUET

Mobile operators

Fabrice ALVES

Frequencies

Olivier BLONDEAU

Numbering

Jacques LOUESDON

International

Coordination and implementation of ART's international actions.

Anne LENFANT
Deputy : **Joël VOISIN-RATELLE**

European Affairs

Françoise LAFORGE

International Affairs

Joël VOISIN-RATELLE

ITU Coordination & International Standardisation

Marie-Thérèse ALAJOUANINE

Legal

Responsible for all legal aspects of ART's activity; ensure the legal security of decisions.

Bernard MESSIAS
Deputy : **Loïc TAILLANTER**

Administration and Human resources

Manages ART resources, documentation, the intranet and consumer relations

Jean-Marc SALMON
Deputy : **Elisabeth CHEHU-BEIS**

Information System & Office Support Services

Pierre-Jean DARMANIN

Programming, Budget & Management, Audit

Bernard THOUVIGNON

Documentation

Elisabeth CHEHU-BEIS

Consumers

Stéphane KUNA

Human resources & labour relations

Catherine AUTIER

ART'S EXECUTIVE BOARD

The Executive Board - January 2005



Gabrielle
GAUTHEY

Édouard
BRIDOUX

Paul
CHAMPSAUR

Michel
FENEYROL

Jacques
DOUFFIAGUES

As a guarantee of ART's independence, the members of the Executive Board may not be dismissed nor may their six-year term be renewed. This independence is strengthened by the fact that the Board members are appointed by several high-level elected officials. Three of them are appointed by the President of the Republic, while the two others are appointed, respectively, by the President of the National Assembly and the President of the Senate.

Three members of the Board were appointed by order of the President of the Republic:

- as Chairman, **Paul CHAMPSAUR**, Inspector General of INSEE, on 3 January 2003;
- as members, **Michel FENEYROL**, telecommunications engineer, on 3 January 2001, and **Édouard BRIDOUX**, Doctor of Science, university professor, on 4 January 2005.

The President of the Senate appointed former minister **Jacques DOUFFIAGUES** as member of the Board on 4 January 2001.

The President of the National Assembly appointed **Gabrielle GAUTHEY**, telecommunications engineer, as member of the Board on 31 December 2002.

These five members make up ART's Executive Board. It defines the major guidelines for action and issues the decisions and recommendations that structure ART's overall action.

□ ART/ARCEP's RESPONSIBILITIES

In 2004, the new regulatory framework, come from the transposition of the European directives known as the "telecom package," confirmed the principle of sector-specific regulation. Article L. 32-1 of the Post and Electronic Communications Code (CPCE) defines the regulator's primary responsibilities, which must be carried out in an objective and transparent fashion:

- To foster real and fair competition that benefits users.

Competition is not an end in itself; rather, it aims to provide consumers, whether individuals or business users, with a diversified service offering. Only a competitive market can provide services that can be differentiated in terms of quality and price.

- To monitor the provision and funding of universal service as part of the public telecommunications service.

The public electronic communications service includes universal service which is comprised of four components: an affordable high-quality service, including social tariff reduction; a directory enquiry service and a subscriber directory; access to public payphones deployed in the public domain; special measures to accommodate disabled users.

- To monitor the development of employment, innovation and competitiveness in the telecommunications sector.

In its recommendations and decisions, ART seeks to encourage employment and innovation in the sector's companies, while maintaining an environment that fosters their competitiveness.

- To take into account the interests of the regions and users, in terms of access to services and equipment.

Regional development is a major concern for ART, both in terms of expanding broadband into sparsely populated regions and of national mobile coverage.

The Act on postal operations regulation, dated 20 May 2005, entrusts ART - which thereby becomes ARCEP (Autorité de régulation des communications électroniques et des postes/Electronic Communications and Postal Regulatory Authority) - with a mandate to monitor the opening up to competition and proper operation of the postal market, notably in granting authorisations to exercise a postal activity, and by issuing public recommendations on tariffs and universal service quality objectives which it is in charge of overseeing, and by approving tariffs in the reserved sector.

THE LAWS

ELECTRONIC COMMUNICATIONS

- Act no. 2003-1365, dated 31 December 2003, on public telecommunications service and France Telecom's obligations.
- Act no. 2004-575, dated 21 June 2004, on confidence in the digital economy.
- Act no. 2004-669, dated 9 July 2004, on electronic communications and audiovisual communication services.

POSTAL SECTOR

- Act no. 2005-516, dated 20 May 2005, on regulation of postal operations.

THE EUROPEAN FOUNDING TEXTS

ELECTRONIC COMMUNICATIONS

Six directives

- The "framework" Directive 2002/21/EC of the European Parliament and Council, dated 7 March 2002.
- The "access" Directive 2002/19/EC of the European Parliament and Council, dated 7 March 2002.
- The "authorisation" Directive 2002/20/EC of the European Parliament and Council, dated 7 March 2002.
- The "universal service" Directive 2002/22/EC of the European Parliament and Council, dated 7 March 2002.
- The "protection of privacy and electronic communications" Directive 2002/58/EC of the European Parliament and Council, dated 12 July 2002.
- The "competition" Directive 2002/77/EC of the European Parliament and Council, dated 16 September 2002.

One decision

- The "radio spectrum" decision no. 676/2002/EC of the European Parliament and Council, dated 7 March 2002.

Administrative texts

- Commission guidelines, dated 11 July 2002, on market analysis and assessment of market power pursuant to the EC regulatory framework for electronic communications networks and services.
- The European Commission recommendation, dated 11 February 2003, concerning relevant markets for products and services in the electronic communications sector that are likely to be subjected to ex-ante regulation pursuant to the "framework" Directive.

POSTAL SECTOR

- Directive 97/67/EC of the European Parliament and Council, dated December 1997, on common rules for the development of the Community's interior postal services market, and improvement of the quality of service.
- Commission paper on application of competition rules in the postal sector, and assessment of certain State postal services measures.
- Directive 2002/39/EC of the European Parliament and Council, dated 10 June 2002, modifying Directive 97/67/EC as concerns continued deregulation of the Community's postal services.

□ MARKET ANALYSIS: A THREE-STEP PROCESS

The Act of 9 July 2004 profoundly altered the Post and Electronic Communications Code (CPCE), particularly in terms of the market analysis process provided for in the European directives. A section 2 on operators with significant market power (SMP) in the electronic communications sector was introduced in the Code's legislative part. This provision was later specified by decree no. 2004-1301 dated 26 November 2004 on SMP operators, published on 30 November 2004, and referred to hereafter as the "market analysis" decree.

It is thereby stipulated in Articles L. 37-1 and L. 37-2 of the Post and Electronic Communications Code that it is ART's responsibility to:

- define the relevant markets for ex-ante regulation, following Competition Council opinion;
- designate the operator(s) with significant market power in each of the markets, following Competition Council opinion;
- impose, amend or, if appropriate, withdraw these operators' obligations.

ART must also submit to the CSA (broadcasting authority) for opinion on the decisions concerning the definition of a relevant market and designation of an operator with significant market power when radio and television broadcasting are included in the market's scope. Both the Competition Council and the CSA have a period of six weeks to submit their opinions to the Authority.

ART must conduct its relevant market analysis by taking utmost account of the European Commission's recommendation on relevant markets of 11 February, as well as the guidelines on market analysis and SMP assessment of 11 July 2002. These analyses must be part of a forward-looking approach.

Furthermore, given that these decisions will have a major impact on the markets being examined, ART must consult the sector nation-wide to gather the views of the people and players involved. The minimum length of this public consultation has been set at one month by Article D. 304 of the Code.

ART must also define the lifespan of these market analyses' validity. According to Article D. 301 of the Post and Electronic Communications Code, it cannot exceed three years. Nevertheless, when justified by the market's evolution, the Authority can elect to conduct a new market analysis before this expiration date. Similarly, should the Commission alter its recommendations on relevant markets, the Authority must conduct new analyses as soon as possible. It should also be noted that, in accordance with Article D. 303 of the Post and Electronic Communications Code, ART can alter SMP operators' obligations without having to re-determine relevant markets.

Lastly, pursuant to the provisions contained in Article L. 37-3 of the Post and Electronic Communications Code, ART must notify the Commission and the other National Regulatory Authorities (NRA) on its decisions. These bodies have a minimum of one month to submit their observations, which ART must take under close consideration. Nevertheless, should the Commission feel that these draft decisions are detrimental to the common market's development, or if it has concerns that the draft decisions - on relevant markets not listed in the Commission's recommendation, or on the designation of an SMP operator - are incompatible with community laws, it will have an additional two months to further its examination. At the end of this period, it can veto the adoption of the draft measures.

This process can, however, be eliminated, in accordance with Article L. 37-3 of the Code, under exceptional circumstances that require urgent measures to be taken to preserve competition and protect users' interests. In such a case, ART and the Ministry in charge of electronic communications can adopt proportionate measures immediately, and which will be in effect for a maximum of 6 months only.

THE RELEVANT MARKETS DESIGNATED BY THE EUROPEAN COMMISSION

The European Commission's recommendation, dated 11 February 2003, identifies the product and services markets which are likely to be subject to ex-ante regulation under the "framework" Directive. The Commission defined seven retail markets and eleven wholesale markets.

