

OECD REVIEWS OF REGULATORY REFORM

REGULATORY REFORM IN FRANCE

**REGULATORY REFORM IN THE
TELECOMMUNICATIONS SECTOR**



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

Regulatory reform has emerged as an important policy area in OECD and non-OECD countries. For regulatory reforms to be beneficial, the regulatory regimes need to be transparent, coherent, and comprehensive, spanning from establishing the appropriate institutional framework to liberalising network industries, advocating and enforcing competition policy and law and opening external and internal markets to trade and investment.

This report on *Regulatory Reform in the Telecommunications Sector* analyses the institutional set-up and use of policy instruments in France. It also includes the country-specific policy recommendations developed by the OECD during the review process.

The report was prepared for *The OECD Review of Regulatory Reform in France* published in June 2003. The Review is one of a series of country reports carried out under the OECD's Regulatory Reform Programme, in response to the 1997 mandate by OECD Ministers.

Since then, the OECD has assessed regulatory policies in 16 member countries as part of its Regulatory Reform programme. The Programme aims at assisting governments to improve regulatory quality — that is, to reform regulations to foster competition, innovation, economic growth and important social objectives. It assesses country's progresses relative to the principles endorsed by member countries in the 1997 *OECD Report on Regulatory Reform*.

The country reviews follow a multi-disciplinary approach and focus on the government's capacity to manage regulatory reform, on competition policy and enforcement, on market openness, specific sectors such as telecommunications, and on the domestic macro-economic context.

This report was prepared by Dimitri Ypsilanti of the OECD Directorate for Science, Technology and Industry, with the participation of Frédéric Bourassa (DSTI). It benefited from extensive comments provided by colleagues throughout the OECD Secretariat, as well as close consultations with a wide range of government officials, parliamentarians, business and trade union representatives, consumer groups, and academic experts in France. The report was peer-reviewed by the 30 member countries of the OECD. It is published under the authority of the OECD Secretary-General.

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THE TELECOMMUNICATIONS SECTOR IN FRANCE

SUMMARY

The telecommunication sector in OECD countries has seen significant regulatory reform in the last decade. The success of the liberalisation process depends on the presence of a transparent and effective regulatory regime that enables the development of full competition, while effectively protecting other public interests. With the explosive growth of Internet usage and the beneficial economic impact which could occur from the development of the digital economy, the stakes in telecommunication infrastructure development are even higher. As of 1 January 2004 all 30 OECD countries had unrestricted market access to the telecommunications sector including for the provision of voice telephony services, and infrastructure investment in public switched telecommunications networks.

France opened up its telecommunications market to full competition in 1998 following the requirements set down in European Union Directives in which it participated with other EU Member countries. Before 1998 some steps had been taken in introducing competition, including in the cellular mobile sector with three market entrants, in abolishing restrictions on terminal equipment, in the provision of data services and in allowing for closed user groups to function without restraint.

French governments in the early 1990s were not always strong supporters of telecommunication liberalisation and tended to be followers rather than leaders in implementing regulatory reform in telecommunication markets. France has not been one of the OECD countries that have been innovators in telecommunications policy or regulatory practices. It has tended to lag behind in the implementation of EC Directives and has been overprotective of the incumbent carrier in which the government is still a major shareholder. At the policy level the separation between ownership of the incumbent and policy formulation is not yet complete. Recent initiatives in setting up a more independent share holding agency for state owned firms is a positive move, but full privatisation of the incumbent would be optimum.

The creation of an independent sector regulator in 1997 with technical and economic powers, the Autorité de Régulation des Télécommunications, was a new step in French administrative procedures. The ART's initial track record was shaky, but as it gained experience, it has become independent, transparent and supportive of competition. With more powers to enforce its decisions and greater independence which it will obtain from the new French law on telecommunications, the regulator should be in a position to develop more effective competition in the future in France.

There are now over 91 operators competing in the French telecommunications market but new entrants have a market share of less than 0.5% of access lines in the fixed line market. Only since 2002 with the implementation of carrier preselection has competition emerged in the local call market where new entrants had 20% of market share by the end of 2002 as measured by retail revenues in the fixed telephone market. Competition is also starting to benefit from the implementation of local loop unbundling. Nevertheless, insufficient competition exists in France from alternative infrastructures mainly due to the weak cable TV sector where the incumbent telecommunication operator has market power. Further competition is necessary in the cellular mobile market as well.

France, as in other EU countries is in the process of transposing a number of new EU Directives into national law. It should do so fully. This should help eliminate a number of the problems in the existing policy and regulatory framework. France, in facing the challenge of convergence, has chosen not, to create a single regulator for the electronic communications sector as has been the case in some other OECD countries. Convergence will be a key issue that the French Government needs to address in the near future and could prove to be problematic given France's history with respect to content and broadcasting issues.

1. The Telecommunications sector in France

1.1 *The national context for telecommunications policies*

The French telecommunication market was characterised by relatively low subscriber line penetration rates in the late 1960s and early 1970s. In 1970 France had a subscriber line penetration rate of 8 lines per 100 inhabitants, the 4th lowest in the OECD. In 1974 the new administration gave high priority to the development of the telecommunication infrastructure which accelerated the build-up of the telecommunication network in the 1970s and 1980s.¹ By 1980 the penetration rate had increased fourfold to nearly 30 lines per 100 inhabitants and by 1985 France had the 8th highest penetration rate in the OECD.² The relatively late start in France's telecommunication network expansion resulted in France being among the leading OECD countries in terms of the digitalisation of its network. This technological lead was short lived as other countries increased their rate of network digitalization in particular as they opened their markets to competition. Much emphasis was also put by governments at the time on high technology projects supported by state funds and supply rather than demand driven, such as the Minitel (Box 1), as France tried to catch-up in its ability to produce and use information and communication technologies.³

At the time when the European Commission was putting forward proposals for the liberalisation of the telecommunications market in EU countries, starting in 1987 with the publication of the *Green Paper on the Development of the Common Market for Telecommunications Services and Equipment*,⁴ the French Administration was not always in favour of introducing competition in the sector. This tended to slow the initiatives taken by those who favoured reform and who were not sceptical of the benefits that competition could bring. During the decade during which the European Union took to put in place a framework for telecommunication liberalisation France was often a follower rather than a leader.

The process of liberalization of the telecommunication sector was met by strong labour union opposition from some labour unions within the incumbent telecommunication operator, at that time the Direction générale des télécommunications (DGT) part of the Ministry of Posts and Telecommunications. This linked with the fact that there was not strong industry pressure for telecommunication liberalization or strong political support for the creation of a competitive telecommunication market slowed the initial process of reform. Initial proposals for change made by the government in 1993 and 1995 made little headway. The governments of the time tended to make changes following obligations arising from membership in the European Community.

As a result, France did not take the initiative, unlike several EU countries, to open its voice telephony market to full competition before the EU's deadline of 1 January 1998. France has on a number of occasions lagged in implementing EU Directives which were not always fully implemented leading to several occasions when the European Commission has taken France to Court in order to ensure full compliance with Directives. The latest example of this is with the implementation of the "telecommunications packet" which was due to be transposed into national law by 25 July 2003 and is unlikely to be enacted in France before the end of 2003.

Box 1. The Minitel

In the late 1980s most OECD countries had introduced videotex (teletext) services either on a commercial or an experimental basis. These interactive services allowed users to communicate with databases through telecommunication networks. In France the Télématicque programme had several aims. First, as an industrial policy objective it aimed to bring the French electronics industry up to speed and become competitive in world markets through the production of electronic terminals. Secondly, it was intended to replace printed telephone directories. The idea of providing an electronic directory was mainly intended to quickly create a large customer base which would stimulate potential service providers to provide electronic services. Thirdly, it was intended to accelerate France's entry in the information society especially by developing data networking and to ensure the profitability of Transpac, the public switched packet network put in place in 1978 by the Direction Générale des Télécommunications. The DGT, was the monopoly operator at that time, was part of the French Ministry of Posts and Telecommunications. The first commercial videotex service began in 1983. The Minitel terminal was provided free of charge to telephone subscribers. Growth in the use of the Minitel in France was rapid making France a leader in videotex services. But success came at a high cost to the State. Total investment by the DGT in the Télématicque programme amounted to some \$860 million by the end of 1986. Furthermore the savings expected by eventually eliminating paper telephone directories did not materialise since it was decided by the government that subscribers should have a choice as to the type of directory they wanted to use. The installed base of traditional Minitel terminals peaked at some 6.5 million in 1994, after a decade of spectacular growth. Revenues from the Minitel in 1996 were \$548 million, or 2.1% of the telecommunications operator's total turnover. However, the rapid development of Internet access is leading to a rapid decline in Minitel usage. By 1997 more than half of Transpac's traffic in 1997 came from the Internet whereas in 1995 Transpac's Internet traffic was insignificant. In 2002 traffic decreased by 22.4% and the number of Minitel terminals rented for a fee decreased by 11%. Supporters of the Minitel claim that it has paved the way for France in developing e-commerce and the diffusion of the Internet. But these claims are not supported by the evidence which shows France lagging in Internet diffusion and e-commerce applications.

The recent state initiatives in the debt problems of the incumbent, France Telecom, the majority of which is owned by the State, attests to continuing close ties between the State and state-owned enterprises, in those sectors where there is a concept of public service, and a reluctance to let solutions emerge from the market. The Ministry, which participated "in the capital increase of FT through a shareholder's loan"⁵ in March 2003 is the Ministry of Economy, Finance and Industry and the shareholder of the incumbent and has responsibility for telecommunications policy and approval of the incumbent's universal service tariffs. This has led to scepticism being voiced on the extent to which policy formulation is sufficiently separate from operational and industrial policy issues in the sector although these responsibilities are in different Directorates and the Minister responsible for Industry has his own area of competence which is exercised independently.

The law identifies the major responsibilities of the minister responsible for telecommunications and the regulator as:

- Allow unimpeded market access in the telecommunications sector.
- Maintain and develop public service in telecommunications and in particular universal service.
- Have a regulator independent from telecommunication networks and service operations.
- The provision and financing of the public service in telecommunications.
- Develop employment, innovation and competitiveness in the telecommunications sector.
- Defining the conditions of access to public networks, interconnection to these networks.
- Ensuring operators respect the secrecy of messages and the principle of neutrality with respect to the content of messages transmitted.
- Ensuring that operators and services providers respect their obligations to national defense and public security.

As a result of a review by the European Commission of the European telecommunications regulatory regime and the adoption by the EU Member States of four Directives the existing legal framework in Europe changed from 25 July 2003. The transposition of this new regulatory regime for the regulation of electronic communications networks and services is in the process of enactment in France. The EC's Directives are the Framework Directive⁶ dealing with the overall framework for electronic communications and services, the Access Directive⁷, the Authorisation Directive⁸ dealing with licensing and the Universal Service Directive.⁹ The transposition of these Directives in the new draft law on electronic communications will result in some significant changes in the regulatory framework in France. These include: simplified market entry procedures notably by eliminating individual licensing; the elimination of a number of restrictions which have constrained the development of the cable television sector; increased consumer protection measures, moving to use "dominance" and "joint-dominance" rather than "significant market power" to assess market power, and more efficient management of spectrum.

Box 2. Milestones in France's Telecommunications Policy and Regulation

Year	Policy change
1988	EC Terminal Equipment Directive opens the terminal equipment market to competition;
1990	The EC's ONP Directive liberalises value-added services and data services for business and closed-user groups;
1991	France Telecom becomes an independent operator under public law;
1995	Direction Général des Postes et Télécommunications (DGPT) issues a public consultation document on competition in telecommunications ;
March 1996	Parliament passes the Experimental Licensing Bill for immediate implementation
July 1996	Liberalisation of alternative infrastructures
July 1996	Implementation of the Telecommunications Regulation Law
July 1996	France Telecom incorporated
1996	Regulatory provisions implementing the new law (licensing, establishment of interconnection charges, sharing the net cost of universal service); France Telecom's reference interconnection offer approved by DGPT and published January
1997	The Autorité de Régulation des Télécommunications (ART) created as an independent sector specific regulatory body;
Spring 1997	Licenses issued to competing public network and voice telephony operators, effective from 1 January 1998
1 January 1998	The telecommunications market opened to full competition in France;
January 1998	Call-by-call carrier selection for international and domestic long-distance calls introduced;
January 2000	Carrier preselection for long distance introduced;
2000	54 Wireless in the local loop (WLL) licences attributed in Metropolitan France and its overseas territories)
2000	Unbundling decree published
2001	Two UMTS licenses attributed
2001	Flat rate interconnection offer for Internet access calls introduced;
January 2002	Carrier preselection for local calls introduced;
2002	Third UMTS licence attributed
2003	New telecommunications law under discussion.

1.2 General features of the telecommunications market and market structure

1.2.1 Telecommunication market and participants

Since the French telecommunication market opened to full competition the market has expanded from 22.7 billion euros in 1998 to 32 billion euros in 2002.¹⁰ The range of services on offer has also increased. According to the sector regulator, the Autorité de régulation des Télécommunications (ART) prices have declined over the last three years as follows:¹¹

- More than 35% for long distance telecommunication services.
- Between 12% to 39% for mobile depending on individual subscriber packages.
- Between 50% to 75% for Internet access according to monthly consumption.

France is the fifth largest telecommunication service market in the OECD (and third largest among EU Member countries). The French mobile market in 2002 was the 5th largest in the OECD in terms of revenue (EUR 11.6 billion) and 6th in terms of the total number of subscribers (fourth in the EU). Fixed telephony traffic in France has declined in terms of minutes since 1998 as a result of substitution by mobile services and in later years as dial-up Internet traffic shifted to using broadband Internet access. Nevertheless, fixed telephony services remain the largest sector of the market (Table 1) followed by mobile services.

Table 1. Distribution of revenues in the French telecommunications market

	2002
Fixed telephony services	43%
Mobile telephony services	36%
Leased lines	7%
Advanced services	6%
Internet	3%

Source: ART, Annual Report 2002.

At the end of 2001, the incumbent operator, France Telecom (FT), was the world's sixth largest fixed telecommunications operator (France Telecom Group) as measured by revenues.

1.2.2 Competition in fixed services

The number of public telecommunication operators licensed to establish and operate fixed networks and/or supply public fixed telephone service was 91 at the end of 2002, compared to 97 a year earlier, and of these 59 have a national licence. The number of operators authorised to operate a public network per million inhabitants is low in France compared to the EU average.¹² This, and the fact that cable telephony is not at all developed, means that the percentage of subscribers with a choice of alternative operators for direct access is very low in France¹³, and the actual number of subscribers using an alternative provider for local calls (usually through carrier preselection) is also relative low.¹⁴ Less than 1% of subscribers use an alternative provider for direct access. The incumbent, France Telecom (FT), had a market share as measured by revenue in June 2003 of 77.8% of local calling services and 63.3% of long distance calling services.

The main competitors in the fixed telecommunication market to FT are Cegetel¹⁵ and LDCOM.¹⁶ Cegetel had a customer base of 3.3 million subscribers (households and business) obtained mainly through

local preselection, and 10% of the revenue of the fixed market in 2002. Cegetel merged its fixed line operations with Télécom Développement owned by the French Railways (SNCF). The new corporation maintained the name Cegetel and capital is held 65% by the Cegetel Group and 35% by the SNCF. LDCOM offers both a backbone network to offer access to service providers and retails under the brand 9 Telecom. It claims to have 1 million residential clients and 60 000 business clients in 2002. Télé2, has also grown its customer base relatively quickly and had 3.5 million customers by March 2004.

France Telecom

France Telecom, as a service provider autonomous from a government department, was created on 1 January 1991. Prior to that, the Direction Générale des Télécommunications (DGT), which was part of the Ministry of Posts and Telecommunications, had responsibility for the provision of the telecommunication network and services.¹⁷ In December 1996 France Telecom became a corporation¹⁸ and the following year issued public shares and was traded on the Paris and New York stock exchange. The state's share as of January 2004 was 54.53%.¹⁹ The privatisation process has been relatively slow and could be accelerated.