FIXED VOICE

- 6 retail markets: access, national and international calls, based on segmentation between residential and non-residential users;
- 3 wholesale markets: call origination, call termination, transit;

FIXED DATA

- leased lines
 - * 1 retail market: lines equal to or lower than 2 Mbit/s;
 - * 2 wholesale markets: terminal segment (including, primarily, partial leased lines for termination and the trunk market, i.e. the backbone between operators' main network nodes);
- broadband
 - * 2 wholesale markets: wholesale provision of broadband access (bitstream) and wholesale provision of unbundled access;

MOBILE

- 3 wholesale markets: access and call origination, call termination, wholesale provision of international roaming nation-wide;

AUDIOVISUAL

- 1 wholesale market: broadcasting services.

□ STRENGTHENING COMPETITION IN THE FIXED TELEPHONY MARKET THANKS TO BROADBAND

When looking at market figures, there may appear to be healthy competition in the fixed telephony sector. In 2004, close to a quarter of French users chose an alternative operator over France Telecom for conveying their local, long distance and international calls. This figure needs to be put in perspective, however: in terms of value, alternative carriers' market share is much lower than that (by around 10%), due to the interconnection charges paid to France Telecom. The fixed telephony market's degree of openness therefore remains limited, seven years after the market's full deregulation. And competition remains fragile.

Now, thanks to IP technology, France Telecom's competitors are finding an opportunity to improve their future prospects. New IP networks are considerably less expensive to deploy and operate, which gives new entrants an advantage. These networks also open up possibilities for designing a variety of new IP-based services, particularly for use over broadband.

However, to develop and market their services to end customers, and broadband services in particular, alternative operators need to have access to the local loop.

While cable is a natural alternative infrastructure to the local copper loop, it remains accessible to only a minority of the population - even if it does play a sizeable role in those areas where it is deployed. In France as a whole, however, cable carries little weight, particularly when compared to its prominence in other countries like the United States, Belgium and even the UK. In these countries cable is a fully competitive alternative infrastructure. The restructurings that are currently underway are expected to further substantiate its role of challenger in those areas where it is available.

Other alternative technologies, whether terrestrial, such as WLL (Wireless Local Loop) and satellite, or fixed such as fibre optics and PLC (PowerLine Carrier) are still too marginal or, for some, too immature, to constitute alternatives to the copper pair.

Since, from an economic standpoint, it would not be feasible to duplicate the local loop connecting to end users, regulation must allow France Telecom's competitors to have access to this infrastructure through unbundling.

The incumbent carrier's competitors were initially able to develop nationally available broadband access offerings by combining partial unbundling in densely populated zones with another of France Telecom's wholesale offers, in areas where unbundling was not yet possible.

Unbundling of France Telecom's local loop and wholesale broadband offers are the two prime areas of competition in France - and unbundling is the keystone.

ART's strategy involves giving alternative operators the possibility of having direct access to customers, in exchange for fair payment to the incumbent carrier for use of its local loop. Given the quality and density of France Telecom's local loop, it is in fact essential that it must be properly maintained and developed.

FULL UNBUNDLING

As broadband telephony has proven itself technically viable, and in a position to become customers' sole telephone service by substituting it for conventional calling on the PSTN, the challenge now for alternative operators is to establish an exclusive relationship with customers. To be able to have only one bill to pay, customers will be inclined to sever business relations with France Telecom, and opt for a single vendor who supplies telephony, access to the Internet and even other broadband-based services, such as television.

ART is committed to defining a coherent framework for consolidating competition in the broadband market, by giving it visibility and by simplifying the transition from partial to full unbundling.

In early 2005, France Telecom agreed to improve unbundling operating conditions. Up until recently, the quality of the process that had been implemented provided few incentives for France Telecom's competitors to invest in full unbundling. ART wants the quality of service to be high enough for alternative operators to be able to compete with France Telecom's retail offers. The quality and the continuity of the phone service in particular need to be guaranteed. Here, it is imperative that full unbundling be synchronised with number portability.

Improving the quality of service will involve the publication of indicators that enable comparisons and guarantee that the quality of service supplied in the wholesale market matches the one supplied in the retail market. These indicators will make it possible to ensure high quality unbundling, which is in consumers' interest. Late penalties are planned for in cases where commitments are not met.

A further requirement is the need to cut the cost to alternative operators for co-locating their equipment in France Telecom's main distribution frames (MDF). These costs can constitute entry barriers for smaller sites which are less profitable, since targeting a smaller potential customer base. ART has entered into discussions with France Telecom to reduce co-location costs, and a variety of other costs to unbundling operators, and to design a new, more suitable MDF connection offer.

COHERENT PRICING STRUCTURE

On 1 June 2005, the tariffs for full unbundling of a phone line dropped to 9.50 euros a month. This rate will be the ceiling for three years. At the same time, ART issued a recommendation in favour of increasing France Telecom's main subscription, and decreasing basic tariffs for fixed to fixed calls in 2005, with a conditional recommendation for the next two years. The goal is to achieve a gap of around 4 euros between the wholesale price of full unbundling and the retail price of a subscription, within two or three years' time. Only a gap of this size will enable the incumbent carrier's competitors to have enough economic freedom to invest in full unbundling. Between the wholesale price of full unbundling and the retail price of a subscription will be the resale price of the wholesale subscription that France Telecom has agreed to offer starting in the autumn of 2005.

At that point, it will be possible for France Telecom competitors who do invest to build a nationwide offer which combines a telephone service and broadband access to the Internet, based on full unbundling in those zones where unbundling is economically possible, and on another France Telecom wholesale offer completed by subscription resale, in non-unbundled zones.

What also needs to be maintained is the appeal for operators to enter into unbundling, rather than rely on a France Telecom wholesale offer, which provides no incentive to invest. Here, regulation of wholesale markets for regional (former option 3, wholesale ADSL access and Internet traffic collection at regional points) and national (former option 5, which allows unbundled operators to resell France Telecom's wholesale broadband access service under their own brand) offerings is based on the ban on price squeezes.

This new pricing mechanism creates a virtuous circle aimed at ensuring durable competition for local loop access.

PRICE OF THE LOCAL LOOP

For ART, the challenge for the coming months is to allow full unbundling to develop at the same fast pace as partial unbundling. Unbundling plays a fundamental role in the sector's economy since it guarantees France Telecom's competitors proper independence which, in the long run, will lessen the regulations applied to France Telecom.

Pricing principles will be re-examined to calculate the fair cost of unbundling. The method used for evaluating the cost of the local loop, currently based on the costs of wireline replacement, contains a serious lack of coherence and could lead to wholesale tariffs that are higher than retail tariffs, which are themselves based on historical book costs - an equally ill-suited method. This is why, in mid-April 2005, ART launched a public consultation on copper local loop pricing methods. The goal here was to get in line with Europe's best practices by implementing a robust method that would be difficult to manipulate from an accounting standpoint, and which would give all players visibility in the coming years. The new local loop pricing method will be notified to the European Commission, then adopted in the second half of 2005. While awaiting the market analysis results, ART has maintained the old system. In any event, under the agreements made by France Telecom, full unbundling tariffs should not exceed 9.50 euros a month for the next three years.

GEOGRAPHIC EXPANSION OF UNBUNDLING

Finally, unbundling will only be entirely successful when broader geographical coverage has been achieved. This expansion is crucial to ensuring that competition does not remain confined to urban areas only, but extends also into those regions where unbundling is not currently available. It is as much in the interest of consumers living in low density areas, as in the interest of regional governments.

To achieve this, unbundled operators' networks need to be more dense. This will involve deploying collection networks to reach France Telecom's main distribution frames in the region. It will require substantial investments, with civil engineering accounting for 80% of the cost. It is therefore critical to encourage public-private synergies for sharing the cable ducts, engineering costs and fibre, and to enable a maximum number of operators to serve the regions.

To respond to the demands of local authorities seeking to increase the appeal and competitiveness of their region, Article L. 1425-1 of the Local Authority General Code, ratified as part of the Act on confidence in the digital economy, dated 21 June 2004, gives them the ability to intervene in the establishment and operation of electronic communications networks. This Act also recognises their ability to provide electronic communications services directly to end users, provided there is a proven lack of private initiatives. By not ruling out local authorities' involvement in establishing and operating networks when a lack of private initiatives exists, the legislator's goal was not to disregard the principle of freedom of commerce and industry, under which public economic intervention must not compromise the ability to exercise free and fair competition.

Acting in the interest of the regions, as required by law, ART is particularly attached to adhering to this principle.

The experience that the regulator has acquired in regulating broadband since the markets' deregulation, allowed it to lay down guidelines in December 2004 for all public interventions with respect to competition.

SHARING INVESTMENTS

First, local authorities are invited to coordinate their projects: in the best case scenario, the four levels of regional organisations in France will consult with one another to achieve the greatest possible efficiency. Next, any intervention must be concerned with sharing investments: infrastructures should be able to be shared by a maximum number of operators. Third, intervention must respect the principles of transparency, and therefore not be discriminatory. This means that local authorities, or their proxies, will be subject to the same obligations as all the other operators. And, finally, it is essential that a distinction be made between the business of operator, and the business of the power that awards rights of way, which implies a separation between the two entities.

In addition to following these principles, local authorities' involvement appears to be naturally geared to providing services in wholesale markets. Operators and Internet access providers, who are the local authority's or its proxy's customers, will in turn be steering their efforts towards serving retail markets. A local authority's involvement in the market fosters real competition at the network level, which is not the case with the resale of a single operator's wholesale offer under a market monopoly.

It would also be wise for local authorities to plan on supplying offers such as simple non-activated fibre optic leasing, a useful resource for operators and access providers who do not own their own network.

The law gives local authorities greater leeway. To a large extent, it is difficult to predict what use they will make of it, if only because of the complexity of this area of business, the uncertainties surrounding technological developments, the differences between the regions, and the differences in how high they perceive the stakes to be.

This is why ART elected to create an entity focused on study, debate and consultation, the Public Initiative Networks' Committee (CRIP), in which local authorities and operators will be able to analyse the obstacles and keys to regional digital development. The goal is to promote a complementary relationship between private initiative and public intervention, and to thus make the best use of the clearly innovative legal framework that the Parliament has provided for local authorities.

□ THE MOBILE MARKET

At the end of 2004, there were a total 44.6 million mobile users (flat rate and prepaid cards), generating revenues of close to 15 billion euros, compared to only 5.8 million mobile lines at the end of 1997. This massive growth has slowed down over the past few years, however. But there are several factors that would enable this sector to exploit its full potential: consumer interest in new services, number portability and the arrival of new players onto the scene.

NEW SERVICES

Initially centred around voice, mobile telephony has recently been the stage for the rise of new services - with SMS (short message service) topping the bill. More than 10 billion SMS were exchanged in 2004 on Metropolitan France's mobile networks, generating revenues of over one billion euros. Traffic in 2000 was seven times less than that. On the whole, new communication modes (SMS, MMS, e-mail, videophony) and new services (SMS+, positioning, Internet access, mobile TV), seem to have a bright future ahead of them.

Consumers' appetite for new ways to communicate and for new mobile services is now the chief driving force behind the sector's growth and technological development (EDGE, UMTS, DVB-H). With this in mind, the market is expected to enjoy a revived momentum in the medium term. The first figures in this area from SFR and Orange France, which launched their third generation networks in late 2004, are indeed encouraging.

NUMBER PORTABILITY

Portability is one of the keys to ensuring free-flowing competition in the market. It is a necessity for all operators, whether new entrants or not, in their bid to gain new customers. This is all the more true in a relatively mature market, in other words one where the goal is not so much conquering new customers as one where customers are likely to want to switch from their operator to one who better responds to their needs.

For corporate customers and public authorities, portability involves strategic considerations: changing operators would involve changing telephone numbers, which may have an adverse effect on business (loss of customers) or harmfully disrupt the continuity of a customer's service. So, even though portability is not in and of itself a guarantor of free and fair competition, without efficient portability healthy competition would not exist in a market with high penetration levels.

In December 2004, ART drew up an implementation summary for mobile number portability, and identified the short-term developments that would be put into place in 2005 (removal of the ineligibility clause for unsettled accounts, reduced porting times, implementation of multi-line porting vouchers for companies and government agencies).

A one-stop kiosk system will eventually be put into place. A centralised database enabling more efficient (i.e. direct) traffic routing to "ported" customers will be created. These more structured developments will require a joint effort on the part of the players in defining customer processes and technical interfaces to be used by all operators. ART's coordination of this effort will make it possible to achieve that goal within a relatively short timeframe. And, finally, ART is keen to have this technical work be completed by specific regulatory measures, to ensure an appropriate solution is reached - given the number of players and the economic, technical and competitive stakes involved in such a development.

NEW PLAYERS

The entry of new players also seems necessary to stimulate the market. It should be noted that a UMTS licence is still available to any operator wanting to market third generation mobile services.

Since June 2004, in Metropolitan France, seven companies have signed MVNO agreements (Mobile Virtual Network Operators, i.e. those who do not have their own cellular network) with mobile operators who own the networks (i.e. host operators).

ART is pleased by the arrival of these new players. They will lead to new sources of growth, provided that the agreements signed with host operators are fair. On the whole, the arrival of new entrants into a market fuels innovation, a diversification of the offer and a drop in prices.

The retail market's revival may involve these new players taking up a distinctive position from existing operators, for instance in terms of marketing policy (low-cost offers, regional offers, content offers, etc.), in terms of distribution channel (Internet, newsstands), and especially in terms of service (fixed-mobile convergence).

The advent of MVNOs can only increase competition in the mobile market, particularly in the short term (in the absence of a fourth network operator), but in the long term as well. New entrants can in fact gain access to a sizeable portion of the value chain (outbound, and even inbound, traffic, handset sales). They can develop strategies that are complementary to or different from mobile operators', given their variable cost economies which may lead them to target a smaller customer base, or one with lower buying power, and thereby stimulate new pockets of the market (light users, regions with low penetration rates).

In addition, some MVNOs which are also fixed telephony operators could develop bundled or convergent offers - an area pioneered by other countries.

ART is naturally in favour of all technical and pricing innovations that benefit customers. Promoting the development of this type of offer is particularly important in light of the Authority's responsibilities, namely, "to ensure the development of innovation in the telecommunications sector for the benefit of users."

The Authority is keen to ensure that these innovations, which could have an impact on the entire electronic communications landscape, will not have an adverse effect on the exercise of free and fair competition between network operators and electronic communications service providers, notably between those operators who operate both, fixed and mobile networks, and other operators.

Furthermore, it is possible that an MVNO will initially use its access contract as a "stepping stone," before applying for the fourth UMTS licence at a later date, and so deploying its own cellular network, sustained by an existing customer base.

□ MANAGING SCARCE RESOURCES

Frequency and numbering plan management are essential elements of regulation. Should proof of this be required, one need only look at the large number of decisions made by the Executive Board in these areas. In 2004, aside from independent networks which are heavy frequency users, 218 decisions enabled the allocation of 5,236 frequencies to networks open to the public; 80 decisions made changes to allocations and some one hundred allocations were cancelled. At the same time, 203 decisions on the day-to-day management of numbering resources were made in 2004.

As part of its scarce resource management mandate, ART will be focusing on two major issues. The first involves the introduction of a secondary spectrum market, and the second involves changes to the numbering plan.

TOWARDS THE CREATION OF A SECONDARY SPECTRUM MARKET

Article L.42-3 of the Post and Electronic Communications Code introduced the possibility of selling off frequency authorisations, for those frequencies allocated by ART. The choice to create a secondary market is provided for in the "authorisation" directive. This mechanism gives authorisation -holders the freedom to negotiate the transfer of all or a portion of it.

Its implementation requires the Ministry in charge of electronic communications to issue a decree to determine the general terms and the regulator's responsibilities in the matter, in addition to the publication of an order that defines the frequency bands for which this type of sale will be authorised.

ART is involved in helping the government lay the groundwork for these texts, and will be submitting a report on the frequency bands concerned in summer 2005.

The creation of this type of secondary spectrum market will constitute a new regulatory tool that brings with it a greater flexibility in spectrum management, which is expected to enable a better balance between demand and frequency allocation, to remove certain inflexibilities in spectrum access, and to foster innovation. This economic value placed on frequencies is also expected to enable more efficient spectrum allocation. A coherent pricing policy will need to be adopted to guarantee optimal impact of this new mechanism.

This does not mean that the market will replace frequency planning. On the contrary, its role becomes all the more important since the rules defined should serve as a framework for current and future users. In addition to planning, the rules which are in the process of being defined are expected to help prevent any risks of anti-competitive behaviour.

France has adopted the principle of a gradual opening of a secondary market - focusing during the first stage on those bands for which there is already demand, and which carry limited risks. To choose the frequency bands, the government can rely on the market-by-market analysis conducted by ART to assess the demand, the risks and the possible impact on primary spectrum allocations.

The first frequency bands open to the secondary market will become available in 2006. These bands will be analysed on a case-by-case basis, according to criteria enabling a ruling on the relevance of introducing a secondary market, and particularly on the possibility of allowing partial authorisation sales.

CHANGES TO THE NUMBERING PLAN

After eight years of using the numbering plan defined in 1998, and since altered, these updates proved necessary, most notably, to improve the legibility of pricing for special 08AB type numbers, to take into account virtual private networks and the introduction of short 3BPQ numbers. First, the new regulatory framework requires that numbering plan management rules comply with new measures, and particularly the introduction of a general authorisation system.

In addition, the market's evolution is changing the stakes involved in allocating certain resources, such as one-digit prefixes for carrier selection. These resources become less strategic with subscription-based pre-selection and could be allocated to other uses.

Finally, technological innovations are forcing the need for changes to the old systems, and even the creation of new ones. It is therefore worth wondering, for instance, whether the geographic information tied to a number should be maintained, or whether a videophony service should be identified by a specific number. The growing use of Voice over IP services, fixed-mobile convergence and the possibilities that these new technologies open up for consumers and operators, require that the numbering plan be taken under proper consideration.

This is why, on 27 October 2004, ART launched a public consultation on changes to the numbering plan and its management rules. This consultation, which ended on 26 January 2005, will be split into different topics to be discussed with the operators throughout 2005, which will in turn lead to the first decisions in the matter.

The consultation contained two main parts. The first part was prospective in nature, aimed at exploring new uses and new needs that will emerge in the coming years, as enabled by new technologies. The second part, focused more on the operational aspect, was geared primarily to gathering the sector's views on the current numbering plan, and on its evolution in the short term. Three main topics were addressed in this call for opinions: Voice over IP, roaming and the impact on current numbers: geographic numbers (01-05), mobile numbers (06) and non-geographic numbers starting with 087; the carrier selection prefixes "E" and "16XY"; and "08AB" numbers for accessing online services.

Parallel to this public consultation, upon the Authority's suggestion, the Advisory Commission on Electronic Communications Networks and Services (CCRSCE) created a task force dedicated to examining changes to the numbering plan in three to ten years. This task force is made up of users, operators, equipment manufacturers and academics. Its goal is to reach a consensual view which would be used primarily in guiding ART's future decisions on numbering.