FT was also subject from 1994 to 2002 to a special tax regime (business taxes and professional taxes). Some new entrants viewed this as constituting indirect State aid which gave an advantage to the incumbent. The European Commission has claimed that the tax differential could represent about EUR 150 million per year, but the specific impact of this tax regime on FT is presently under investigation.²⁰ Prior to 31 December 2003 the law required the government's shareholding to be at least 50%, but the parliament adopted in December 2003 a new law which allows for the government's shareholding to fall below this limit.

At the end of 2002 the debt of France Telecom was in the region of 68 billion euros relative to revenues of EUR 46.6 billion (FT Group). By the end of 2003 debt had been reduced to 44 billion euros and revenues had increased to 50.2 billion euros. FT's debt increased from 13.8 billion euros in 1998 to 61 billion euros by the end of 2000. The debt in 2002 was equivalent to nearly two times the size of the total telecommunication service market in France.²¹ Indebtedness was to a large extent a result of an aggressive program of foreign acquisitions, aggravated by the rapid fall in the value of telecommunication share prices worldwide and the fact that as a partially state-owned company FT had to use for the most part debt rather than shares to finance acquisitions. As a result of these acquisitions the percentage of total revenues earned outside France increased from 26% in 2000 to 41% by end of 2002.

The State, as majority shareholder of France Telecom in 2002, indicated on 4 December 2002 that it would support the debt reduction plan²² put in place by the new management of France Telecom and, as outlined in the plan of action approved by its Board of Directors. The State had considered anticipating its increase in the capital of the company (in proportion of its share of the capital, or EUR 9 billion) through the form of a shareholder's loan. Finally, this did not take place. This action by the State, as a shareholder, was viewed positively by the financial community. Other wholly-privatised telecommunication operators in other OECD countries which also faced debt problems, were obliged to sell some of key assets in order to improve their financial situation. Competitors viewed such support as giving an advantage to FT.²³ As a result of the State's action several of France Telecom's competitors have complained arguing that the action of the State constituted unfair state aid and have requested an investigation by the European Commission to determine whether this intervention should be considered as aid.

France Telecom S.A. (the parent company of France Telecom Group) employs mainly civil servants (86% of its employees). Employees of FT who had civil service status when the company was created maintained this status. They also maintained many of the rights of civil servants. The Parliament adopted in December 2003 legislation which allows employees of FT who are civil servants to retain statutory

guarantees if FT loses its public service mission, which is now subject to competition from other entrants as a result of the new European Union directives, and when the government's share of FT falls below 50%. The law of 2 July 1990 does not allow the recruitment of civil servants as from January 2002; (in practice this had stopped in 1996). Estimates are that by 2018 one quarter of its staff will be civil servants.

1.2.3. The cellular mobile sector

Competition in the mobile telecommunications market was first introduced in France in 1987 when SFR obtained an analogue licence allowing it to compete with the incumbent mobile operator, France Telecom Mobiles (now known as Orange). In 1991 France Telecom Mobiles and SFR obtained a GSM licence. The mobile duopoly remained in place until 1994 when a third GSM licence was awarded to Bouygues Telecom. As a result of the duopoly the development of mobile markets in France was initially relatively slow so that in 1996 France had a mobile penetration rate of 4.2 subscribers per 100 inhabitants, below the EU average penetration rate of 9.0. Since 1996, coinciding with the development of service by the 3rd operator growth has accelerated with a compound annual growth rate of 72 percent from 1996-2001, among the highest in the OECD.²⁴ However, despite this high rate of growth penetration rates in France for cellular mobile services still remain below the EU average with a rate of 61 subscribers per 100 inhabitants compared to an EU average of 75 subscribers per 100 inhabitant at the end of 2002 (as of December 2003, the total number of mobile subscribers in metropolitan France was 40 million equivalent to a penetration rate of 69.1 subscribers per 100 inhabitants). Growth in the penetration rate over the 2001-2002 period was also among the lowest in the EU.²⁵ The latter period also coincided with a period when prices stabilised in the sector.²⁶ The affiliate of France Telecom, Orange, had a market share of 48.9%, SFR 35.4% and Bouygues 15.6%.²⁷ Over the last two years Bouygues has lost 2.7 percentage points of its market share.

There could be a number of reasons why French mobile penetration rates are not higher. Over half of the EU countries have more than 3 GSM licences and some have MVNOs²⁸ operating so that competition for customers is keener. In terms of prices, however, France is among the cheaper OECD countries when compared using the OECD mobile baskets for high users and average users.²⁹ However, the highest growth area in the mobile sector in most European markets has been in the pre-paid card market and in France prices for low users (essentially pre-paid cards) tend to be relatively high (France is in 15th place in the OECD benchmark of low user mobile charges). These higher charges linked with the short period in which an unused pre-paid account remains valid (6 months in France compared to 12 months in the Netherlands) has meant that France has a much lower percentage of mobile customers using prepaid cards (48.8% in 2001 compared to the EU average of 61%).³⁰

It has also been claimed that differences in definitions in measuring subscribers in particular depending on whether inactive customers are measured could result in differences in comparison across countries. However, regulators such as OFTEL also take into account inactive accounts. Furthermore most data made available comes from operators who provide these data for the financial institutions or for required regulatory filings with bodies such as the Securities Exchange Commission, so that care is taken to ensure the veracity of the data. In any event any measurement problems would not be expected to change the penetration rate by much, at least not sufficiently to account for the important difference between the French penetration rate and the EU average. A more important explanatory factor could be that in a number of European countries many mobile customers use dual SIM cards, usually because of price differences between on-net and off-net calls. A 2001 study by OFTEL in the UK found that countries such as Italy, and Finland had 13% and 7% of customers with dual SIM cards³¹. Unpublished data seem to indicate that these percentages have increased over time whereas in France the use of multiple SIM cards is small. Other reasons may also include a relatively low penetration in France in the 5-14 age group relative to some other countries.

Until recent years insufficient action has been taken by the regulator to increase competition and growth in the mobile market. High growth rates for a new service are not necessarily indicative of vibrant competition. The fact that the ART has not been given sufficient powers in some areas, especially in the area of enhancing consumer welfare, is well illustrated by the fact that despite complaints by consumer organisations on the pricing structure for mobile calls which charged users for a full minute (initial minute and then by 30 seconds) even though call time may have been several seconds no action could be taken. Eventually a private consumer organisation (Union Fédérale des Consommateurs) took the 3 mobile operators to court and obtained a decision requiring operators to charge by the second (after an initial set-up charge).³²

The regulator has, however, taken a very positive approach in the mobile sector since then by requiring a reduction in fixed to mobile call charges, a major area of contention by users and fixed operators. These termination charges are being reduced by 40 percent over 3 years. In addition, following EU Directives the regulator introduced mobile number portability on 30 June 2003.

Following complaints from a number of communities in France because mobile coverage was not available in their region the government took the initiative at the end of 2002 to allocate 44 million euros to fund the mobile operators to invest in 1 200 relay antennae aimed at covering 1 500 communities in zones without mobile coverage.

The fact that only 3 third generation mobile licences have been taken-up (see below) implies that in the future the degree of competition in the sector may not be as high as in other countries warranting a review of policies in this market segment by the regulator to determine whether any new regulatory initiatives need to be taken.

1.2.4. Cable television networks

The cable television sector is not well developed in France and it has been mostly regulated under an archaic framework not conducive to developing competition or developing an alternate infrastructure capable of competing against the public switched telecommunications network (PSTN). Cable operators have been subject to a number of restrictions. They cannot have an exclusive zone with more than 8 million inhabitants, which limit the possibilities for mergers between operators. Cable companies have an operating agreement with municipalities of between 20-30 years at which point it is possible for the municipality to reclaim the cable network.³³ In addition France Telecom, the incumbent PSTN operator, is also a leading player in the cable sector.

There are approximately 840 licensed cable operators in France but five of these have nearly 90% of the market.³⁴ Only one-third of homes are passed by cable networks as compared to an average for the OECD of nearly 59% and only 1.8% of cable subscribers subscribed to telephony services provided by cable companies while only 8% subscribed to cable modem service. France Telecom is the largest provider of cable television infrastructure. The company's main vehicle for cable television is France Telecom Cable through which it provides direct services to subscribers. France Telecom also owns the major part of the cable network over which NC Numericable provides services. In addition, France Telecom owns a minority interest in Noos which provides cable services over its own network but also uses part of France Telecom's network. France Telecom's share of Noos is the result of the retrocession of the Noos shares, previously held by NTL prior to that company's bankruptcy reorganization. Noos, NC Numericable and France Telecom Cable are the three largest providers of cable television services in France.

1.2.5. *The Internet market*

In France approximately 28% of households are connected to the Internet.³⁵ In the Internet market, the number of dial-up subscribers was estimated at 7.2 million in France and 2.3 million broadband customers in September 2003.³⁶ Benchmarked against other OECD countries France is relatively behind in the diffusion of Internet with the number of subscribers per 100 inhabitants at 11.8 in 2001 compared to the OECD average of 18.7. Similarly, in the broadband market despite recent growth France had a diffusion rate of 6.2 broadband subscribers per 100 inhabitants at the end of 2003 compared to the OECD average of 7.3, ranking France at 14th position. The incumbent is installing new equipment (DSLAMS) in its main distribution frames with 1 000 or more lines and estimates that by the end of 2003 80% of lines will be capable of providing broadband access using ADSL by the end of 2003, and 90% of lines by the end of 2005 will be able to provide ADSL.

The dial-up Internet market is dominated by Wanadoo, France Telecom's Internet Service Provider, which has just over one-third of the market. AOL-Compuserve (21%) and Tiscali (14%) are the other main players. In the total broadband market Wanadoo is dominant in the retail where its market share is 57%, while its parent company, FT, is dominant in the wholesale market.

As in most OECD countries prices for access to the Internet through dial-up services are declining rapidly and customers are shifting from dial-up to broadband access. This is resulting in declining revenue in the dial-up market. Although broadband revenues are increasing rapidly this growth has been insufficient to maintain the rapid growth in revenues that characterised the Internet market in the past.³⁷

1.2.6. *Wireless Local Loop (WLL)*

In France, as in many other OECD countries, much was made of the potential ability of WLL networks and services to compete against the incumbent in the PSTN market. The Ministry decided to offer 2 national licenses (3.5 and 26GHz) with national coverage and 2 regional licences covering the 22 regions in metropolitan France, that is up to 44 licences in the 26GHz band. The WLL licences were awarded through a beauty contest during the 2nd half of 2000. The licences were awarded to: Altitude (regional coverage); Belgacom France (regional coverage) subsequently purchased by LDCOM in 2002; BLR Services (regional licence) subsequently purchased by LDCOM at the end of 2001; Broadnet France (regional licence); FirstMark Communications (national licence); Squadran (national licence) subsequently purchased by LDCOM in 2001; Landtel France (regional licence); Six of the attributed licences were not taken up and a number of licensees were bought out by larger companies soon after licences had been attributed. In December 2000, the French authorities allocated those licenses that were turned down by winners of the original selection procedure. The first commercial services offered were in a few large cities in May 2001. It appears that roll-out has been affected by the economic downturn, and there have already been some financial problems in the sector resulting in one of the two national licensees declaring bankruptcy. In addition, two of the multi-regional licence holders have not complied with their scheduled roll-out and so had their authorisations partially suspended. However, over 20 large urban areas are now covered or partly covered by WLL operators. The fact that the regulator approved the transfer of the licences indicated recognition of the problems facing the industry and the technology at the time.

WLL has thus had a very limited success. As of December 2002 870 WLL access lines were in use. The lack of success of WLL is reflected in other OECD countries and cannot be attributed necessarily to the regulatory or policy framework.

2. Regulatory Structures and their reform

2.1 Regulatory institutions and processes

The 1996 Telecommunications Act amended Article L. 32 of the Posts and Telecommunications Code and sets the framework for a competitive market for telecommunications services. The Act set up the independent regulatory body, and it enhanced the powers of the Public Service Commission for Posts and Telecommunications (an advisory body to the Minister).

2.1.1. The Autorité de Régulation des Télécommunications

The Autorité de régulation des Télécommunications, ART, was set up by the Telecommunications Act of 1996 on 5 January 1997. The ART was the first sector regulator that had technical and economic powers. It is headed by a Commission of five members, who cannot be removed and are appointed for a single term of 6 years. The chairman and two members are appointed by the President of France and the other two members are appointed respectively by the Chairman of the National Assembly and the Chairman of the Senate. One-third of its members are renewed every 2 years. The regulator is required to publish an annual report which is submitted to the government and to Parliament. Licensed operators are required to provide statistical information on the use, area of coverage and means of access to their services.

Although the Act foresees that ART should be financed by payments from the taxes and fees payable by licensees and for other resources, supplemented if necessary through the State Budget, this did not in fact occur. When Parliament voted for the first budget of the ART it decided that the regulator's budget should come completely from the State Budget.

ART has shared powers with the Minister responsible for telecommunications (La Ministre déléguée à l'industrie, placée auprès du ministre de l'économie, des finances et de l'industrie). The responsibilities of the ART, as outlined in the Act, are shown in Box 3. The Minister is responsible for drafting laws and decrees, but requests the opinion of the regulator in these areas. This opinion is made public. The Minister is also responsible for attribution of licenses but the verification process is undertaken by the regulator who provides a recommendation to the Minister. The conditions attached to a licence are on the basis of proposal put forward by the regulator, and the modalities and conditions to distribute licenses in the case of the mobile sector or wireless services require an opinion of the regulator. The approval of tariffs by the Minister also requires an opinion of the regulator. There is also shared responsibility in the area of universal services where the regulator analyses the cost of universal service and proposes the amount of contribution required from each operator but the Minister takes the final decision.

ART's powers are limited by law in that decisions taken in accordance with Article 36-6 of the law (dealing with obligations arising out of the operation of networks and services, interconnection, interoperability, conditions for establishing networks) require the approval of the Minister before being published in the French Official Journal. This is a limitation on their freedom to act since it requires further authorization from another body. In addition, the ART has limited powers to undertake action on its own in order to develop competition in the market unless it is requested to adjudicate in settling a dispute. As an example, the ART could not intervene in the context of the tariff and technical conditions of unbundling except when asked to intervene in a dispute settlement procedure.

The regulator has the right to impose penalties either through total or partial suspension of a licence or through fines which may not exceed 3% of net turnover (increased to 5% for repeated default). This power of sanction has been used, but not frequently *e.g.* in 2002 FT was fined EUR 5 million for not implementing a regulatory decision taken in 2000 following a dispute settlement procedure. The regulator

has also not always had sufficient powers to ensure that its decisions have been applied. Rather it has had to react to complaints. On the other hand the regulator cannot impose fines for delay on delivery *e.g.* for leased lines. This has made it difficult to impose and enforce service level agreements on the incumbent. The transposition of the new European framework into French law will permit ART to have the power to impose fines for non-compliance which will enable it to ensure that its decisions are followed.

The regulator has the right to obtain information to verify the implementation of its decisions. It has limited investigative powers.

The existing law foresees that consumers can be compensated if requirements for quality of service are not met. Unlike countries such as the UK and Canada where the welfare of the customer is viewed as being of primary importance, indeed, as being the main objective of regulation, the French Telecommunications Act pays relatively little attention to the rights of customers. ART has not been given sufficient competence in the law to act in favour of consumers and this is also reflected in the amount of resources allocated by the regulator to questions of consumer welfare.

The ART's decisions can be appealed on procedural grounds as well as on substance. As an example, a ruling of the regulator on third party billing was appealed to the Cour d'Appel de Paris in February 2002. The Court took the view that there appeared to be an error in the substance of the decision and appointed an outside expert to review the decision.

The Minister has in most cases taken on board ART's recommendations, but there is no requirement for this in the framework of the shared powers. The Minister is not obliged to follow ART's advice and there are several examples where the Minister has chosen not to. For example, in the case of 3G licenses ART recommended a level of payment for the licenses much lower than the government requested. As another example, ART had advised against the proposed tariff of France Telecom for a project to provide Internet to schools but this advice was not followed.