□ INNOVATION AND REGULATION

The innovations and R&D programmes rolled out by industry players' and operators are continually changing the shape of the electronic communications landscape, and can bring about major technological disruptions - IP being a perfect case in point: originally developed for computer networks but spreading later to telecommunications networks as well.

The growing ubiquity of IP-based offerings is likely to bring about deep-seated changes in the electronic communications landscape. With a technology that induces different cost structures, services can become more independent of the networks, enable roaming, be combined more and more (e.g. triply play bundles) or incorporated into one another (e.g. videophony), so the resulting economic and competitive balances will necessarily shift.

ART monitors the sector's overriding trends in order to a gain forward-looking view of the sector. Two main paths of development stand out: Next generation networks (NGN) and fixed-mobile convergence.

MIGRATION TO NEXT GENERATION NETWORKS

The deployment of next generation networks depends a great deal on the different players' position in the market: incumbent fixed carrier, new fixed entrant, mobile operator, services provider without access network, etc.

All incumbent carriers who operate a PSTN are gradually deploying next generation networks (NGN), in other words all-IP networks that enable voice-data and fixed-mobile network convergence, with the goal of marketing multimedia broadband services that can be easily accessed from the various networks.

Integrated operators who provide fixed and mobile telephony as well as broadband access to the Internet are working towards equipping themselves with hardware that is compatible with both fixed and mobile, which is expected to generate economies of scale.

Most of Europe's incumbent carriers are taking a cautious approach, but do plan on replacing all of their switches by 2010-2012, along with a reduction in network nodes and harmonisation of their transmission solutions.

New entrants are basing operations on more recent and scaleable solutions. They are benefiting from preferred relations with their suppliers - most of which come from the computer world - when adapting products to local features.

Following the first announcements of NGN deployment at the international level, we can already get a preview of the regulatory issues that will force a rethink of current analyses. It has now become necessary to take technological shifts into account, such as the drop in the number of fixed, and later mobile, concentration and interconnection points, the gradual reduction of interconnection points with the incumbent network, the evolution of interfaces with the existing fixed network and mobile networks (ubiquitous IP-based network interconnection), user data and profile repatriation in the networks (which are key to service offerings), emergency call positioning, legal call interception, etc.

FIXED-MOBILE CONVERGENCE

Fixed-mobile convergence is one of the main reasons behind an operator's decision to migrate its switched networks to next generation networks.

Even if the pioneer services launched in Europe in the early 2000s were not terribly successful, the convergence trend is now taking place in a variety of ways: service access continuity (roaming for corporate users, integrated services on several platforms, unified customer service, etc.), mobile replacing fixed-line calling (unmetered mobile calling, high volume mobile telephony offers, etc.), and even fixed replacing mobile (BT's Bluephone service, the rise of IP telephony, etc.). This trend is expected to maintain its momentum in the short term, and will likely lead to a growing number of partnerships between players from different backgrounds. Mobile handsets and multifunction gateways will therefore take on a strategic role.

Furthermore, the introduction of IP connectivity for fixed (broadband over DSL, fibre optics, PLC, WLL, etc.), roaming (Wi-Fi) and mobile (2.5G, 3G) access makes it possible to establish a link with end users, without necessarily having control over the access segment. To a certain extent, this shift has revived the momentum of fixed-mobile convergence. Users can now subscribe to services independently of their access provider. The race for ever-higher bitrates will only enhance the range of services available. Voice over IP is the current focus of attention, but other services too are taking shape. A wide variety of peer-to-peer applications (voice, content...), will only further consolidate this trend.

These technological innovations, which will come to the fore over the next two years, are forcing a re-examination of regulations which are still highly segmented between fixed and mobile.

□ **POSTAL REGULATION**

Act no. 2005-516, dated 20 May 2005, on postal operations regulation seeks to reconcile the existence and viability of the universal postal service with the postal services market's gradual opening up to competition.

This new legal framework transposes the European Directive of 15 December 1997 into national law, particularly as concerns the creation of an independent regulator, and the Directive dated 10 June 2002 on continuing to open postal services up to competition.

La Poste's banking operations and its regional development mandate are not affected by this regulation, and so do not fall under ARCEP's jurisdiction.

The legislator has given ART the responsibility of regulating postal operations. ART thereby becomes ARCEP (Autorité de régulation des communications électroniques et des postes/Electronic Communications and Postal Regulatory Authority).

The legislator has entrusted ARCEP with a mandate to monitor the postal market's opening up to competition and proper operation, while also ensuring the funding and maintenance of universal service.

To fulfil this mandate, ARCEP delivers licences to operators involved in areas which are opening up to competition, exercises accounting and pricing control over the universal service provider, settles disputes, monitors La Poste's universal service mandate, and particularly the quality of the services it provides. The regulator also has the power to make recommendations and to issue opinions on universal service funding.

The scope of regulation extends to postal services operations, which include the clearance, sorting, transport and delivery of postal items in the context of regular delivery tours. Excluded are the distribution of unaddressed printed papers, city couriers and express delivery - sectors which are already open to competition and covered by competition laws.

The universal postal service continues to be defined in general terms, based on the principles set out in the "framework" Directive of 1997: "The universal postal service shall contribute to social cohesion and the balanced development of the territory. It shall be provided in compliance with the principles of equality, continuity and adaptability while seeking optimum economic and social efficiency. It shall provide all users across the whole of the national territory with continuous postal services that meet established quality standards. These services shall be offered at affordable prices for all users." (Article L.1 of the Post and Electronic Communications Code.)

A decree of implementation will specify the regulation's characteristics, notably the postal services covered, clearance and delivery organisational methods, quality of service and universal service access criteria.

THE RESERVED SECTOR

La Poste - designated as the universal service operator under the Act dated 25 June 1999 on directions for sustainable regional development - also has a reserved sector (monopoly). In accordance with the European directive of 2002, this monopoly is restricted, up to the end of 2005, to postal deliveries (mail items addressed to households and businesses, both domestic and coming from abroad) of under 100 g, and at a price less than three times the basic tariff, up to one euro maximum (in May 2005, this basic tariff corresponded to postage of 53 euro cents for a letter weighing under 20 g).

Starting on 1 January 2006, the postal monopoly's weight-price limit will be dropped to 50 g, and to two and a half times the basic tariff.

It will be ARCEP's responsibility to ensure that La Poste fulfils its universal service mandate, and to set the analytical accounting rules that enable verification of La Poste's obligations in terms of the universal service's financial equilibrium, and its funding by the reserved sector's resources.

As concerns tariff control, ARCEP has the authority to approve the tariffs charged for the postal services operated within the monopoly, and for defining multi-annual framework procedures for the rates charged for the universal services open to competition, such as delivery of postal items over 100 g, which can distinguish bulk mail from select mailings.

If it appears that the universal service cannot be funded by the provider of this service in a fair manner, ARCEP can make recommendations to the Ministry in charge of the post on the appropriate measures to take to ensure provision of this service. There are also plans for the creation of a universal postal service compensation fund, managed by the the Caisse des Dépôts et Consignations.

LICENSING SYSTEM

Operators competing with La Poste are subject to a licensing system for mail delivery services which are not part of the reserved sector.

These licences are awarded for a ten-year period to all service providers offering guarantees of protection of the interest of postal services users (ensuring the confidentiality of the mail, the existence of complaints processing procedures, quality of service standards, etc.). The licence must specify the features of the postal services supplied, the territory where they can be supplied, along with information on complaints processing and quality of service.

The licensed operators can have access to certain facilities and information belonging to La Poste (delivery service through post office boxes, mail forwarding service, access to customers' change of address information, access to the postal code directory). In addition, as licensed operators, they also have access to customers' mailboxes for mail delivery purposes.

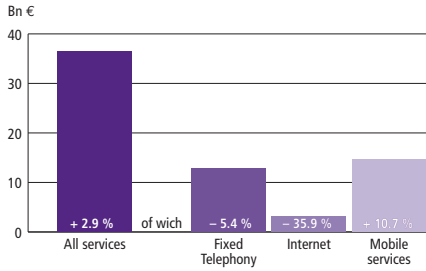
Should the universal service fund be implemented, licensed operators could be required to contribute to it, prorated based on revenues generated in the area of universal service.

The other postal services operators (such as routers, package delivery operators, press distributors) must also comply with essential requirements such as ensuring confidentiality, protection of users' private data and security, and protection of the staff and facilities used for providing the services.

Finally, to ensure fulfilment of its mandates, ARCEP is authorised to impose penalties and to conduct enquiries, and has the jurisdiction to settle any disputes arising between licensed operators, leading distributors, routers and the universal service provider. As in the area of electronic communications, ARCEP may solicit opinions from the Competition Council, and may be asked by the Council for recommendations.

The market in 2004

Market value & growth compared to 2003

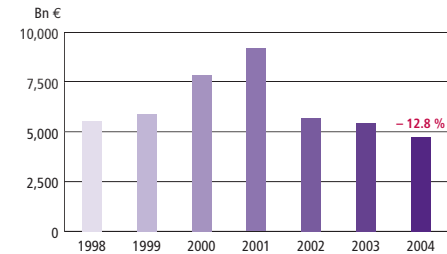
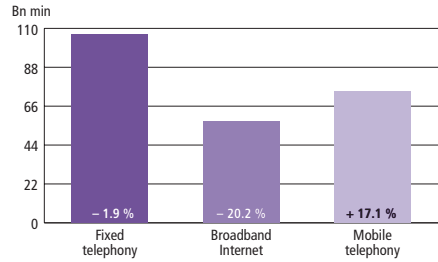


Source: ART, Market Observatory

Telecommunications investments in 2004

For the third year running, there has been a drop in electronic communications operators' spending. This drop of 12.8% in 2004, compared to 2003, was due mainly to mobile operators' cutbacks.

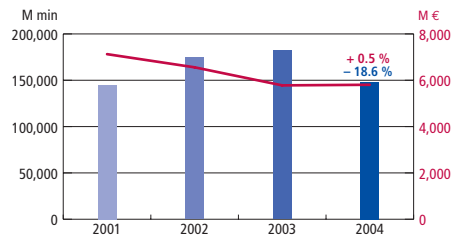
Market volume & growth compared to 2003



Source: ART, Market Observatory

Interconnection services

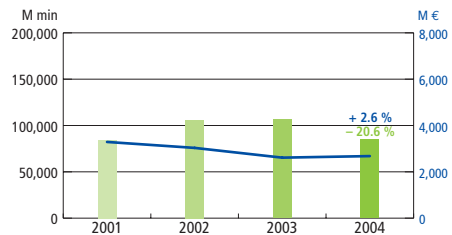
All interconnection services



Source: ART

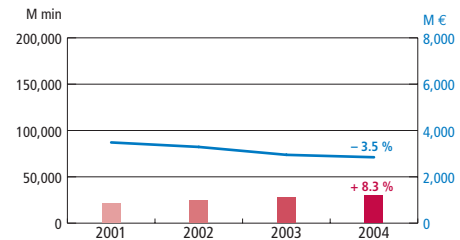
Interconnection between the different electronic networks is one of the essential technical conditions for ensuring healthy competition in the market.

Fixed operator interconnection



Source: ART

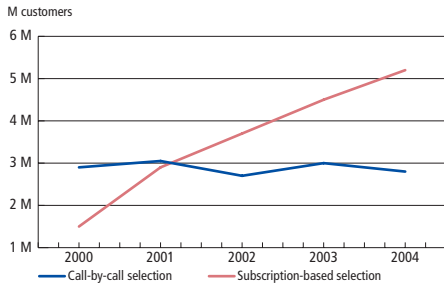
Mobile operator interconnection



Source: ART

Carrier selection

Growth 2000-2004

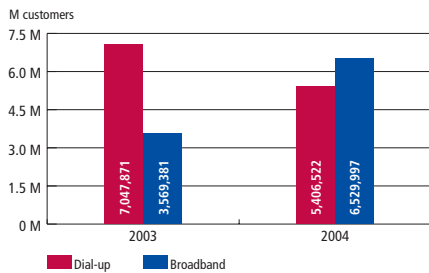


Source: ART

Customers' ability to select a carrier of their choice for conveying long distance calls, initially, and later for local calls as well, was one of the first mechanisms to be included in the market's deregulation.

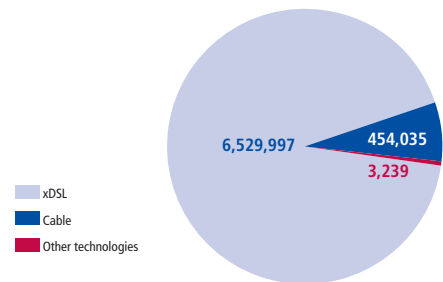
Internet

Growth of Internet subscribers end of 2003 & end of 2004



Source: ART

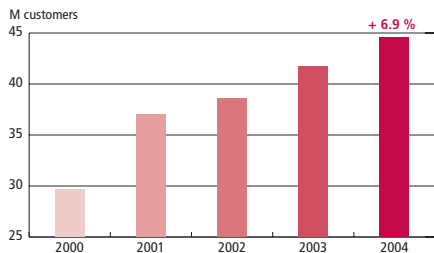
Breakdown of broadband access in 2004



Source: ART

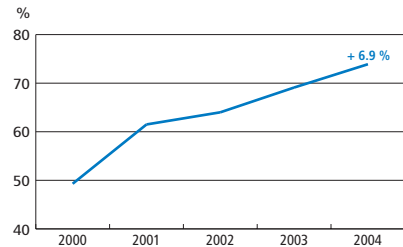
Mobile

Growth of the customer base*



Source: ART

Growth of the penetration rate



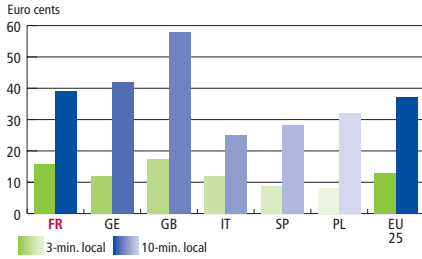
Source: ART

* A customer is anyone with a SIM card, or anyone with a pre-paid card having made at least one call, and who has not exceeded the date after which it is contractually impossible to receive calls, and registered with the operator's Home Location Register (HLR).

EUROPEAN COMPARISONS

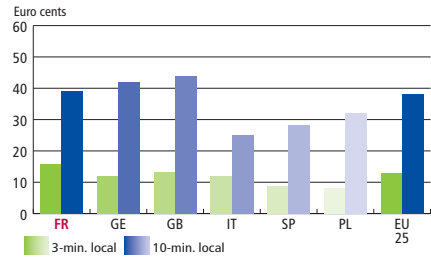
Calling prices

Local call in 2003



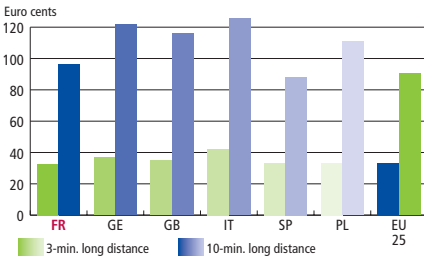
Source: 10th European Commission Report. August 2004

Local call in 2004



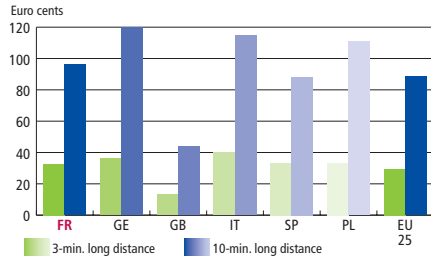
Source: 10th European Commission Report. August 2004

Long distance call in 2003



Source: 10th European Commission Report. August 2004

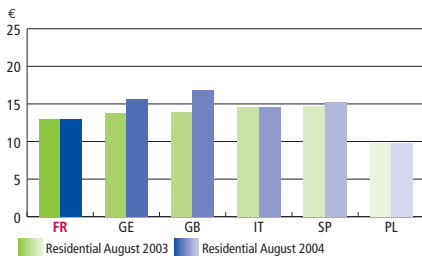
Long distance call in 2004



Source: 10th European Commission Report. August 2004

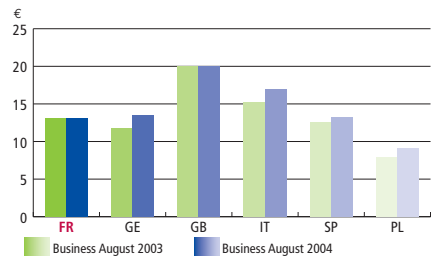
Subscription prices

Residential subscription



Source: 10th European Commission Report. August 2004

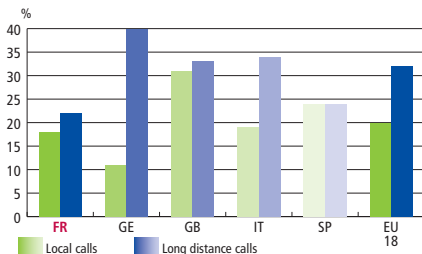
Business subscription



Source: 10th European Commission Report. August 2004

Pre-selection

Local and long distance calls

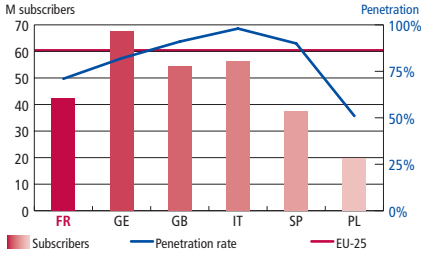


Source: 10th European Commission Report. July 2004

In July 2004, 22% of French telephone subscribers were using an alternative operator to convey their long distance calls, and 18% for local calls – a rate which is below the EU-15 average of 31% and 20%, respectively. .

■ Mobile

Number of subscribers

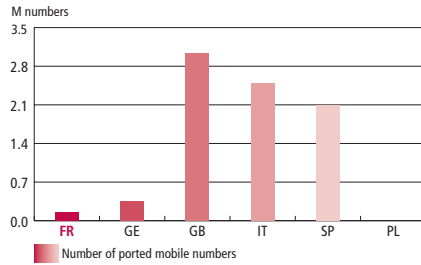


Source: 10th European Commission Report. June 2004

With a mobile penetration rate of 71%, France is well below the cumulated EU-15 average (86.6%), and the EU-25 average (83%). With a penetration rate of 98%, Italy is among Europe's leaders, alongside Sweden and Luxembourg.

In August 2004, there were 12.1 million ported mobile numbers in the 16 European countries where this service is available, or a total 3.2% of all mobile numbers. Number portability is not offered in Poland.