ART, as a regulator should have sufficient powers to take action where it deems it necessary in the interest of creating more effective conditions of competition. It does not seem to have this power to act autonomously when necessary.

There have been continuing criticisms about certain aspects of the ART's approach to dispute resolution, but the real problem appears to be the number of appeals against ART decisions and the lack of power to enforce decisions or unwillingness to implement sanctions where these are not respected. One indicator of the difficulties faced by ART is the date of adoption and publication of the incumbent's reference interconnection offer (RIO). The 2001 RIO was published in October of the preceding year but the same timetable was not respected for RIO 2002, and according to new entrants this did not permit ART to negotiate in the best way modifications to the incumbent's offer. There had been problems in implementing certain elements of the 2001 RIO, such as local call pre-selection and FRIACO, but ART had at least been willing to signal its commitment to these services by including them in the offer. In the case of interconnection ART has in effect quasi-judicial powers to resolve conflicts once one of the parties involved has requested the intervention of the regulator.

New entrants believe that ART has not used its existing powers to the full *e.g.* through imposing fines, by referring issues to the competition authority to examine, or to ensure that its decisions are fully implemented and in the time specified. Of particular concern is that no penalties have been imposed on the incumbent in delays for interconnection. The problem is partly due to the fact that clauses on delay are imprecise referring to "average" delays rather than providing fixed timetables.

ART provides an annual report where it can propose report suggestions to improve the regulatory framework. However, it should undertake on a regular (perhaps triennial) basis a more systematic review of regulations with the objective to determine whether there is scope for forbearance.

ART has the authority to obtain information from telecommunication operators regarding their activities in markets and all interconnection agreements need to be provided to the ART.

ART has a total staff of approximately 150 as of 1 January 2003 and a budget of EUR 16.10 million.

Box 3. ART's primary regulatory responsibility in the telecommunications sector

- Provides authorisation for the provision of independent networks for closed user groups;
- Can sanction operators for not meeting legal or regulatory requirements including through temporary or definite suspension of a licence or fines up to 5% of turnover in case of repeated offences;
- Shall set out regulations for rights and obligations arising from the operation of various categories of networks and services;
- Determine provisions applicable to the technical and financial conditions governing interconnection;
- Set out technical rules required to ensure interoperability, efficient use of radio spectrum and of telephone numbers;
- Examine on behalf of the Minister licence applications;
- Enforce obligations on licensees resulting from the Act and regulatory provisions and penalise breaches of conditions;
- Propose to Minister the sum payable as the contribution to the financing of universal service and supervise financing mechanisms;
- Allocate frequency and numbering resources to operators;
- Establish a list of operators with significant market power having obtained the opinion of the competition authority;
- Approves interconnection offers of operators with significant market power;
- Responsible for interconnection dispute resolution and conditions of access to networks;
- Responsible for settling disputes concerning sharing of rights of way
- Can be requested by enterprises, associations or individuals to act as conciliator in any litigation;

The regulator has been criticised by a number of new entrants for not taking the initiative when necessary but rather waiting until a complaint was made. The seeming lack of proactive regulation can weaken a regulator. However, recent action, for example, in Wi-Fi, shows that ART can act rapidly if it wishes and can be proactive.

ART publishes a number of reviews of the telecommunications market in additions to its annual report. These include mobile (3 times a year), and twice a year its benchmarking on unbundling. Given that the public fixed telecommunication market, including voice, is the most important market, as well as being part of universal service, more effort should be made to review the development of competition in this market than is presently undertaken.

The power of the ART is expected to be strengthened by the new Act. In particular it will be able to determine the relevant market and determine dominant operators in those markets (the opinion of the Competition Authority is required for this). In addition the ART can determine obligations imposed on operators. The new draft law (see Box 4) changes the role of both the Ministry and the ART. Shared responsibility will remain only for universal service where the regulator will continue to determine the cost of universal service, but the designation of the operators to provide universal service, undertaken on the basis of tenders, will be decided by the Minister. In the other areas the responsibility will be left to the regulator although in the context of a different framework (*e.g.* there will be no more licensing). The regulator will also have the power to undertake investigations and will have the power of injunction.

2.1.2. The Public Service Commission for Posts and Telecommunications

The Commission supérieure du service public des postes et télécommunications (CSSPPT) was set up in 1990 as an advisory body to the Minister as concerns the telecommunication sector and, in particular, with respect to public service and universal service, but has been used more widely by Ministers as a consultative body to provide opinions on draft laws.³⁸ The CSSPPT has 17 members: seven members of the National Assembly and seven members of the Senate elected by their peers and 3 experts appointed by the Minister responsible for telecommunications. The views of the CSSPPT are made public. Its main role is to support compliance with public service principles, in particular universal service.

The CSSPPT can submit suggestions and recommendations to the Minister and can be consulted by the regulator and by the standing committees of the two parliamentary chambers. The Commission can also call on the regulator to intervene “with regard to controlling the fulfilment by operators and penalising operators for the non-fulfilment of the public service and universal service obligations.” (Article 3). It can also ask the minister in charge of posts and telecommunications to have the general inspection of posts and telecommunications undertake any study or investigation concerning the Post Office or France Telecom. Within this framework, it has, if it considers it necessary, wide powers to carry out investigations.

As a consultative body the Commission should have wider representation among its members. In particular, in view of its primary role to advise on universal service it would be useful if consumer representatives participated as experts in the proceedings of the CSSPPT.

2.1.3. The Ministry responsible for telecommunications

Responsibility for telecommunications policy lies with the Minister of economy, finance and industry (specifically the General Directorate for industry, and information technologies and posts [Direction générale de l'industrie, des technologies de l'information et des postes (DiGITIP)]. Consumer and competition questions in the sector come under the responsibility of the DGCCRF (Direction générale de la concurrence, de la consommation et de la répression des fraudes, which is under the authority of the Minister of economy, finance and industry. The DGCCRF is a competition authority that has powers to investigate. For competition issues it must obtain an opinion of the Conseil de la concurrence on behalf of the Minister, it intervenes in ongoing investigations of the Conseil de la concurrence and can undertake inquiries on its own.

2.1.4. Competition authority

The competition authority in France (Conseil de la concurrence) is an independent authority and has, as well as the ART, authority in the telecommunications sector. There is both formal and informal cooperation between the competition authority, and the telecommunication regulator. There are also a number of areas where the ART is required to consult with the competition authority. For example, the

ART is required to demand the opinion of the competition authority to establish the yearly list of operators with significant market power.

Some operators have raised the question as to whether appeals to decisions taken by ART and the competition authority should be with the same bodies. At present appeals to ART's decision are to the Conseil d'Etat. Those dealing with dispute settlements can be appealed to the Cour d'Appel de Paris, as is the case for decisions of the competition authority. The Conseil d'Etat and the Cour d'Appel de Paris can take decisions on the substance of ART's decisions. Decisions of the regulator remain in effect unless the appeal body decides otherwise.

2.1.5. *French Frequency Agency*

The Agence Nationale des Fréquences (ANFR) was created by the telecommunications act of 1996 bringing together several administrative bodies that had been engaged in spectrum issues. It is responsible for planning, monitoring and coordinating spectrum usage in France. However, individual ministries and frequency allocating authorities, such as the telecommunications and broadcasting regulators, are responsible for the strictly defined management of attributed spectrum bands. The ART has responsibility for the billing of frequency licence fees and administrative taxes.

2.1.6. *Le Conseil supérieur de l'audiovisuel*

The Conseil supérieur de l'audiovisuel (CSA), created in 1989, is an independent agency responsible for the audiovisual sector in France. It is responsible for managing and allocating spectrum for radio and television, providing operating licenses to radio and television stations including cable television and satellite television. It determines the regulations applicable to radio stations and to television distributed by cable and satellite. It also provides advice on legislation in the audiovisual area. The CSA also appoints the heads of the public radio and television stations.

2.1.7. *The European Commission*

As a Member State of the EU, France is required to take EU legislation into account in its domestic law³⁹. In February 2002, the EC adopted legislative measures consisting of a general Framework Directive (Directive 2002/21/EC) on a common regulatory framework for electronic communication networks and services. Responding to the need to recognise developments in 'convergence', the new framework covers all electronic communications networks and services. The framework directive requires the definition of markets in accordance with the principles of competition law and aims to reduce *ex ante* sector-specific regulation progressively as competition develops. EU member states were obliged to implement the Framework Directive⁴⁰ into domestic law within 15 months that is by July 2003.

- Wholesale unbundled access (plus shared access) to metallic loops and sub-loops.
- Wholesale broadband access (including 'bit-stream' access).
- Wholesale terminating segments of leased lines (up to and including 2Mb/sec as referenced in the Universal Service⁴¹).
- Wholesale fixed to mobile termination.

2.2. *Licensing regime*

In France licenses for public switched telecommunication operators are awarded in general for a period of 15 years. Licenses can only be refused on the grounds of public order or in the interests of national defence, limitations of spectrum or when the regulator judges that applicants do not have the technical and financial capacity to meet their obligations. Licensees are required to meet a number of conditions as set out in Article 33-1 of the Telecommunications Act. The Ministry awards PSTN licenses after the regulator has made a recommendation. According to the ART its recommendations have always been taken into account by the Ministry. France makes a distinction between a licence to provide networks and/or services at the local level or covering a number of local call zones and a licence to provide networks and services at the national level.

PSTN licence fees have been very high in France, both the fixed (one-off) charge and yearly charges. As an example in 2002 a PSTN operator (offering service in more than 5 zones) would have to pay a single payment of 304 897 EUR and an annual fee of 152 449 EUR.⁴² These fees were well above the administrative costs incurred to attribute and manage licences.

Arguably high license fees may have a negative impact on the number of licensed voice operators, which in France is relatively low compared to other EU countries with a smaller population and geographic area. For example, according to the EC's VIIIth Implementation Report France had 45 public telecommunication operators in 2002 offering voice telephony compared to 68 in Germany, 85 in Italy and 227 in the UK. France has also maintained a zoning system in its licences (local and long distance) although this is unnecessary. The economic situation affecting the telecommunication sector has meant that the number of licensed operators has decreased over the last year.

The process of licensing has not been viewed as an impediment for market entry although there was no reason to maintain a "heavy" market entry procedure through licensing. The draft law when it is implemented will be based on EU Directives will abolish individual licensing and move to a system of authorisation. It is not yet known whether authorisations will still differentiate between regional and national network operators. The heavy licensing fees should also be changed to a more reasonable level reflecting costs of administration rather than being imposed as a quasi-tax on operators.

Public telecommunication operators are required as a condition of their licences to devote a percentage of investment to research and development in the telecommunications sector. This requirement seems unnecessary and discriminatory vis-à-vis other industries. Even though it is foreseen in European directives, the requirement to support social tariffs (when this should be the responsibility of the state) and support industrial development goals can also be viewed as unfair. This requirement should be dropped. Since the requirement for an individual licence is contrary to the "Authorisation Directive", the *Ministre délégué à l'industrie* and the ART could not demand, as of 25 July 2003, operators to obtain such an authorisation. This change was also valid for operators who had made a request before 25 July for an individual authorisation and for which consideration was still underway after that date: in such cases, even if consideration had been given to an application, no individual authorisation would be given, which means that the fees for consideration of a dossier could be reclaimed by an operator.

2.3. *Line-of-business and ownership restrictions*

There are no line-of-business or ownership restrictions on licensees in France. Ownership restrictions exist for mobile licences whereby a licence cannot be issued to a company in which more than 20% of the share capital or voting rights are held, directly or indirectly by foreign nationals. These restrictions to direct participation do not apply to natural or legal persons of the EU or the European Economic Area. As such the restrictions are not viewed as creating any barriers to investment. French corporate law and the

bylaws of France Telecom contain notification requirements governing situations where a shareholder or group of shareholders exceeds certain ownership or voting rights thresholds.

2.4. Regulation of pricing

Price regulation was introduced through Article L. 36-7 of the 1996 Telecommunications Law. Price regulation is applied to those services which are considered as universal services and tariffs for services for which the regulator considers there are no competitors in the market. The universal service tariffs include: fixed line charges; local call charges; long distance charges; international charges; social tariffs; directory assistance; public callbox charges. For these prices the underlying principles in tariff setting consist of: affordability; no geographic discrimination (geographic averaging of prices); non-discrimination and cost-oriented prices. At present the services for which it is considered there are no competitors in the market are access to fixed lines, leased lines, ISDN, and shared revenue numbers. For these tariffs the aim of the regulator is to ensure that there is no price foreclosure and price squeeze.⁴³ The retail tariffs subject to approval also include price packages and discounts.⁴⁴

The regulator is required to provide an opinion to the Ministry on the tariffs which are regulated. The regulator's opinion is necessary before these prices are approved by the Minister responsible for telecommunications and the Minister responsible for the economy. Only the tariffs of France Telecom require approval since, in the fixed telephony market, it is the only operator designated as having significant market power (SMP). Over the past few years some new entrants have expressed concern regarding the potential for conflict of interest in that the Ministry approves tariffs and at the same time supervises the State's shareholding in the incumbent. However, in most cases the Ministry has followed the recommendations of the regulator as far as tariff proposals are concerned: in 1998 the Ministry took a different view from ART in 5% of the tariff recommendations and proposals.⁴⁵ Data are not available for other years to show whether 1998 was a typical year.

Cases have occurred where prices of the incumbent have been approved by the ART and subsequently by the Minister but have been subject to an objection by new entrants who have complained to the competition authority and have obtained injunctions to prevent the new prices coming into effect. An example occurred as local preselection was introduced and the incumbent launched a new service, which bundled fixed and call charges into a single price package, threatening competition. Responding to a complaint the competition authority required the incumbent to suspend its offer.

The existing price regulation framework allows the regulator to control both the wholesale prices of operators having significant market power and the retail prices. In 2003, as in previous years, France Telecom was designated as having SMP in fixed telephony market and for leased lines. The prices for leased lines are part of the interconnection offer (see below) and subject to the same procedure used in finalising the interconnection offer for the fixed telephony market. Using price caps for a number of prices would have the benefit of allowing more flexibility to the incumbent in setting prices for PSTN services as well as reducing the potential danger that prices become 'administered'. There has been little attempt to reduce the regulatory burden of price control and try to streamline price regulation. For example, there would seem to be no need to regulate long distance and international long distance prices. A periodic review of the need and modalities of price regulation would have been useful as part of a regulatory streamlining process. There was also little justification in having a 'dual approach' to price regulation. The objective of price regulation is to encourage market efficiency, fair competition and ensure that the transition to a competitive market provides benefits to consumers while encouraging price rebalancing. The regulator is best suited to meet these objectives since its responsibility includes managing the transition from a monopoly to a competitive market. It is important for the regulator to foster transparency as much as possible. There is scope to increase transparency in areas such as price controls such as by

publishing and obtaining approval for the methodology used to assess whether price squeezing is taking place.

The changes proposed in the draft law to take into account EU Directives will eliminate the two tier system of price approval by giving the regulator full responsibility on price regulation. In 6 markets in the telephone service area and high speed leased line markets for which retail price controls may be maintained by the regulator following an analysis of these markets.⁴⁶ It is also important that the ART maintains legal powers to decide when and under what circumstances it should take action to regulate prices and whether it should decide to forbear from price regulation. This should include, as necessary the regulation of retail tariffs, and in particular, to intervene in the pricing of so-called “innovative” services. It is precisely in new service areas that the incumbent tries to use a first mover advantage to control the market and it is in these new growth areas where the regulator needs to be vigilant in terms of price control.

The French draft law on *Confidence in the Digital Economy*⁴⁷ introduces an article giving a subscriber the possibility to opt for per second pricing.⁴⁸ Pricing structures or practices should best be left to the market, or the regulator where there are problems of competition and dominant position.

Tariff rebalancing in France

Tariffs are said to be “unbalanced” if the line rental and one-off access charge (or more generally the access charge) is insufficient to cover these costs, which may be instead met partly out of profits on calls. Tariff rebalancing in telecommunications usually refers to the process of increasing line rentals relative to call prices until the former are sufficient to cover the costs of providing the subscriber line, appropriately measured and including the cost of capital. In France price rebalancing began in 1994, before the market opened to competition. The subscriber line charge has increased progressively from EUR 6.86 per month in 1995 to EUR 13 per month in 2002. It is considered that generally tariff rebalancing has been achieved although, given that subscriber line charges are geographically averaged, fixed line charges do not cover costs in all areas,. The French authorities estimate that for the period 1995-2001 the overall basket of call charges for residential subscribers fell by 12% whereas the business basket fell by 35%.⁴⁹

A number of other European countries have set target dates to achieve rebalanced prices after which no retail price controls would be applied. Such a strategy avoids continuing the use of protracted price controls. Price controls could be limited to some key wholesale prices and where necessary retail prices to ensure that there is no price squeeze.

2.5. Access regime

2.5.1 Interconnection

In France all public operators are required to meet requests for interconnection from other licensed operators. Reasonable demands for interconnection cannot be refused except if the operator has insufficient capacity. A copy of all interconnection agreements must be provided to the regulator. Operators with significant market power are required to publish the technical and pricing terms of their interconnection offer which needs prior approval from the regulator. Their interconnection tariffs must be cost-oriented. From 1999 a long term incremental cost methodology was used as a basis to determine the incumbent’s interconnection charges in addition to international benchmarks.

Prior to 2001 the regulator could only intervene in interconnection procedures if requested to settle a dispute. This weakened the role of the regulator. The Interconnection Directive of the EC of 1997 in fact states that national regulatory authorities may intervene on their own initiative at any time (Article 9(2) of Directive 97/33/EC. Furthermore, this Directive allows the NRA to set time limits for the completion of

commercial interconnection negotiations after which the regulator can intervene. New entrants thus did not have the full benefit of the Directive in place for the first three years of market competition. Since then the regulator has obtained the power to intervene on its own initiative in interconnection procedures. The procedures to request dispute resolution were quite cumbersome in the past. Dispute settlement procedures have also tended to be lengthy. For example, in late January 1999 Cegetel requested the intervention of ART to resolve a difference in interconnection negotiations. The ART decision took 4.5 months. Interconnection disputes must be resolved in accordance with Article 9(5) of the Interconnection Directive. This has been transposed in accordance with Regulation 6(6) of the Telecommunications (Interconnection) Regulations 1997. Disputes must be resolved in a way which represents a fair balance between the interests of the parties and taking into account a number of other criteria such as the interests of users, the public interest, the relative market position of the parties, the promotion of competition, the availability of technically and commercially viable alternatives to the interconnection requested etc.

FT's reference interconnection offer (RIO) is presented to other operators in draft form for their comment and then finalised by ART and the incumbent. The RIO includes a price list and technical offer (catalogue) defining the conditions under which the incumbent's competitors can interconnect to its network. Prices in the catalogue are required to be cost oriented. The approval procedure uses an interconnection committee bringing together all the relevant operators to comment on the draft reference interconnection offer. Once the other licensed operators have made an input the finalisation of the RIO involves discussions between ART and FT. The latter process has been criticised by new entrants since the final negotiations between ART and FT are opaque. Transparency would be improved if these negotiations were open. In the past procedures for the RIO took a relatively long time whereas in 2003 there is a commitment by the ART to reduce the period to 6 weeks following the presentation of the RIO to new entrants. Furthermore ART should have powers to modify directly the reference interconnection offer of FT, which would be available had the EC's Interconnection Directive been fully transposed.

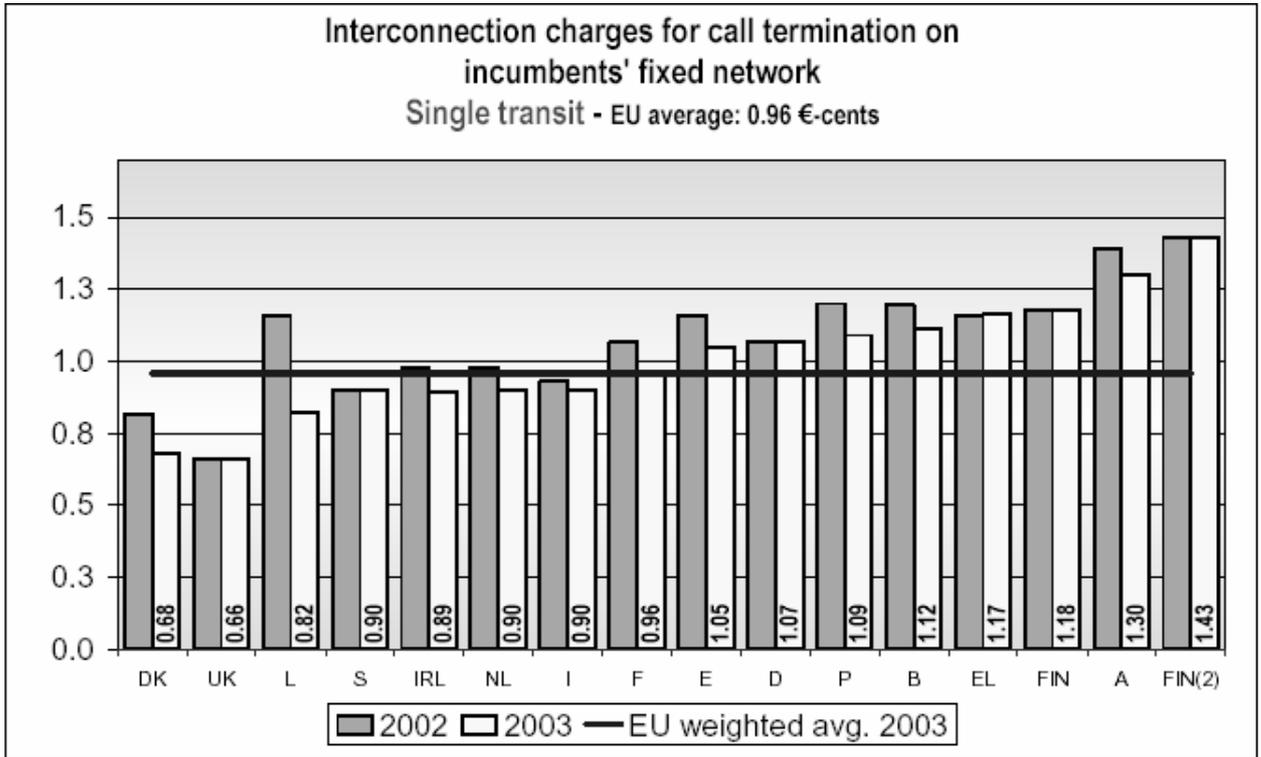
In general interconnection prices have declined in recent years. ART reports that the 2001 interconnection prices were 7.6% lower than 2000 for facility based operators and 30.7% for providers of voice telephony services to the public. These reductions have meant that France has interconnection charges equivalent to the EU average for single transit (see Figure 1) and below the EU average for double transit.

Initially in France, as in other countries, consumers accessing the Internet (narrowband dial-up access) paid per minute charges. This meant that long Internet sessions were expensive. Retail price structures reflected wholesale prices for interconnection which were on a per minute basis. A flat-rate Internet call origination charge (FRIACO) was first implemented by the UK regulator, OFTEL, in 2001. The ART reacted relatively quickly by introducing FRIACO in the 2002 interconnection catalogue allowing for important price declines for narrowband Internet access.

Leased Lines

In February 2002 the incumbent was obliged to introduce interconnection leased lines into its RIO. A mechanism was also introduced to allow new entrants to migrate from their existing leased lines to interconnection leased lines. ART estimates that the interconnection leased line offer will represent an average reduction of around 40% for leased lines.

Figure 1. Benchmarking Interconnection charges, 2002-2003



Source: EC, Telecommunication Regulatory Package –VIII Implementation Report.

For short (2 to 5 km) leased lines FT has the highest prices in the European Union. This is the case for 2Mb/s part circuits and 34Mb/s part circuits. With regard to provisioning time FT was not the worst performer in the EU but was usually above average in terms of the number of days required to deliver circuits.

A dispute has revolved around the 2002 interconnection offer because of the claim by some new entrants that, despite the reductions in wholesale prices there is still a price squeeze given the retail prices for leased lines.

Starting in 2003 the methodology to be applied to interconnection prices will be based on long run average incremental costs. The ART is the first European regulator to apply this methodology to the pricing of leased lines.

Fixed to mobile interconnection charges

Historically, fixed to mobile interconnection charges have been high in France. The ART persuaded the 3 mobile operators to voluntarily reduce mobile termination charges in 1999 and, following a complaint, from MCI/WorldCom against Orange, a reduction of 20% was imposed by the ART on Orange.⁵⁰ In June 2001 ART published guidelines for interconnection tariffs for mobile operators with significant market power in the interconnection market. These laid down the rules for cost orientation for interconnection for the designated SMP operators.

In November 2001 the ART obliged the two mobile operators with SMP to reduce their tariffs by 40% over a 3-year period starting in March 2002. It is not however clear how the level of reduction was

determined. A more efficient decision would have determined the cost-oriented price and set a goal to achieve that price. A cost-oriented price would also require the application of a LRIC model as for fixed to fixed interconnection.⁵¹ Nevertheless, relatively to some other European regulators, the French regulator has recognised that mobile termination is a bottleneck service and has taken steps to reduce prices significantly in a market where it is relatively difficult to introduce competition. Further reductions need to be made if France is to attain the level of best practice prices.

The competition authority is also presently examining the issue of fixed to mobile termination and is expected to publish its decision during 2004.

2.6. Local loop unbundling

Creating competition in the local access market has been one of the main challenges for telecommunication regulators across the OECD. Local loop unbundling (LLU) has been viewed by most regulators as an important tool to allow new entrants to directly access subscribers. Several EU countries implemented unbundling immediately once competition was introduced in 1998 viewing it as part of the interconnection offer of the incumbent. A number of other countries only began the process of implementing unbundling in 2000-2001. The pressure to introduce unbundling came mainly with the development of broadband Internet services and the main goal of these unbundling policies was to stimulate competition in broadband markets rather than voice markets. However, it is likely that as voice services provided over Internet Protocol (VoIP) expand over the next few years that unbundling of fixed subscriber lines will generate competition in the DSL broadband market as well as in the voice market.

The French government introduced a draft amendment to the Telecommunication Law in April 2000 in order to implement local line unbundling. This amendment was subsequently withdrawn.⁵² The Decree of 12 September 2000⁵³ incorporated, although not completely, the requirements of the EC's Directive on unbundling into the existing French legal framework and required the incumbent to provide access to unbundled local loops from 1 January 2001. The EC's unbundling regulation required all fixed line operators with Significant Market Power to unbundle their local loops⁵⁴ and also mandated line sharing for the provision of DSL services to end users and sub-loop unbundling as well as the provision of access to other service providers of the SMP operators own ADSL services for the purposes of resale. Although in its recommendations on unbundling the ART had stated that the offers must be sufficiently unbundled so that operators can request only those network elements that they require⁵⁵, the issue of sub-loop unbundling was actually not specifically mentioned. The regulator also adopted guidelines, which clarified cost-oriented pricing principles as well as using LRIC to calculate wholesale prices. The guidelines are not, however, binding.

The implementation of unbundling has been viewed as being very slow by new entrants in France. New entrants believe that delays gave an advantage to Wanadoo, the incumbent's ISP, in the broadband market and slowed down the diffusion of broadband in France. Table 3 shows the timeline for unbundling in France. However, even though unbundling should have been available from January 2001, it was not effectively available until a much later date.

First mover advantages in a market with rapid change, such as broadband, can place new entrants in a significantly disadvantageous position and can act as a barrier to entry. The ISP of the incumbent, Wanadoo, on a number of occasions took advantage of these first mover advantages and even though the Competition Council took action it is not clear that this was sufficient to eliminate these advantages. Wanadoo in fact began providing retail ADSL access in 1999 but was required to stop providing this offer by the competition authority following a complaint until France Telecom had put in place a commercial offer for other Internet Service Providers (ISPs). As a follow-up to this action the Competition Council

required the incumbent in February 2000 to make available a bitstream access offer (referred to as Option 3 in France) to other fixed telecommunication operators. This was only implemented in 2003.

In February 2002 the Competition Council required Wanadoo to suspend the sales of its retail ADSL packs until France Telecom had provided to all ISPs information on which subscriber lines could support ADSL technology and the characteristics of modems compatible with ADSL equipment, as well as requiring the incumbent to provide connections to ISPs on the same terms and conditions as it was doing for Wanadoo.

In addition, Wanadoo engaged in predatory pricing which also had the impact of increasing its share of a rapidly growing market. Wanadoo was recently fined⁵⁶ by the European Commission for predatory pricing on consumer ADSL service in France. The EC found that Wanadoo deliberately set prices in broadband products lower than cost during the end of 1999 to October 2002.

Wanadoo's market share of the retail DSL market is in the region of 63% with FT having a 100% of the DSL wholesale market (and an important indirect share in the cable modem market through its ownership in cable companies).

Table 2. Timeline for unbundling in France

1999	ART launches a consultation on the development of local competition
October 1999	Publication of synthesis of public consultation
February 2000	Meeting of industry group presided by ART to determine technical and price conditions for unbundled loops
July 2000	Experimental launch of unbundling
September 2000	Decree on unbundling published
January 2001	Unbundling comes into effect
September 2001	No unbundled lines made available

The two years after the introduction of unbundling in January 2001 saw serious delays in the provision of unbundled loops and competition in ADSL services. By the end of October 2001, only a few lines had been unbundled and there were no examples of shared access. The regulator had during that year gone through four versions of the reference offer for unbundling put forward by FT and, in addition to these pricing delays, there were a number of problems with the technical implementation of unbundling including collocation (see below). Unlike in most OECD countries France Telecom's reference offer for LLU does not necessarily have to be approved ex ante by the regulator, although ART verifies that prices are cost oriented and has issued decisions to request changes in the offer. Greater certainty in the market would exist if the reference offer were subject to approval. In the context of the EC's Relevant Markets Recommendation which will be transposed into French Law with the new Act one of the markets defined for scrutiny in the context of dominance is the wholesale broadband market so there is a possibility that the incumbent's wholesale prices may become subject to further control. In this context it is important that the ART begin as soon as possible in undertaking market reviews as laid down in the Directive and if possible before the law is enacted. It has already sent the questionnaire to operators with a deadline date for reply by 30 September 2003.⁵⁷

In France, as in other OECD countries, the incumbent used systematic delaying tactics to obtain an advantage in the DSL market and in general to delay full implementation of unbundling. To its credit the ART took a number of actions in 2001 to try and facilitate unbundling. These included issuing an injunction forcing FT to release collocation information in a timely manner. FT was also forced to revise its reference offer and to set tariffs comparable to the EU average. In April 2001 ART intervened for the third time threatening FT with financial sanctions and requiring FT to modify some of its offer. FT

subsequently appealed the ART's decision to the Conseil d'Etat, but it was obliged to comply with ART's decisions. FT's appeal was subsequently rejected. In June 2001 the ART intervened again to oblige FT to comply fully with earlier decisions. Finally in July FT published a revised reference (the fourth) offer.

A number of new entrants were not satisfied by the performance of the ART during 2001. They felt that insufficient attention had been given to the price squeeze they were subject to and that collocation issues had not been dealt with adequately. For example, there were complaints that the incumbent imposed a standard contract outside of the RUO imposing conditions such as the level of risk that had to be insured by the new entrant in laying cables in collocation rooms which increased costs significantly. In addition in mid-2001 FT requested approval for a set of promotional tariffs which the regulator supported on condition that the implementation was delayed. The Ministry approved the tariffs but did not impose the regulator's condition which had a negative impact on new entrants in that market.