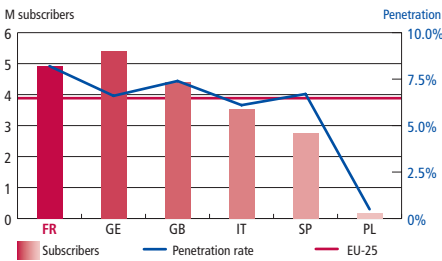
Mobile number portability



Source: 10th European Commission Report. August 2004

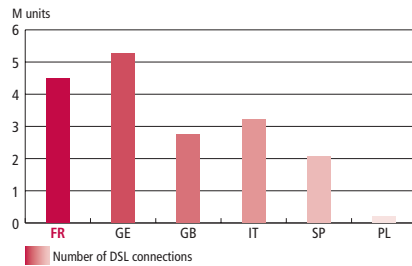
■ Internet

Number of subscribers



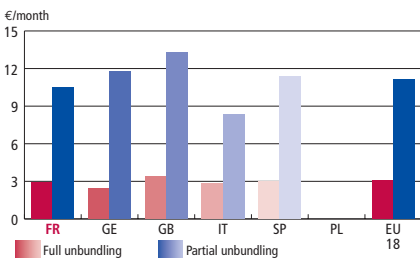
Source: 10th European Commission Report. July 2004

Number of DSL connections



Source: 10th European Commission Report. July 2004

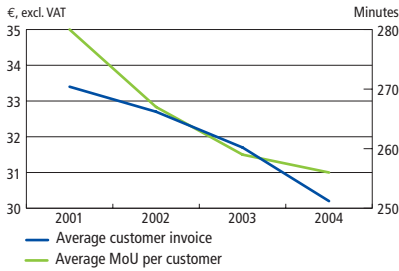
Unbundling tariffs



Source: 10th European Commission Report. August 2004

Full and partial unbundling tariffs in France were below the EU-15 average: 10.50 euros/month versus 11.09 euros/month, and 2.90 euros/month versus 3.10 euros/month, respectively.

■ Average monthly fixed-line phone bill

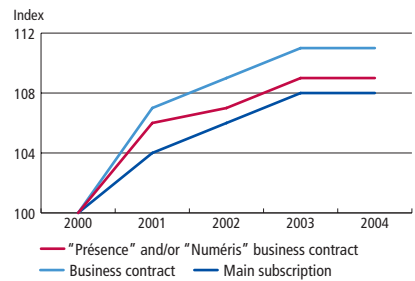


Source: ART

The average customer invoice dropped by 4.6% in 2004 compared to 2003, chiefly due to the decrease in mobile call termination tariffs, passed on to the retail market. At the same time, the volume of calling minutes dropped by 1.3%.

■ Subscriptions

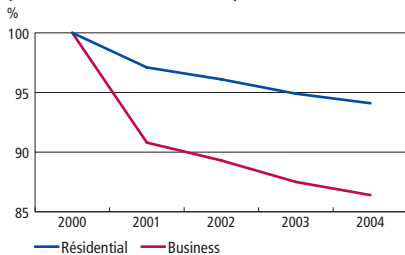
In 2004, the cost of the subscription constituted a sizeable portion of the monthly phone bill for all user categories: around 45% for residential users, compared to 35% in 1997, and roughly 36% for business and corporate users, versus 23% in 1997.



Source: ART

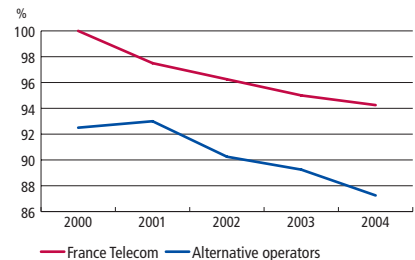
■ Price baskets

Consumption growth index (France Telecom basic tariffs)



Source: ART

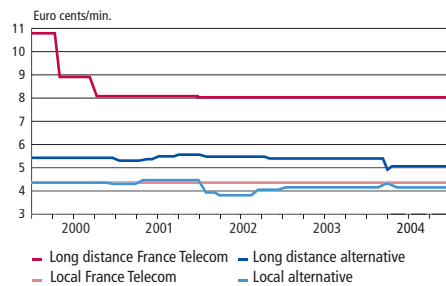
Residential price index



Source: ART

■ Fixed-fixed calls

Comparison of France Telecom and alternative operators' prices

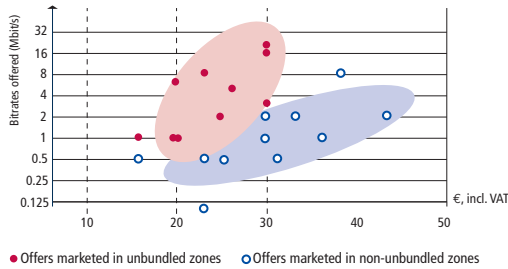


Source: ART

France Telecom's per-minute price dropped significantly in late 2000, settling in at around 8.1 euro cents. The alternative operators are more competitive, charging an average price of around 5.5 euro cents per minute. For local calls too, alternative operators' prices are lower, but the difference with France Telecom's price is much smaller (4.2 versus 4.4 euro cents/minute in 2004).

■ Broadband

Broadband retail tariffs

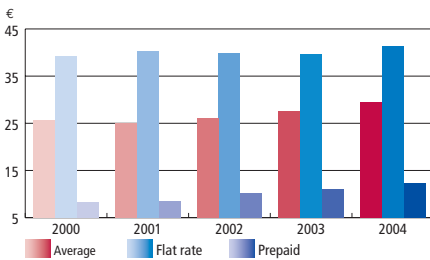


The tariffs were substantially lower and the bitrates on offer higher in unbundled competition zones. Retail tariffs have decreased by 2.5 overall in the span of two years.

Source: ISPs' websites

■ Mobile telephony

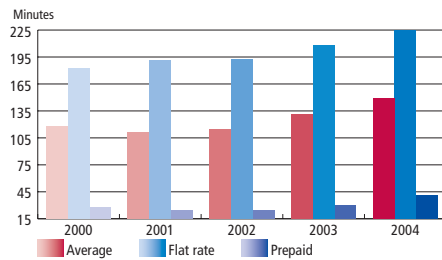
Average monthly consumption per customer



Source: ART

The average monthly invoice per subscriber is calculated based on mobile telephony turnover, including data transport, applied to the average annual base.

Average monthly MoU per customer

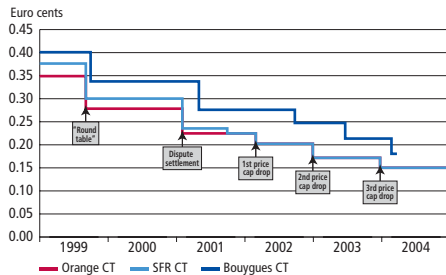


Source: ART

Revenues generated by interconnection (incoming calls) are not factored in. Calculation of the average monthly minutes of use per customer is based solely on voice traffic.

■ Fixed-to-mobile calls

Growth of fixed to mobile call tariffs



Source: ART

In 2001, ART ordered Orange France and SFR to lower their call termination tariffs for Metropolitan France by around 37% over three years, which led to a wholesale tariff of 15 euro cents per minute, excl. VAT, in 2004.

Planned fixed to mobile call tariff reductions, up to 2007

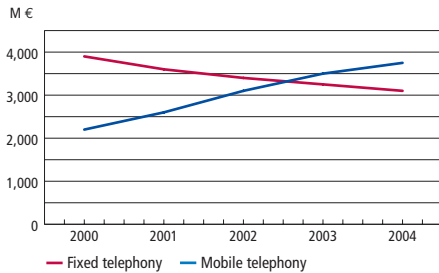
	2005	2006	2007
Metropolitan France	-11 %	-15%	TBA in 2006
Overseas départements	-16%	-15%	-14%

A decrease in price for end users if the reductions in the wholesale price (mobile call termination) are fully passed on.

Source: ART

■ Growth of fixed telephony revenues compared to mobile telephony

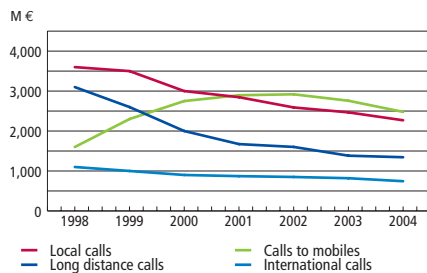
Fixed vs. mobile turnover



For the first time ever, fixed telephony revenues for the whole of 2004 were below mobile telephony revenues. They declined by 5.4%, compared to 3.7% in 2003, and 2.4% in 2002.

Source: ART

■ Fixed line calling revenues



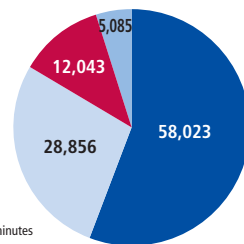
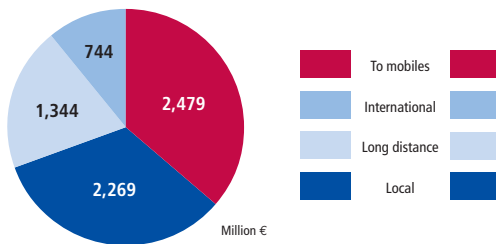
Fixed to mobile calls accounted for over a third of fixed telephony revenues in 2004, while representing only 11.6% of the total fixed calling minutes.