In 2002 the ART, reacting to an infringement proceeding brought by the EC, modified the reference unbundling offer to introduce sub-loop unbundling. This decision also required the incumbent to reduce its tariffs for LLU. The changes in the first half of 2002 resulted in a reduction in the price of raw copper falling by 30% while shared access prices decreased by more than half. As a result of this action the tariffs for shared access and unbundled lines are now among the lowest in the European Union (see Table 4). Further, the regulator outlined a number of service quality indicators and put forward a protocol for migration to unbundled loops to ensure that the incumbent and new entrants could work smoothly together. These indicators were scheduled to be published by ART. ART also decided to establish a service level agreement in the first half of 2003 for access to unbundled lines and integrated with the reference offer. This made it mandatory for France Telecom to determine and publish the average waiting times for processing orders for unbundled local loops.

Table 3. Prices for unbundled local loop (€), 2002

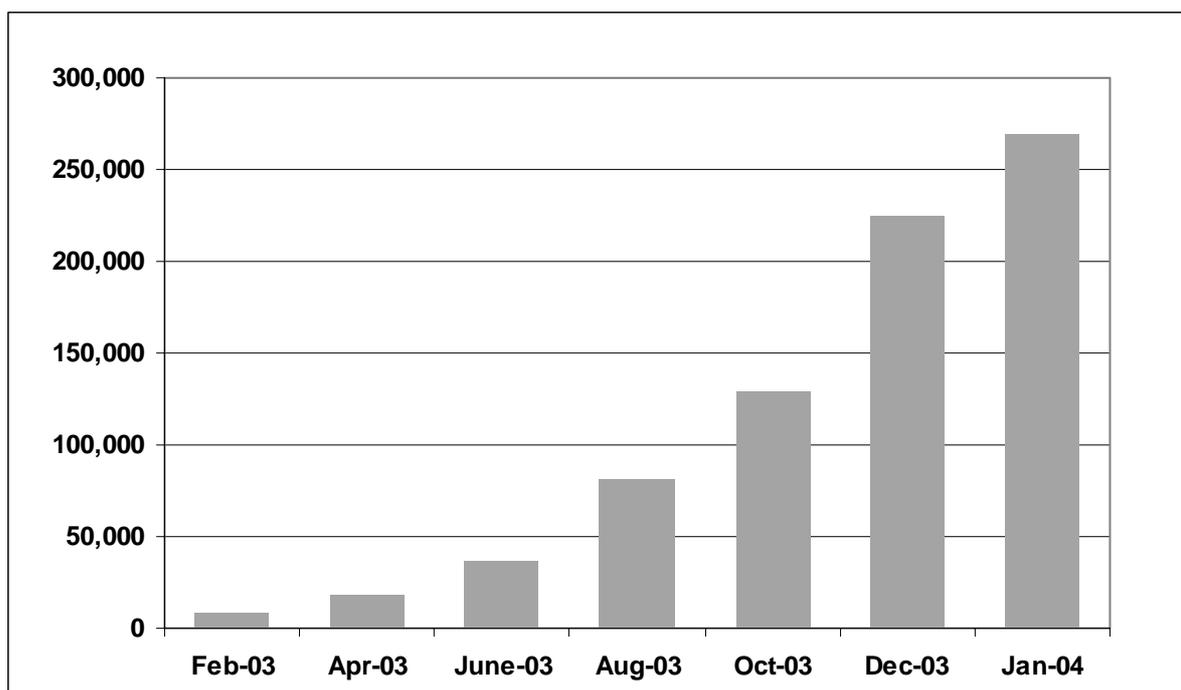
	Full unbundling		Shared access	
	monthly rental	connection	monthly rental	connection
Belgium	13.3	79.9	3.2	86.5
Denmark	8.3	45.4	4.1	178.4
Germany	12.5	70.6	4.8	74.9
Greece	11.5	123.4	6.9	141.9
Spain	12.6	20.0	4.8	27.0
France	10.5	78.7	2.9	78.7
Ireland	16.8	121.5	9.0	123.4
Italy	11.1	91.4	2.8	81.0
Luxembourg	15.8	185.6	7.5	196.2
Netherlands	13.5	79.0	5.6	89.2
Austria	10.9	54.5	5.5	109.0
Portugal	13.8	82.9	7.9	173.8
Finland	14.7	216.0	7.0	160.0
Sweden	11.3	165.2	5.4	118.0
United Kingdom	16.2	140.3	7.0	186.5
EU average	12.8	103.6	5.6	121.6

Source: EC (2002), Eighth Report on the implementation of the Telecommunication Regulatory Package, Annex 1.

The development of unbundling in France is shown in Figure 2. Good progress was only achieved after the first quarter of 2003. The number of unbundled lines grew from 1 000 in November 2002 to 41 000 by 1st June 2003 and 273 255 lines by the end of 2003, which is, however, less than 1 percent of main subscriber lines.

It is not clear in the case of unbundling whether more effective and rapid sanction procedures would have allowed the regulator to reduce the delay in implementing effective unbundling. In many OECD countries the process of introducing and regulating unbundling was complex and many issues which arose as unbundling was implemented were not initially foreseen either by regulators or market players. These included pricing as well as technical issues, issues dealing with the relationship between the incumbent and its affiliate ISP, and issues dealing with collocation. In addition, incumbents invariably tried through various means to delay access to unbundled loops either by restricting information or citing technical difficulties as the cause of delay.

Figure 2. Number of unbundled lines as of 1 January 2004



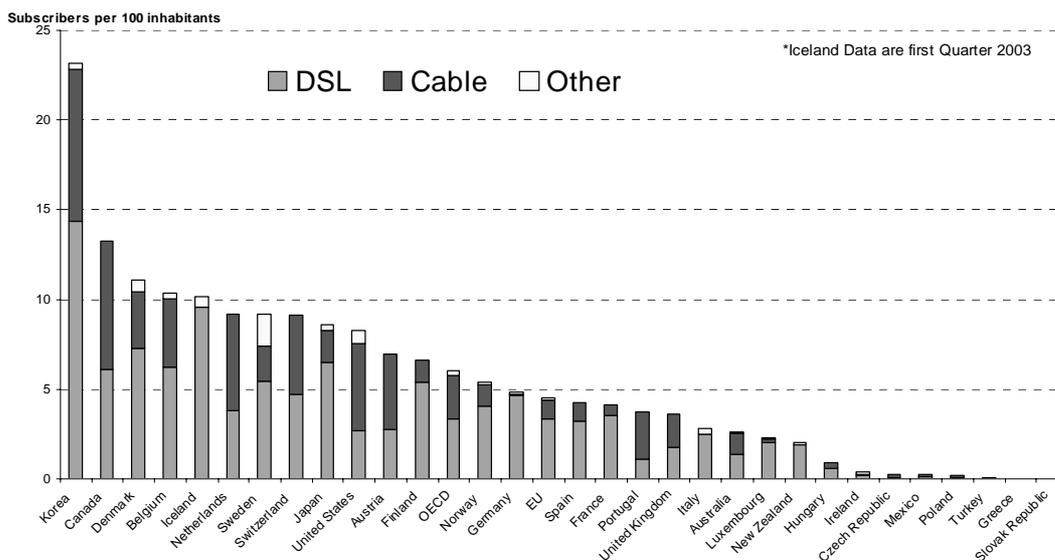
2.7 *Internet Development and Broadband*

The development of broadband Internet markets is closely linked to policy and regulatory development in unbundling. France, as well as several other G7 economies, have been relatively slow in the development and diffusion of broadband services. As of the 1st quarter of 2003 France was 15th in the OECD in terms of the number of broadband subscribers per 100 inhabitants. Although growth has accelerated in France, it has also accelerated in most other OECD countries so that by June 2003 France's relative position remained unchanged (Figure 3).⁵⁸ However, as noted above, a number of the earlier problems regarding access to FT's unbundled lines have been mostly resolved which should permit greater competition in this area. A number of new entrants have come out in mid-2003 with competitive products combining both high speed Internet and unlimited telephony which, combined with carrier pre-selection, should help increase competition in both the voice and high speed Internet market. Other factors other than unbundling, such as the lack of competition from alternate platforms (see section on cable below) also contributed to the relative lag of France in broadband diffusion. The relative lag in the diffusion of broadband compared to the leading OECD countries has consequences for France's ambitions to develop an information society and its objective to have 10 million broadband subscribers by 2007.⁵⁹ The incumbent also in the initial stages of ADSL availability refused to allow modems other than those that it had listed as "compatible" [référencement]. This reduced the ability of ISPs to compete with different

packages. Intervention of the regulator was necessary to oblige the incumbent at the end of 2001 to provide manufacturers and ISPs with the specifications to test modems.

The draft law on confidence in the digital economy (Projet de Loi pour la confiance dans l'économie numérique) includes an article stating that all geographic areas should have access by 2015 to high speed Internet networks. The law does not indicate who would be responsible for providing such access.

Figure 3. Broadband diffusion in the OECD (June 2003)



Source: OECD.

Collocation

Following the implementation of LLU unbundling the demand for collocation in France Telecom's switches increased. At the end of October 2001, 83 collocation sites had been made available to the operators in response to their orders, and new entrants were beginning to install and test equipment. By mid-2003 198 sites had been made available for unbundling. A number of problems were encountered by new entrants including the length of time taken by the incumbent to provide technical information concerning the collocation sites and to prepare the switches for collocation. Before mid-2002 the technical conditions applied to implement collocation were a major obstacle to new entrants since the incumbent required that the collocation room have separate and independent access.

The revised RUO of June 2002 introduced cageless collocation in sites where no caged collocation facilities had been ordered by new entrants. Cageless collocation reduces costs for new entrants but the decision did not apply to the existing caged collocation sites most of which are in high volume markets and which incur high costs for the new entrants using these facilities. By mid-2001 33 of the 37 main distribution frame sites in Paris had caged collocation facilities in place. The decision needs to apply to include these sites. FT also has to have a standard offer for collocation.

2.8. Cable networks

In January 2003 the French telecommunication regulator released a report on the state of the cable market in France. The report provided a belated recognition of the problem faced by the cable industry and the discriminatory treatment it has faced vis-à-vis the PSTN market. In the report ART underlined the low penetration of cable in both the television and the telecommunications markets. The report stated that just 13% of French households subscribed to a cable network as of June 2002. The report also cited the large difference in penetration between DSL and cable modems as well as the large difference in respective growth rates: there were 1.4 million DSL subscribers and 283 000 cable mode subscribers by the end of 2002. This extensive review of the French cable market by ART proposed three scenarios for the future development of the cable sector in France. These were:

- Consolidation: rationalisation of networks through area exchanges; consolidation of current cable players, following the elimination of legislative barriers to mergers; grouping of existing players around a new entrant providing fresh capital.
- Separation of infrastructures and services, with the takeover of all physical cable infrastructures by a single operator in order to offer service providers unified access to all 8.5 million connectable households in France.
- The status quo and the technological erosion of cable, which might lead to decreasing interest in this medium.

The first option put forward by ART would appear to be the best way forward if it also included the divestiture of cable assets by the PSTN incumbent.

The transposition of the EU's telecommunication packet into French Law should bring about a number of positive changes for the regulation of the sector and its future growth. The draft law will eliminate individual licensing requirements and the requirement for local (municipal) authorization so that market entry will be simplified through a system of general authorization. In addition the existing limitation that cable operators cannot serve a market of more than 8 million households will be eliminated which should help strengthen the sector through economies of scale thus allowing it to compete more effectively against the public telecommunication network. It is important that the new law overrides existing contracts between cable operators and local communities if it is to have a significant impact.

2.9. WLANs

While regulations have long restricted use of wireless local area network (WLAN or WiFi) technology to private networks in France, the regulator ART launched a public consultation process in December 2001 for the use of WLANs. This consultation aimed at examining the possibility of supplying telecommunications services using frequencies in the 2.4 and 5 GHz bands, which had been reserved for private networks, to the public. The ART announced in June 2002 that it would allow the creation of public WLAN hot spots in the 2.4GHz and 5GHz frequency bands. The regulator responded rapidly to meet the need for rapid development of Wi-Fi. Full frequency bands were made available at the 2.4GHz range and limited availability at 5GHz. In November 2002 ART issued a decision confirming that no licence was required for a public Wi-Fi networks. The Minister responsible for telecommunications approved this decision in December 2002. These decisions allow private companies, local governments and individuals in certain regions to provide both indoor and outdoor coverage in public spaces with high Internet traffic such as airports. In a number of areas⁶⁰, WLAN providers will be able to install the terminals of access without authorisation using technologies in the 2.4 GHz band subject to some technical conditions:⁶¹

It is important to ensure that hotspots in public places (airports, railway stations, etc.) are open to all service providers and do not become exclusive to a single Wi-Fi service provider. Most countries have yet to consider this as an issue but given the rapid growth in Wi-Fi access there is a danger that public access may become limited in public places to a single provider. On the other hand competition between different service providers and commercial establishments for the provisioning of hot spots should be welcomed. In France the three mobile operators have decided to set up an industry body which will be open to all public WLAN operators in order to standardise roaming and to give hotspot operators reciprocal and non-discriminatory access to one another's networks in France.

2.10. *Third Generation Mobile Services (3G)*

France was one of the seven EU countries that chose to allocate 3G licences through a comparative selection procedure (beauty contest). France decided to allocate 4 licenses and set a price of 4.95 billion euros. Industry clearly considered that the price for the licence was too high and a number of firms that had indicated their initial interest in a licence did not participate in the beauty contest. The third GSM operator in France also did not participate in the licence selection procedure which terminated in June 2001 when the two licence applicants (Orange and SFR) received a licence. Soon after the licence allocation, following pressure from the 2 licensees that the terms and conditions were too difficult to meet the government changed the licence conditions. In its 2002 Budget Law, France reduced the fees for a 3G licence from EUR 4.95bn to EUR 619m, coupled with an annual charge of 1% on 3G revenues. In addition, the initial licence duration which was for 15 years was extended to 20 years. A second round of licensing took place in 2002 but, given that this licensing round occurred after the dot.com bubble had burst and the subsequent financial crisis that impacted the industry, there was only demand for one licence by the third GSM operator who obtained the licence in October 2002.

Changing the terms and conditions of the licences after they have been awarded can be viewed as intrinsically unfair to those companies that had decided not to bid because they thought the initial price was too high. The fact that two licences still remained after the initial beauty contest allowed the Government to change terms and conditions on the basis that companies that had initially considered bidding for a licence still had a chance (and still have an opportunity in that one licence still remains). The change in the price of a licence by the government gave credibility to the regulator's recommendation at the beginning of the licence attribution process for a lower licence price. In other OECD countries, governments did not change their position after licences were awarded even though in some countries operators placed pressure to obtain refunds on licence fees or auction payments.

The start of 3G commercial service launch in the licence was June 2002 for Orange and SFR and December 2004 for Bouygues and the initial coverage requirements in the licence were to be met by August 2003 for the first two licensees (December 2004 for Bouygues).⁶² ART has not taken a formal decision to change deadlines stating that the requirements in the licence were conditional to 3G equipment being available, which has not been the case.⁶³ Network sharing (limited to antennae sites) is allowed by licensees.

2.11. *Separation between the incumbent and affiliates*

It is important for the regulator to be able to have suitable accounts from the dominant provider which can be used to analyse whether that operator is meeting a number of obligations, such as cost-orientation and non-discrimination. In addition specific financial accounts are necessary to monitor obligations aimed at preventing anti-competitive practices. These procedures need to be strengthened by the ART. The regulator also needs to undertake a review of the issue of service separation in order to assess what options are available to ensure that procedures ensuring separation between wholesale and retail parts of the incumbent as well as between separate service entities are treated at arms length and that the wholesale

side of the incumbent provides non-discriminatory service to competing entities where and as required by regulations. Sufficient regulatory powers should be available to ensure that such separation is respected and can be sanctioned. The regulatory accounts should also be published at least in summary form as is the case in a number of other OECD countries.

2.12. Universal service

France differentiates between obligations of a general interest which cover telecommunication activities undertaken in the “public interest” (national defence, public research and higher education) (Art.L. 35 of the Law), mandatory telecommunication services, and universal telecommunication service. Universal service is defined in very general terms by the Law to include voice services at an “affordable price”, information service and a telephone directory as well as public pay phones installed in the public domain.⁶⁴ In addition, there is a requirement to provide a social tariff for low income users and disabled users to access the service. Mandatory services include providing access throughout the country for ISDN, leased lines, packet switched data services, enhanced telephony services and telex.

The 1996 Act requires that “an operator may be given the responsibility of providing universal service if it agrees to provide the service to the whole of the country and is capable of doing so” (Art.L.3 5-2. I). In this context the Law is biased toward maintaining the incumbent as the universal service provider. At the same time the Act specifically identifies France Telecom as the provider of these services. The constitution *suggests* that all enterprises with a public service responsibility must be state owned, although this would not seem to be an obstacle to the eventual privatisation of FT.

The Act requires that a schedule of conditions be established (the Act does not specify who should establish these but at present it is the Minister responsible for telecommunications) and these conditions need to be set after consultation with the *Commission supérieure du service public des postes et telecommunications*. The Commission is also responsible for reviewing the scope of universal service, at least every three years, and proposing if necessary its redefinition.

The costs of providing universal service have been identified as: *i*) the costs arising from an unbalanced pricing structure resulting in an access deficit – this cost was eliminated in 2000 *ii*) the costs related to geographic averaging of prices; *iii*) cost arising from requiring a social tariff (low revenue or handicapped subscribers) *iv*) providing public call boxes *v*) providing a universal directory and directory information services. Price rebalancing has also reduced the estimated cost of geographic averaging of subscriber charges from EUR 417 million in 1997 to EUR 229 million in 2001. Other cost reductions have resulted in the total cost of universal service declining from EUR 764 million in 1997 to EUR 415 million in 2001. In 2002 the estimate of the cost of universal service obligations was EUR 295.6 million (of which EUR 175 million accounted from geographic averaging, EUR 102 million for lower tariffs for the disabled and low income subscribers, and EUR 18.6 million for payphones).

It can be argued that these costs were exaggerated in that the benefits to the incumbent in providing universal service have not been taken into account. As an example the UK regulator estimated that in 1998/99 the benefits accruing to the UK incumbent from providing universal service amounted to approximately EUR 90 million and relative to the costs of providing universal service, the regulator concluded that leaving the incumbent with the requirement to provide universal service could not be viewed as being an unfair burden. In a number of OECD countries the incumbent has been left, as part of asymmetric regulation, with the total responsibility for universal service or costing methodologies have been used to estimate the benefits and costs of providing universal service.

The 1996 Act in France also required the setting up of a universal service fund to finance the costs of universal service, the special tariffs, the provision of public payphones and the universal directory. The

Telecommunication Act required that the incumbent rebalance tariffs before 31 December 1999. After that date the access deficit charge on interconnection was to stop and universal service charges were to be covered by the universal service fund. Tariffs for service considered as universal service require the approval of the Minister. It should be noted that in Europe only France and Italy have set up a universal service fund.

Cost sharing has been in place since 1997 and includes all licensed public telecommunication operators and mobile operators as well as non-facility based voice telephony providers. The mobile operators contribute to universal service even though they implicitly have a “universal service” obligation in that their licences include a coverage requirement. Furthermore a recent agreement between operators, the government and municipalities to provide mobile coverage in areas with no coverage resulted in an agreement that the mobile operators would provide half of the funds to put in place 300 new antennae pylons with the rest of the cost shared between the government and the municipalities.

Contributions of companies were in the past calculated on the basis of volume of traffic. Use of traffic as a basis for calculation of universal service contributions created a bias against those operators that carried a lot of Internet minutes of traffic compared to those that carried a high volume of voice traffic (often remunerated at higher prices than Internet traffic). In turn this had indirect impact on Internet Service Providers. The regulator is now proposing that revenues (net of interconnection revenues) should be used as a basis for calculations.

France and the incumbent signed a “convention” in November 1997 to set the tariff objectives for universal service between 1997 and 2000. This foresaw a evolution of universal service tariffs during that period less than the increase in the consumer price index and under 9% on average per year for the 1997-1998 period and 4.5% on average per year for the period 1999-2000.

Following a complaint from the associations of French new entrant telecommunication infrastructure and service providers⁶⁵, the European Commission took France to the Court of Justice of the European Communities regarding the financing of universal service and the method of calculation of costs to be paid to the fund by new entrants. The Court found in favour of the Commission and that France was in breach of the Liberalisation Directive and Interconnection Directive. Following this ruling in December 2001 the French authorities decided to repay amounts charged for 1997 and reduce amounts charged for 1998 and 1999. Repayments were made in the form of a reduction in provisional payments for 2002 based on a revised method of calculating contributions. The Court found that the immaterial benefits associated with the provision of universal service had not been taken into account sufficiently in calculating the cost of universal service. This incident provides an argument for the regulator to be given full powers in managing universal service. The regulator has argued for a number of years that the government should fully transpose the EC Directive 97/33/CE of 30 June 1997 which requires that net benefits to the incumbent in providing universal service be taken into account.

The transposition of the new European Directives will lead to changes in the universal service framework. In particular the Directive does no longer permit that an operator (*e.g.* the incumbent) can be *a priori* designated as the universal service carrier but requires that a selection procedure be put in place to determine which operator or operators should supply universal service. The French draft law in Article L.35.-2 specifies that a universal service operator needs to offer a service on a national basis. The incumbent is the only carrier at present with that capacity which implies that it will retain responsibility for universal service. The draft law allows for different operators to be responsible for providing the different components of universal service as long as this is undertaken on a national basis. The relevant European Directive on Universal Service explicitly foresees that Member States can designate, if they wish, enterprises or groups of enterprises to provide different elements of universal service *and/or cover different*

parts of the national territory (Article 8(1). It is regrettable that the draft law does not allow for a universal service provider to be a company which only has regional coverage.

Regional cost differences arising from geographic averaging account for 59% of the cost of universal service so that it would be more efficient to allow for tenders for different high cost regions which in turn would help reduce the costs of supporting universal service and would help “discover” the true cost of servicing particular high costs regions.

In this context the draft law states that if the net costs of an operator subject to universal service obligations do not represent an excessive charge for that operator then that operator will not be compensated for providing universal service. The costs related to provision of payphones were just under 0.1% of the incumbent’s revenue from fixed voice and data services in France (the total cost of providing universal service was equivalent to 1.6% of these revenues compared to 4% of revenues that FT is obliged to spend on research and development according to its “cahier des charges”). In addition consideration needs to be given to transfer the costs of social tariffs to the State budget in conformity with other State determined assistance to segments of society in need. Such a reform is in line with recommendations made by the CSSPPT.

The modalities in applying Article L.35-2 will be determined by a government decree (approved by the Conseil d’État) based on the advice of the CSSPPT. It will also fix the conditions under which universal service tariffs and quality are controlled.

Although the goals and coverage of universal service are legitimate social and economic policy goals which should be the responsibility of governments to decide, the implementation and financing of universal service can have implications for competition and the regulator should be left to determine the best means to meet the government’s goals. It can be argued that the regulator is better placed to determine how universal service should be managed once policy has determined the components of universal service. In this context it would be preferable if the new Act gave the ART full powers to manage universal service policies. Since the implementation of the Act as regards universal service depends on a number of decrees prepared by the government there is at present insufficient evidence to judge how parts of the Act will be implemented. The Act also changes the way costs are allocated among the market players by using revenue rather than volume of minutes to determine the share of market players.

2.13. *Spectrum allocation*

As noted above the 1996 Telecommunications Law set up the Agence Nationale de Fréquences (ANFr). This body is responsible in France for managing the national frequency plan. The ART is responsible for the allocation of frequencies to telecommunication operators and radio-communications operators while the CSA is responsible for attributing frequency for radio and television networks.

France has used a comparative selection procedure (beauty contest) to allocate spectrum licences for the telecommunication sector. The new draft law will allow for the use of spectrum auctions as an allocation procedure and highlights the importance of “efficient” allocation. The use of auctions will depend on the government. The draft law also foresees the possibility for the transfer of spectrum usage rights (the creation of a secondary market). However, for this to take place the government will have to determine the modalities through a decree. Spectrum allocation in France can be made subject to use conditions and the non-respect of these conditions can result in the withdrawal of frequencies. In the context of spectrum for 802.11 technologies (Wi-Fi) the military occupied the 2.4 GHz and 5 GHz bands which initially excluded access of 2.4 GHz to some regions. Now all the Departments of metropolitan France can use this band for Wi-Fi whereas the 5 GHz band remains closed to public use.

UMTS licences

France allocated licences 6 to 12 months after the other main EU countries had allocated their licences and decided to issue only 4 licences whereas other countries had issued between 5 and 6. As indicated below the final outcome was that only 3 licences were issued.

The French government decided to allocate 3G licenses (UMTS) on the basis of a comparative tender (beauty contest) thus not following the auctions which the UK and Germany in particular used to allocate their 3G licences. The ART had been consulted on the allocation mechanism and indicated it was in favour of a beauty contest but at a fee of 2.285 billion euro per licence. However, the Government set a relatively high price for the licenses – 4.95 billion euro. Relatively high because, even though these prices were less than the price that operators had willingly paid in the 3G auctions in the UK and Germany, the indications from other auctions (Italy, Switzerland) were that operators had reduced their expectations of 3G profitability considerably and prices in those auctions had come far short of government expectations. In addition the dot.com bubble had started to deflate. Initially 4 licenses were placed on offer and a number of consortia had expressed interest in submitting proposals. Nevertheless, once the government set the price for the licence the number of interested participants dropped to two. As a result in June 2001 2 3G licenses were awarded to Orange and SFR (2 of the 3 GSM operators). The licence was for a period of 15 years and a one-off payment was required to pay the fee. The obligations of the licenses are to cover 70% (FTM) and 60% (SFR) of the French population within 2 years and 95% within 5 years.

An attempt to allocate the remaining 2 licences took place in December 2001. The government decided to change the licence price and payment procedures. The price became a one-off charge of EUR 619 million and annual charge levied on basis of 1% of turnover from 3G activities, while the duration of the licence was extended from 15 to 20 years. The modifications also applied to the two existing licence holders. The only applicant for the remaining 3G licences was from the 3rd GSM operator. This new price meant that the cost of a licence, taking into account the one-off cost, fell significantly amounting to USD4.6 per capita compared to USD573 per capita in Germany.⁶⁶

2.14. Numbering policy

The original deadline that France had for mobile number portability was 1 January 2001. Mobile number portability was implemented in France in June 2003 as mandated in the European Union's Universal Service Directive (2002/22/EC). Portability provisions also allow numbers to be kept when moving from 2G to 3G services.

Carrier selection and pre-selection

A new entrant in the telecommunications market requires time in order to construct its own network. A requirement on the incumbent operator to implement carrier selection and pre-selection can enable a new entrant to immediately attract customers and therefore earn revenue. In turn this facilitates the expansion of networks. For new market entrants specialising in the provision of national local and long distance calls and/or international services carrier selection and pre-selection are essential for competition. Thus, new market entrants regard the full implementation of carrier selection, particularly carrier pre-selection (CPS), as being indispensable to the achievement of full market liberalisation.

Although call-by-call selection was made available for long distance services from January 1998, CPS was only delayed in France with the introduction taking place in 2002 instead of 1 January 2000 as foreseen in the European Union's Numbering Directive. This may partly explain why the incumbent has a relatively high market share (in terms of revenue and outgoing minutes) in the local call market relatively to other EU countries.⁶⁷

The delay in implementing CPS for local calls was viewed by some new entrants as another indication that the government was favouring the incumbent. As a result of this delay access to the last mile remained a *de facto* monopoly of the incumbent for 4 years after competition was introduced. As a result of CPS the incumbent's share of local traffic which was 96.8% at the end of 2001 declined to 80.9% by December 2002. In addition, the competition from CPS led the incumbent to introduce a number of new calling packages which benefited consumers.

However, when the ART implemented local pre-selection it took steps to help new entrants in that existing CPS long distance users were informed of the change and were pre-selected for their existing long distance operator unless they objected. This had the effect of immediately introducing a base number of CPS local call users. Table 5 shows the shift of subscribers from call by call selection to pre-selection during 2002. The number of carrier pre-selection subscribers was equivalent to 1.7% of fixed subscriber lines by the end of 2002.

Table 4. Number of subscribers for carrier selection and pre-selection

	2000	2001	2002	Evolution
Number of subscribers selecting alternate carriers:	5 953 396	8 165 786	8 916 988	+9,2 %
<i>Call by call selection</i>	4 453 936	5 253 053	4 815 465	-8,3 %
<i>Carrier pre-selection subscribers</i>	1 499 460	2 912 733	3 979 179	+36,6 %

Source: ART.

Linked with the slow implementation of carrier pre-selection there was a delay in putting in place a service level agreement for pre-selection. It was only in the 2003 interconnection offer that the incumbent began to guarantee maximum delays to meet requests by competing carriers for pre-selected lines. The piecemeal way in which regulations such as pre-selection have been implemented have tended to give credence to claims that policy has been biased toward the incumbent.

Some cases of "slamming" and "win-back" strategies arising from CPS have been reported and proceedings are underway in courts for alleged improper tactics by new entrants and by the incumbent. In particular the incumbent is accused of not maintaining separate the information its wholesale division has on CPS customers from the commercial division whereby the commercial branch has purportedly contacted customers who have switched through pre-selection in order to try and 'winback' these customers. If this is the case it shows inadequate accounting separation procedures within the incumbent and the use of privileged information by the commercial branch of FT.

2.15. *Quality of service*

A licence for a public telecommunication operator is subject to a number of conditions including those on quality of service. The incumbent's obligations for quality of service are described in its schedule of conditions (*cahier des charges*). France Telecom's obligations for quality of service are laid out in the Decree of 12 March 1998 (the indicators are noted below in section 3.7.1).⁶⁸ These data as well as those of other fixed public telecommunication operators are not published by the regulator although they receive the data. Quality of service is an important part of universal service obligations and the relevant data should be made available to consumers both in aggregate form as well as on a per region basis. It is inconsistent that ART publishes extensive details on mobile telephony quality of service (interesting in its own right) which is not part of universal service and does not publish data for the fixed network.

Much emphasis has also been placed on the question of coverage of the mobile networks (see the section on mobile telephony) whereas very little attention has been paid to review the reasons why some households do not have fixed telephones, how to help those segments of the population with special social

needs and those on low incomes, and examine disconnection trends and policies. This is not to say that mobile policies and coverage are not important but rather that questions related to universal service and fixed telephony are equally if not more important and deserve further analysis. It is important that those segments of the population with special needs and on low incomes also can share in the wider benefits brought about from competition and the regulator needs to ensure that any distortions which may arise from competition are minimised.

2.16. Consumer Issues

The largest share of telecommunication services (approximately 46%) are purchased by residential consumers. Yet they have no simple means to resolve disputes with telecommunication operators and no adequate and simple framework to take into account consumer interests or complaints. The protection of consumers comes under the responsibility of the direction générale de la concurrence, de la consommation et de la répression des frauds (DGCCRF) of the Ministry of economy, finances and industry, which benefits from contributions from the national consumer council (Conseil national de la consommation and the commission for abusive clauses (Commission des clauses abusives) and has an investigation service which provides advice to consumers in the case of disputes. Although the regulator has responsibility for consumer issues in that it is responsible to ensure that effective competition benefits users, it has very little legal power to focus on consumer issues and thus has done very little to give priority to the needs of consumers or the defence of consumer interests. This is in stark contrast to many European regulators who have either taken direct action or used pressure on operators to respond in a coherent way to set up frameworks to deal with consumer problems. There are several problems here. The ART has no power to intervene in specific cases to resolve litigations between consumers and companies. Second insufficient resources have been attributed to deal with consumer issues (3 staff members). Although the regulator provides useful information for consumers on its web pages, further information on quality of service of fixed operators, simplified tariff information and comparisons, explanations of consumer rights, etc., would be helpful to consumers to choose between competing operators. The regulator does play an informal role in mediation between consumers and operators but this role needs to be significantly expanded and more widely publicised. The regulator should also play a more active role in the oversight of consumer interests – two important cases which strengthened consumer rights (per second pricing in the mobile sector and modifying the contracts of mobile subscribers) were initiated by the private consumer organisation, the Union Fédérale des consommateurs, whereas arguably these issues should have been dealt with by the regulator.