Source: ART

■ Fixed line calls

Revenues in 2004: 6,836 M€

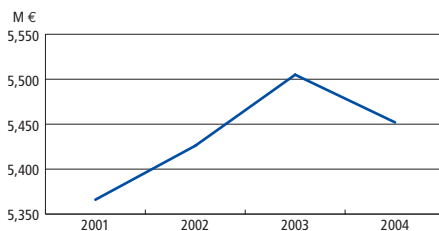
Volume in 2004: 104,007 bn min.



Source: ART

■ Access revenues

Subscriptions and related services

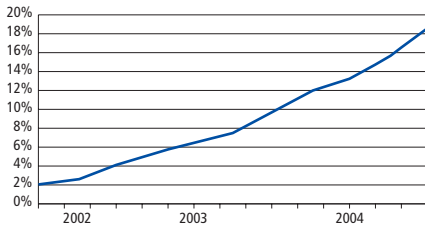


In 2004, the revenues generated by access, subscriptions and related services dropped by 1%, down to 2002 level, totalling 5.45 billion euros.

Source: ART

■ DSL penetration rate

Compared to the number of phone lines

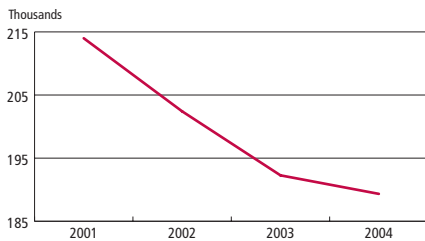


Source: ART

The ADSL growth rate was sustained in 2004 as in 2003. The DSL subscriber base grew by 90%, going from 3.3 million connections at the start of 2004, to 6.3 million connections (residential and business) at the end of the year, representing close to 20% of all fixed lines.

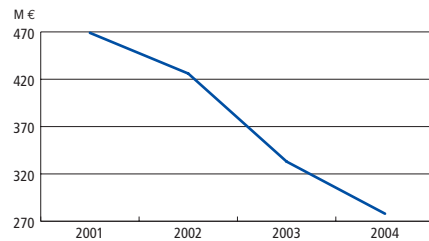
■ Public payphones

Number of public payphones



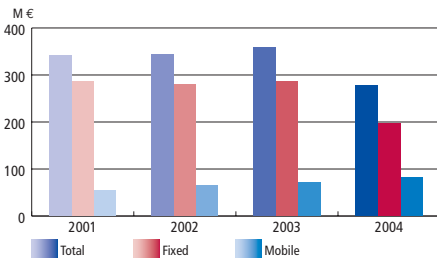
Source: ART

Public payphone revenues



Source: ART

■ Directory services

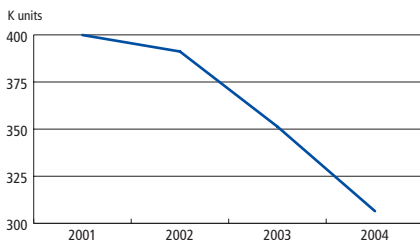


Source: ART

Turnover for directory service enquiries originating on fixed lines dropped by 31.7% in 2004, largely because of the services available on the Internet. Enquiries from mobiles, on the other hand, increased in value by close to 15%.

■ Leased lines

Number of leased lines



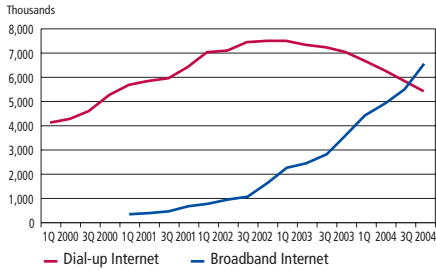
Source: ART

Leased lines revenues



Source: ART

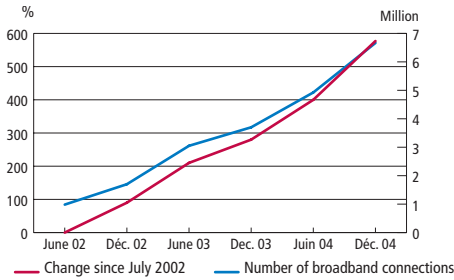
Number of Internet connections



Source: ART

At the end of the year, there were a total 11.9 million Internet subscriptions (+12.4%). With 6.5 million subscriptions, or 3 million more than in 2003, broadband now accounts for more than half (55%) of all connections. Dial-up Internet subscribers totalled 5.4 million at the end of 2004, down from 7 million at the end of 2003.

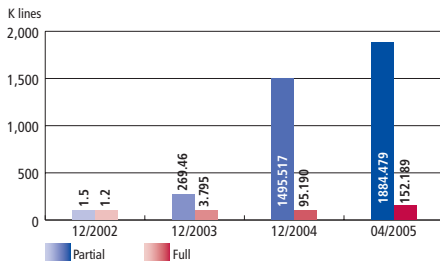
Total fixed line broadband connections



Source: ART

Broadband growth was particularly high in France in 2004. At the end of the year, the residential broadband market was as follows: 92% ADSL and 8% cable – alternative technologies (WLL and Wi-Fi) having undergone no significant development.

Number of unbundled lines

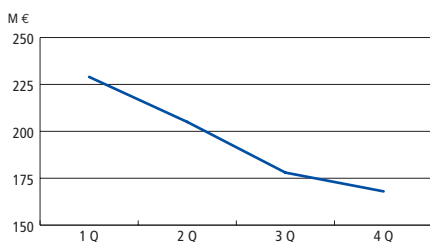


Source: ART

Unbundling increased at a substantial rate in 2004: by close to 455% for partial unbundling, with 1.88 million connections at the end of the year – putting France among Europe's leaders in this area.

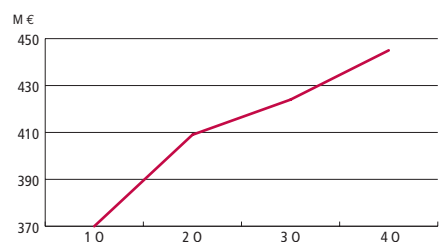
Internet revenues

Dial-up



Source: ART

Broadband



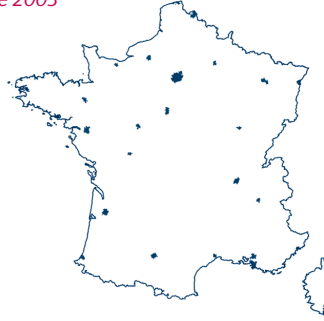
Source: ART

■ Geographic expansion of unbundling

December 2002



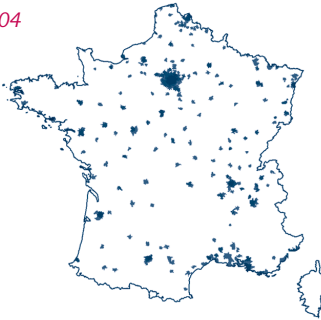
June 2003



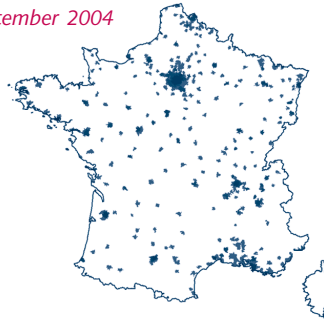
December 2003



June 2004



December 2004



Source: ART

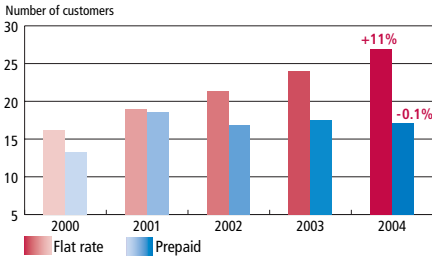
■ National broadband coverage (December 2004)

	% of the population	Num. of districts	% of districts
Dead zone (no offer)	10.85	10,711	29.19
Grey zone (access to an offer)	41.40	22,498	61.33
Competitive zone (2 or more offers)	47.75	3,478	9.48
Total	100	36,687	100

Source: Ortel/ART

Customer base

Flat rate and prepaid

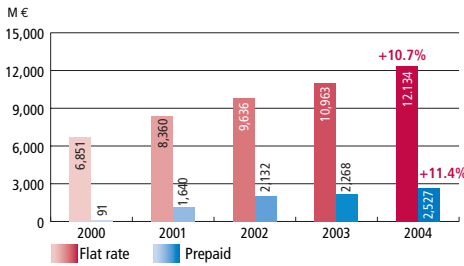


Source: ART

At the end of 2004, France was home to 44.5 million mobile telephony customers, of which 27.4 million flat rate subscribers. The customer base grew by 2.9 million users during the year, representing net annual growth of 6.9%. Since 2001, flat rates have accounted for the bulk of growth – the base of prepaid users having remained relatively stable.

Growth of turnover

Flat rate and prepaid

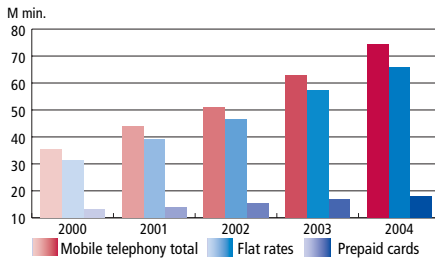


Source: ART

The majority of the increase in mobile operators' turnover was due to flat rate subscriptions – prepaid formulas accounting for only 16.6% of their total earnings.

Growth of volume

Flat rate and prepaid

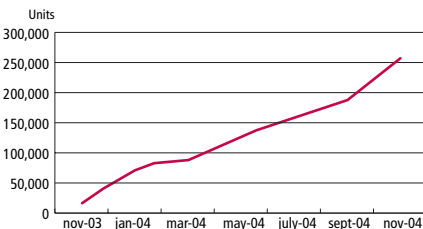


Source: ART

In 2004, mobile to fixed calls accounted for close to 30% of all calls; calls between subscribers to the same operator accounted for 40.7%, and those to a third-party operators' subscribers for 26.8%.

Portability

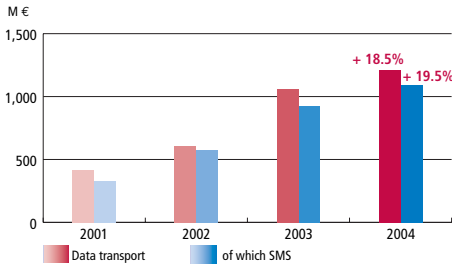
Rise since november 2003



Source: ART

On 31 December 2004, 250,700 mobile numbers had been ported, which represents roughly 0.6% of the total active base of mobile customers (42.48 million mobile subscribers in 4Q 2004, according to ART's Mobile Observatory).

■ Mobile data transport

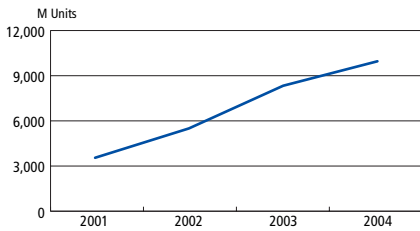


In 2004, SMS were still the chief driving force behind the growth in mobile data revenues, accounting for 83.5% of earnings. As in 2003, the popularity of SMS did not wane, with the volume of messages sent increasing by more than 50%.

Source: ART

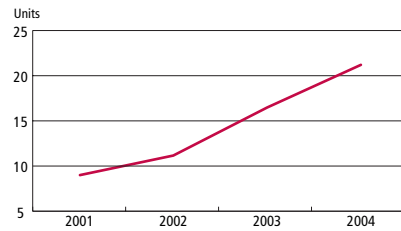
■ The SMS market

Total volume of SMS



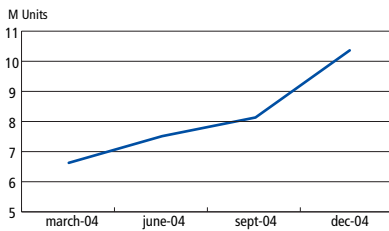
Source: ART

Average number of SMS sent by a customer, per month



Source: ART

■ Multimedia base



Source: ART

By December 2004, 10.3 million customers in Metropolitan France had used a multimedia service (WAP, i-mode, MMS or mail), representing a little over 2.2 million additional users compared to September 2004. More than one subscriber in four now uses these services.

■ Mobile usage

	June 2003			June 2004		
	18 and over	12-17 year olds	Total	18 and over	12-17 year olds	Total
% of people using their mobile to:						
Send SMS	53	92	57	54	97	58
Send MMS	6	23	8	9	26	11
Download a ringtone, logo or game	nd	nd	nd	25	74	29
Consult a paid voice service (kiosk)	17	17	17	18	17	18
Surf the Internet	4	11	5	7	19	8
View e-mail	4	8	4	6	7	6

Source: CREDOC, survey on "French people's living conditions and hopes for the future"

□ REGULATORY MILESTONES

- 26 July 1996: *Regulation:* adoption of the Telecommunications Act;
- 5 January 1997: *Regulation:* creation of ART;
- 1 January 1998: *Competition:* opening of the voice market (long distance and international);
- 24 February 1998: *Numbering:* ART adopts the management rules of the national numbering plan;
- 11 March 1998: *Internet in schools:* ART issues an unfavourable recommendation on France Telecom's tariff proposal;
- July 1998: *Internet on cable:* following settlement of a dispute, ART sets a detailed timetable for opening the Internet service on the Paris cable network;
- 30 November 1999: *WLL:* launch of a call for candidates;
- 8 December 1999, *Pre-selection:* ART specifies the conditions and deadlines for implementing carrier selection, call-by-call and pre-selection;
- December 1999-February 2000: *Broadband access:* ART notifies France Telecom to submit its ADSL access offers for approval; the Competition Authority orders FT to propose a permanent virtual circuit service offer to its competitors (option 3) or any other equivalent solution;
- 18 August 2000: *UMTS:* launch of the first call for candidates; the 2nd call is launched end 2001;
- 1 November 2000: *Pre-selection:* implementation of pre-selection for calls to mobile operators;
- December 2000-February 2001: *Broadband access:* ART notifies France Telecom to supply the information required to implement access to the local loop and asks it to modify its reference offer;
- 18 July 2001: *Pre-selection:* ART specifies the conditions and deadlines for implementing carrier selection for local calls to start 1 January 2002;
- 16 November 2001: *Fixed to mobile calls:* ART imposes a reduction of around 40% over 3 years in the average price of fixed to mobile call termination charges for the two SMP operators in the interconnection market, Orange France and SFR;
- April 2002: *Regulation:* publication of the "telecoms package" directives by the European Commission;
- April 2002-July 2002: *Broadband access:* ART imposes modification of France Telecom tariff and operating conditions for unbundling, a reduction in option 5 and option 3 tariffs;
- 25 July 2002: *Wi-Fi:* deregulation of the 2.4 GHz frequency band;
- 9 January 2003: *Broadband access:* specification of the tariff and technical conditions for the ADSL Connect ATM (option 3) offer;

- 11 February 2003, *Market analysis:* The European Commission issues a recommendation on relevant markets;
- 23 July 2003: *Number portability:* implementation of mobile number portability (MNP);
- 23 September 2003: *Directories:* ART defines the competitive economic conditions for implementation of subscriber directory and telephone enquiry services;
- 9 December 2003: *Broadband access:* ART issues a favourable recommendation for France Telecom's "ADSL IP collection" and "ADSL IP" offers. The differentiation in wholesale tariffs aligns the option 5 tariffs more closely with the underlying cost structure;
- 1 January 2004: *Regulation:* publication in the OJ of Act no. 2003-1365, dated 31 December 2003, on public telecommunications service obligations and on France Telecom;
- 9 March 2004: *Mobiles:* ART issues a paper and announces revised UMTS deployment obligations for operators Orange France and SFR;
- 2 April 2004: *Mobiles:* renewal of Orange France and SFR GSM licences for 15 years;
- 16 April 2004: *Market analysis:* ART publishes its first analysis of a relevant market: mobile network call termination;
- 22 June 2004: *Regulation:* publication in the OJ of Act no.2004-575, dated 21 June 2004, on confidence in the digital economy;
- 23 June 2004: *Market analysis:* ART publishes its public consultation on analysis of the wholesale local loop unbundling and broadband access markets;
- 9 July 2004: *Market analysis:* ART publishes its public consultation on its analysis of the fixed telephony market;
- 10 July 2004: *Regulation:* publication in the OJ of Act no.2004-669, dated 9 July 2004, on electronic communications and audiovisual communication services;
- 28 July 2004: *Market analysis:* ART publishes a questionnaire on the audiovisual services broadcasting market;
- 29 July 2004: *Market analysis:* ART launches its analysis of wholesale SMS termination services on mobile networks;
- 30 July 2004: *Market analysis:* ART publishes a questionnaire on electronic communication services in France's overseas *départements*, in Mayotte and Saint-Pierre-et-Miquelon;
- 5 October 2004: *Market analysis:* ART publishes a summary of the contributions made to its public consultation on wholesale local loop unbundling and broadband access markets, and invites players to voice their opinion on the creation of a wholesale market for broadband access offers delivered at the national level;

□ REGULATORY MILESTONES

- 19 October 2004: *Universal service:* ART publishes the universal service funding mechanisms for 2002. All electronic communication service operators which were operating in 2002, even if they did not hold a licence - notably ISPs and data transport operators - must contribute to the universal service fund, starting in fiscal 2002;
- 27 October 2004: *Numbering:* ART launches a public consultation on changes to the telephone numbering plan;
- 2 November 2004: *Market analysis:* ART notifies the European Commission on its analysis of the call termination market on mobile networks, and recommends that mobile operators be required to reduce their wholesale tariffs by 36% over two years;
- 5 November 2004: *Market analysis:* ART transmits to the Competition Council its analysis of the market for wholesale broadband access offers delivered at the national level, and publishes a summary of the contributions made by the market's players;
- 2 December 2004: *Universal service:* ART specifies the conditions of implementation for the provisions of the decree dated 17 November 2004, modifying the method used for calculating universal service cost sharing between operators, and which will be put into application upon final calculation for fiscal 2002;
- 10 December 2004: *Market analysis:* ART and the other European NRAs launch a coordinated joint analysis of the international wholesale roaming market;
- 16 December 2004: *Subscriber directory:* ART publishes its guidelines for the sale of subscriber or user lists to directory and universal directory service suppliers;
- 17 December 2004: *Market analysis:* Access and call origination on mobile networks. ART recommends that the three metropolitan mobile operators fulfil all reasonable access requests from virtual operators (MVNO);
- 21 December 2004: *Market analysis:* ART publishes the results of its public consultation on the list of relevant markets and identification of SMP operators in mobile networks' access and call origination market;
- 21 May 2005: *Regulation:* publication in the OJ of Act no.2005-516, dated 20 May 2005, on regulation of postal operations. ART becomes ARCEP (Autorité de régulation des communications électroniques et des postes/Electronic Communications and Postal Regulatory Authority).



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