There are a number of precedents in the OECD whereby regulators either deal directly with consumer issues or set-up a body (funded by licensed operators) to deal formally and informally with consumer complaints without consumers having to resort to complicated and onerous court cases. The situation may improve as a result of the initiative of telecommunication operators who, in mid-2003 agreed to create a mediator (Association Médiation Télécom) to mediate in the fixed and mobile sector.

The regulator should encourage telecommunication service operators to publish a basic code of practice for residential customers which should be assessed by the regulator before publication. In addition, these service providers should provide consumers with a transparent, fair, and inexpensive dispute settlement system.

It is important to give the ART the power to intervene in the relationship between a consumer and service provider, which at present it cannot do. Sections of the new law, based on the EC's Universal Service Directive, may address some concerns relating to the protection of the consumer. It aims to increase transparency for consumers regarding prices and quality of service and will set down some minimum obligations in contracts between consumers and service suppliers. Given that it is five years since the market opened to competition such changes are long overdue.

It is important for ART to better integrate consumer representatives in its consultation procedures. Complaints from consumer organisations indicate that they have problems in receiving consultative documents before meetings and are not fully involved in issues which are relevant to them. Consideration should also be given to funding consumer organisations so that they can provide more effective participation in the telecommunication sector. It is not always easy for consumers to decipher price information which is often bundled and includes a range of different prices which change according to time of day, etc. In this context it would also be useful if part of the regulator's web pages were dedicated to provide information for consumers.⁶⁹

2.17. *Rights of way*

The French law foresees that operators with a licence have the right to use, under certain conditions, the public domain to install their infrastructure, as well as the right to install and use their equipment in common areas of private residences. In public transport areas operators have rights of way which are based on permission granted by the competent authority (communes, departments or the state), according to which route is being used. Usage is subject to a fee which has been determined by the decree of 30 May 1997. The use of the public domain not covered by the road transport network is determined by a non-discriminatory agreement between the management authority and the operators and may be subject to reasonable and proportionate fees. Operators also have the right of access to buildings and private land in order to be able to install their equipment.

2.18. *Convergence in communications markets*

It has been recognised for some time that the telecommunications, broadcasting and IT industries are converging. Digital media are revolutionising the telecommunications, broadcasting and IT sectors and bringing them together, so that services, which used to belong clearly to the one sector are now being delivered by another and vice versa. Thus people now use their TV sets to email, shop from home, access the Internet and devise their own personal viewing schedules. And they are using fixed telephone lines and mobile phones as well as computers to access the Internet. Telecommunications companies want to become broadcasters, while broadcasters increasingly are moving into e-commerce, and Internet Service Providers are offering television channels.

The type and range of content available to consumers depends on the competitive environment in this converging sector. At the same time, the type of content that broadcasters carry in turn affects the market itself. This means that economic regulation of the market and regulation of content need to go hand in hand and the regulatory framework needs to consider both the content and the way it is carried to people.

The French government has chosen, in the context of the introduction of the new law on electronic communications, not to create a single regulatory agency for electronic communications. This would have required merging the ART and CSA (such a step would also result in the merging of frequency allocation responsibilities for telecommunications and broadcasting). Such a body would deal with problems of access across all delivery networks through a common generic framework.⁷⁰ While some countries have reacted to convergence and technological neutrality by bringing together regulators, in a number of other European countries that have strong preoccupation with content there is a reluctance to mix the regulation of content, especially in the audiovisual sector, with the economic regulation of networks.

Some important changes are, however, expected to take place. Important improvements will be undertaken in the regulatory framework for cable television (see section on CATV) and the distinction between regulation of networks and regulation of content will become more distinct. There is a danger however that instead of using the opportunity provided by new legislation and new technologies to

streamline regulations that existing regulations are being extended to cover new technologies. Specifically, this may occur by extending broadcasting and content regulation to cover new services such as interactive television and web sites. This in turn will likely have economic implications on the specific platforms being used to provide these services and in particular on ISPs.

2.19. The new telecommunications act

Box 4. Draft of the New Telecommunications Act

Five new European directives went into effect in April and June of 2002. The implementation of these Directives should have been transposed into French law in July 2003. The new directives give the regulatory authorities more latitude for applying the regulatory instruments and the European Commission more possibilities of participating in implementing regulatory procedure.

The government has decided to take certain transitory measures until the new law is enacted.

Transitory measures

- Licences for public telecommunication operators replaced by general authorisation. Existing licences will be changed to general authorisations but in view of the delay in enacting the new French law all existing licences will remain applicable until the 24 April 2004.
- New requests for market entry will be through general authorisation.
- The process of designating operators with significant market power will continue in 2003 in order to apply the required obligations on them for 2004.
- Existing tariff approval procedures will remain until the new law comes into effect.

The most important new elements include:

- Individual licences will no longer be necessary with market entry subject to a general authorisation procedure and these will be under ART's responsibility.
- Private networks do not require authorisation.
- Using "dominant position" as opposed to notion of "significant market power" in order to be more consistent with competition law.
- Identification of pertinent markets for regulation.
- Concepts of interconnection and access are more widely defined to include the local loop, sub-loop unbundling and access to rights of way.
- Price regulation will be the sole responsibility of ART.
- ART will be given increased powers to undertake enquiries.
- ART to have increased powers to sanction.
- ART to obtain powers of injunction.
- ART to obtain wider powers to adjudicate in disputes.
- ART has the option to allocate some frequencies through auctions.
- Secondary markets for spectrum will be possible.

The draft law does not include conditional access systems in the definition of “access”. In France this is covered by the law of 30 September 1986. This approach by France differs from many other EU countries where conditional access systems are included as in the EC’s Access Directive⁷¹ as part of the definition of access which includes the telecommunication sector.

3. Performance of the telecommunications industry

3.1 Introduction

Efficient competition should yield tangible benefits for consumers in the form of lower access charges to telephony services, higher quality services, greater choice of services and market operators, etc. However, in the French telecommunications market, as is the case worldwide, it is not easy to establish and maintain a competitive balance due to the fact that the historical operator has significant market power as well as responsibility for managing the most extensive networks in the country. It is for this reason that competition often has to be promoted through sector-specific regulations -- which need to be kept to a minimum – with the sole aim of benefiting the consumer.

The importance of this a study of the performance of the telecommunications sector lies in the light in can shed on whether opening the market to competition has achieved its goal of offering consumers benefits that were not available previously. The indicators used to this effect are telephone network penetration rates, revenues in the sector, investment, pricing and tariffs, quality of services and productivity.

3.2 The telecommunications market

Despite the crisis in the French and the world telecommunications sector, total revenues rose by 1.6% in 2002 (Table 6). Revenues from mobile telephone networks rose by 8.4% in 2002; in contrast, those from fixed-line networks fell by 1.6%.

The telecommunications sector in France generated total revenues of 34 billion euros in 2002 and earnings have grown by 6.1% since 1999 (Table 6). Revenue from fixed-line networks has fallen by 2.3% since 1999. This trend seems set to last and is inversely proportionate to growth in the mobile telephony market. The relative decline in revenue from landline networks has clearly been offset by high growth in the mobile telephony market. In 2002, mobile telephone networks accounted for 34% of total revenues in the sector, compared to 22% in 1999.

In volume terms (millions of minutes consumed) the decline in the use of fixed-line networks was twice that in turnover, that is to say 5.2% between 1999 and 2002. Mobile telephony has experienced exceptional growth in volume terms of 24.6% over the past four years. The entire sector has been stagnating since the last year in that period, but has enjoyed a very high growth rate of 9.5% since 1999. Despite the substantial reduction in intercity and international telephone charges, the impacts are not yet visible in national volumes of fixed-line telephony usage (Table 6). The reason for this might be the transfer of a portion of national calls to fixed-line to mobile calls.

3.3 Fixed-line telephony

The success in shifting from a monopoly to a fully competitive market and the effectiveness of regulations cannot easily be measured. One informative indicator of the effectiveness of regulatory measures, however, is growth in the market share of new entrants.

France Télécom resisted opening up to unbundling. The solution put forward by the latter was to provide very costly unbundling rooms for which there was no practical justification. This stance could

have delayed the implementation of the rules of competition and consequently a potential loss of the market share available for capture by alternative operators.

Since 31 December 2001, any subscriber can choose which telephone operator to use for local calls, as has already been the case since 1 January 1998 for long-distance, international and fixed-line to mobile calls.

According to the European report *Telecommunications Regulatory Package VIII*, since the end of March 2002, 100% of subscribers to a fixed-line telephony service have a choice of operator for fixed-line calls. This also applies to international calls, for which the report notes there is a choice of over 5 operators. The percentage of subscribers using an alternative operator for local calls is 8.9% and 22.5% for intercity and international calls. According to the ART's 2002 Annual Report, slightly under 9 million subscribers had chosen another operator, of which 4 million (end of 2002) opted for carrier pre-selection, *i.e.* 1 million more subscribers than in 2001, representing an increase of 36.5% since the end of 2001. This increase provides a measure of the growth rates experienced by alternative operators. According to figures released by France Télécom and quoted in the above report, the market shares captured by alternative operators in terms of volume amount to 36% for national and international calls and 20% for local calls.

Table 5. Revenues and traffic volume in the French telecommunications sector

Fixed-line and mobile telephony market – Turnover (euro millions)	1999	2000	2001	2002	cagr 1999-2002	cagr 2001-2002
Fixed-line telephony [1]	15 353	14 631	14 436	13 986	-2.3	-1.6
Internet[2]	..	731	1 161	1 136	..	-1.1
Mobile telephony [3]	6 004	7 789	9 998	11 754	18.3	8.4
Telephony and Internet	21 357	23 151	25 595	26 876	5.9	2.5
Advanced services		1 842	1 794	1 882	..	2.4
Leased lines	1 633	2 011	2 373	2 433	10.5	1.3
Market total	26 800	29 633	32 941	34 024	6.1	1.6
Fixed-line and mobile telephony – volumes						
(in million minutes)						
Fixed-line telephony	137 944	121 950	118 622	111 444	-5.2	-3.1
Internet		34 016	67 455	66 110	..	-1.0
Mobile telephony	21 444	35 524	44 273	51 747	24.6	8.1
Total	159 388	191 490	230 348	229 301	9.5	-0.2

[1] This indicator covers turnover from access charges and subscriptions, calls from fixed-lines other than those to the Internet and public pay-phones and cards.

[2] Excluding the value-added of unlicensed Internet access providers (for example, Wanadoo, AOL and Club Internet).

[3] This heading includes data carried on mobile telephone networks.

Source: ART, Quarterly Surveys.

Revenue from interconnection services have fallen substantially compared with last year (Table 7), declining by an average of -3.8%. Volumes, on the other hand, grew substantially this year. This can be explained by a loss of earnings due to the lower interconnection charges imposed on France Télécom by the ART and, as mentioned in the earlier section, to the introduction of unlimited Internet access packages through the used of switched access which have lowered operators' costs by around 30%.

Table 6. Revenue and traffic volume in relation to interconnection services in France

Interconnection services - Turnover (in euro millions)	1999	2000	2001	2002	cagr 1999-2002	cagr 2001-2002
Interconnection services	4 297	5 941	6 997	6 481	10.8	-3.8
Of which fixed-line operators		2 679	3 408	2 911	..	-7.6
Of which Internet		114	280	233	..	-8.8
Of which mobile network operators		3 148	3 308	3 338	..	0.5
Interconnection services – volumes						
(in million minutes)						
Interconnection services	48 404	68 955	101 233	140 492	30.5	17.8
Of which fixed-line operators		44 255	56 647	72 383	..	13.0
Of which Internet		7 864	23 232	43 830	..	37.4
Of which mobile network operators		16 836	21 354	24 279	..	6.6

Source: ART, Quarterly Surveys.

As Table 6 shows, fixed-line calls lost considerable market share, in terms of both volume and the revenue they generated for operators, to mobile telephony services. It is nonetheless astonishing to see that the non-negligible increase in the market share of alternative operators had very little impact on the volume of fixed-line communications. Table 8 shows that the only item in which there was growth in the volume of fixed-line communications was that of international communications. This allows us to note that the delays in introducing carrier pre-selection for local calls severely restricted the possibilities open to alternative operators to gain access to all segments of the fixed-line telephony market.

Access charges for fixed-line telephony services remain reasonable, given that costs in France are slightly below the OECD average in terms of both residential and professional baskets (Figures 3 and 4).

Table 7. Turnover and volume of fixed-line calls

Fixed-line calls – Turnover	1999	2000	2001	2002	cagr 1999-2002	cagr 2001-02
(in euro millions)						
Domestic calls excluding those from fixed lines to mobiles	6 303	5 612	4 999	4 173	-9.8	-8.6
Of which local calls	3 436			2 656	-6.2	..
Of which intercity calls	2 562			1 517	-12.3	..
International calls		897	866	844	..	-1.3
Calls to mobiles	2 252	2 728	2 898	2 879	6.3	-0.3
All fixed-line calls	9 558	9 237	8 764	7 897	-4.7	-5.1
Fixed-line calls – volumes						
(in million minutes)						
Local calls	80 876	77 037	72 541	65 820	-5.0	-4.7
Intercity calls	29 351	27 801	28 016	27 368	-1.7	-1.2
International calls	4 386	4 454	4 600	4 704	1.8	1.1
Calls to mobiles	5 623	7 649	9 396	10 357	16.5	5.0
All fixed-line calls	132 833	151 898	166 039	108 247	-5.0	-19.3

Figure 4. Composite OECD basket of telephone charges for residential subscribers, August 2002, including VAT.

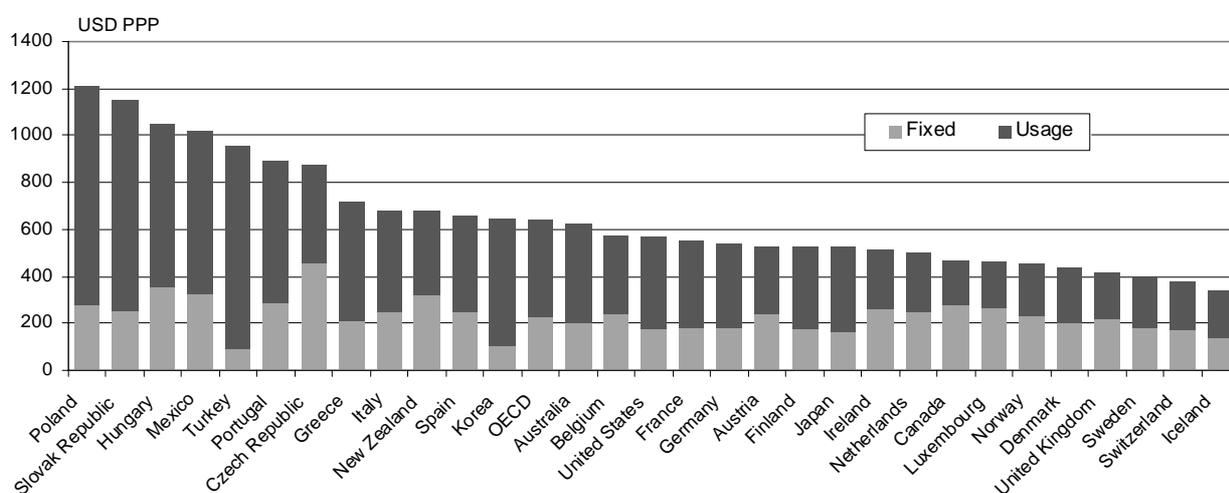
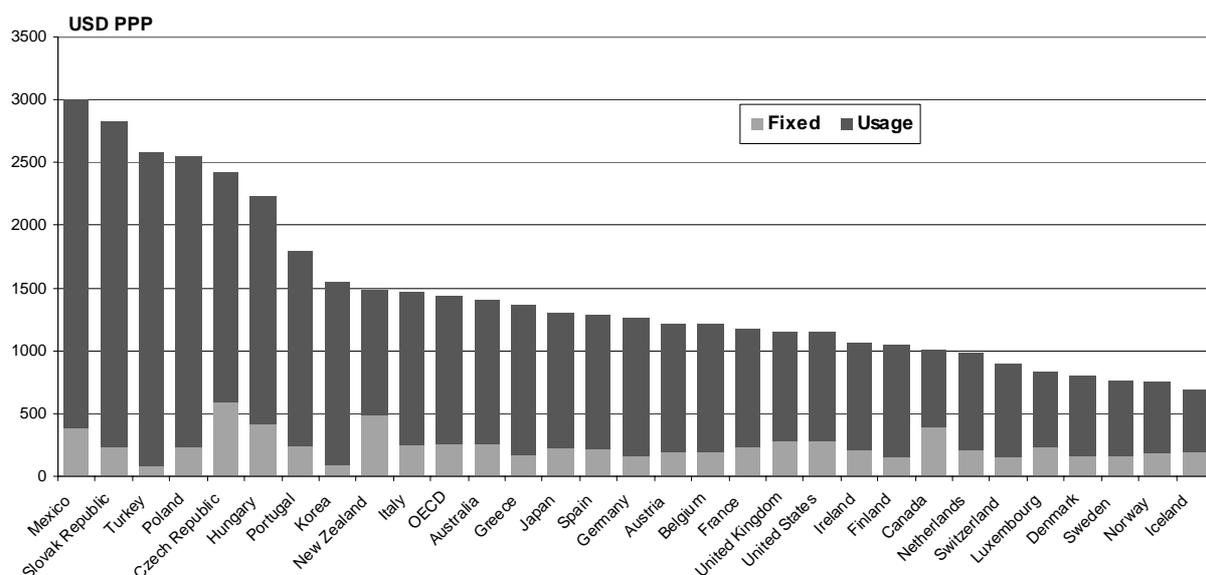


Figure 5. Composite OECD basket of telephone charges for professional subscribers, August 2002, excluding VAT.



3.4 Fixed line to mobile calls

The ART ensures that consumers benefit from the opening-up of the market to competition by issuing recommendations to powerful market operators (Orange and SFR) to respect the average target prices for call termination charges for domestic calls (Table 9) set out in Decisions 01-970 and 01-971.

Table 8. Termination charge for domestic calls

	2002 (beginning March)	2003	2004
Average price (euro centimes before tax per minute)	20.123	17.074	14.940

3.5 Mobile telephony

The breakdown of mobile telephony market share as of June 2003 (Figure 5) was 49.7% for Orange (France Telecom), 35.5% for SFR and 15.5% for the latest entrant to the market, Bouygues Télécom. There has been no significant change in these shares since last year: Orange has gained one percentage point, SFR 1.5 points while Bouygues has lost 2.5 points.

Revenues in this sector, as noted above, have grown at the very high rate of 8.4% since 1999 and traffic volume has grown by 8.1%. Given a relatively modest penetration rate in France compared with the European average, *i.e.* 62.3 subscribers per 100 inhabitants in 2001 (64% at the end of 2002) in France compared with the European average of 74.3% in 2001 (Figure 6), there is every likelihood that the market will continue to grow over the next few years.

Figure 6. Market shares of mobile telephone network operators in France

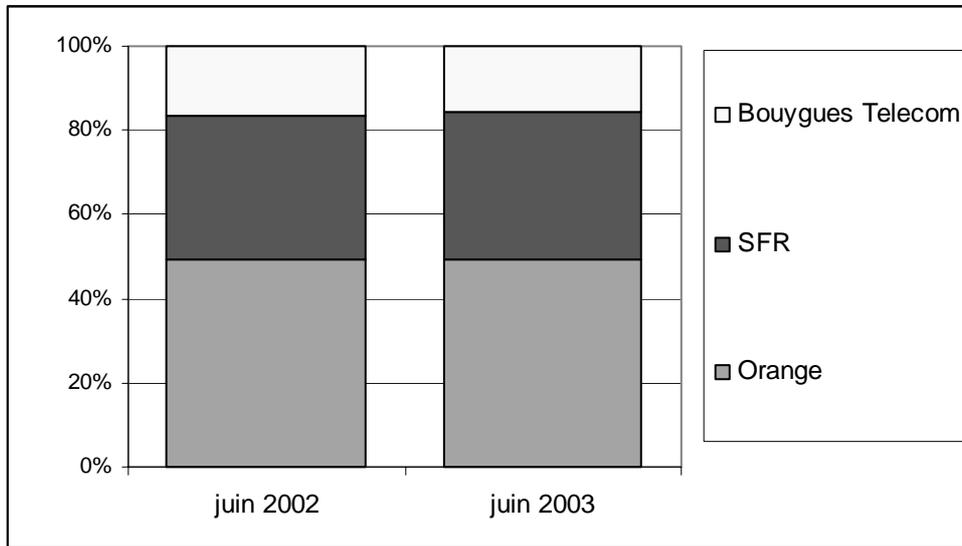


Figure 7. Number of mobile telephone subscribers per 100 inhabitants in OECD Member countries

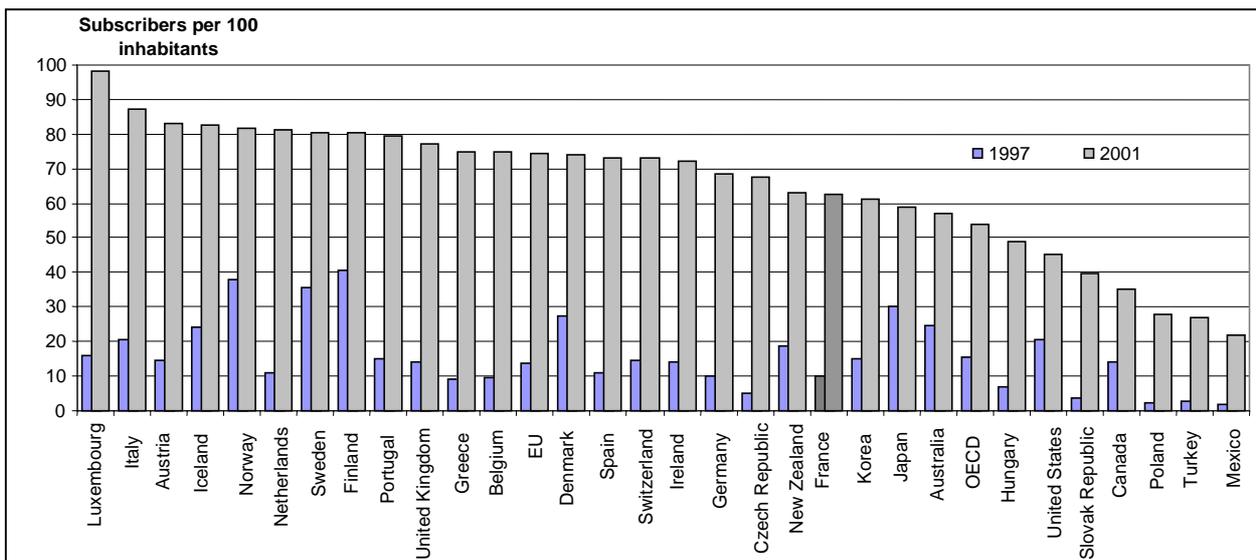


Figure 8. Percentage of pre-paid mobile subscriptions

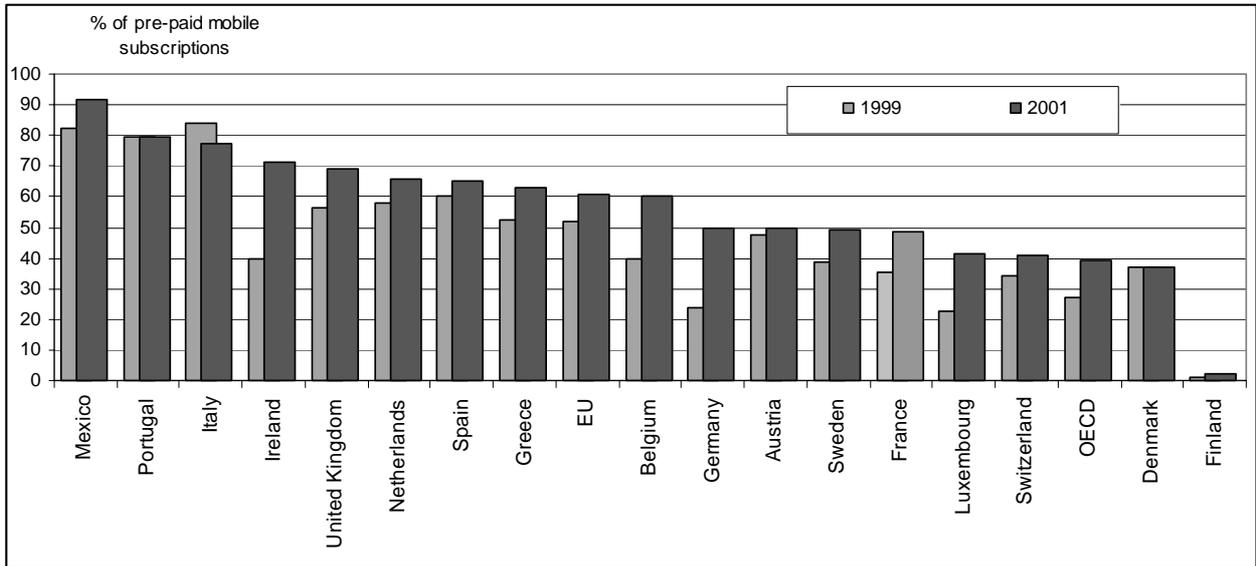


Figure 9. OECD basket of mobile telephone charges for small-scale users, August 2002

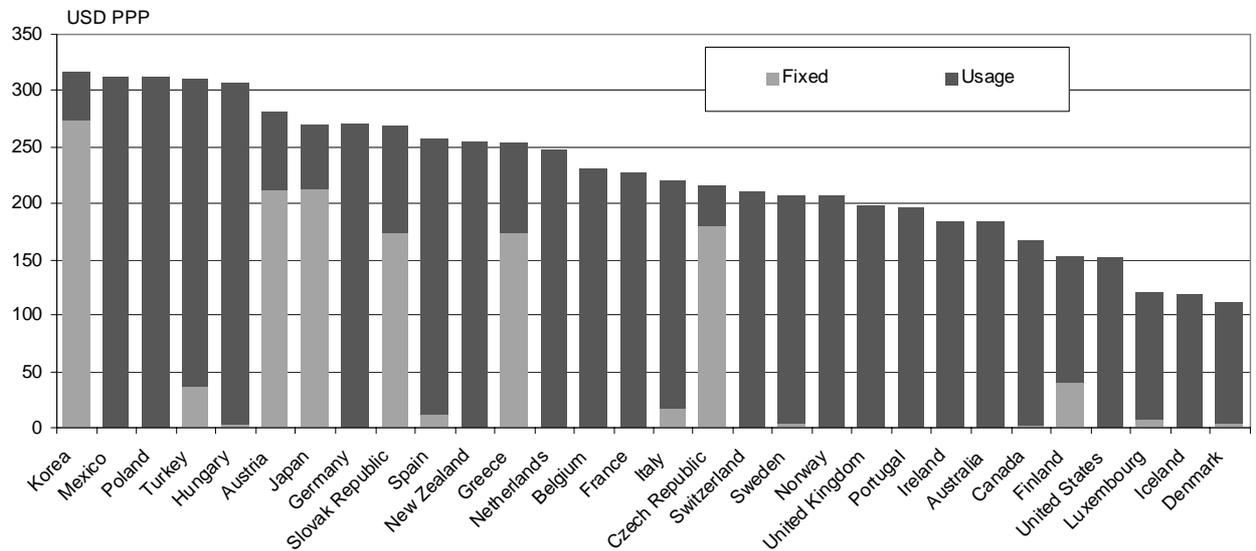


Figure 10. OECD basket of mobile telephone charges for medium-scale users, August 2002

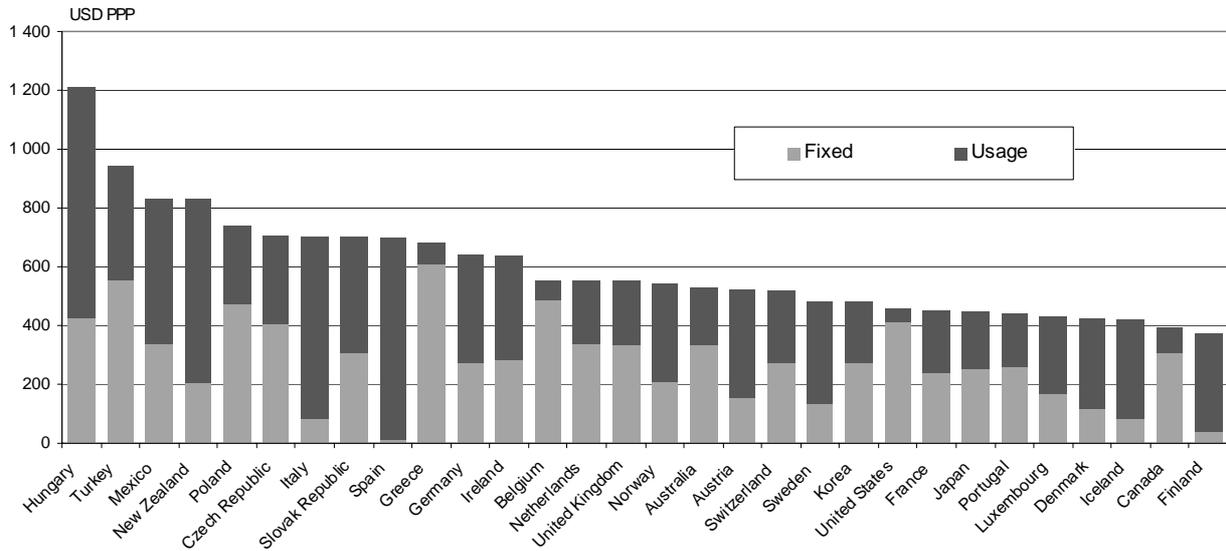
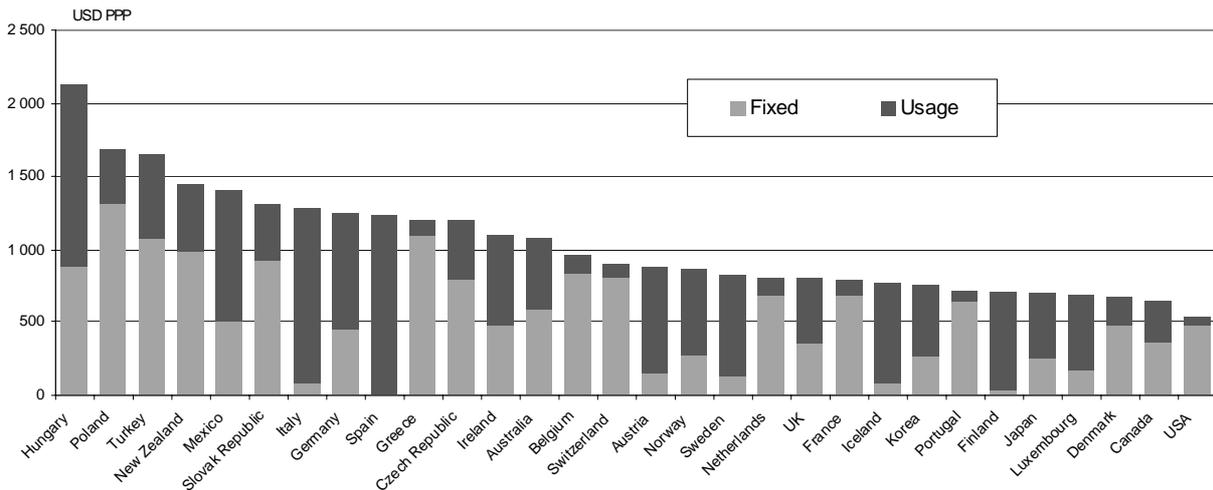


Figure 11. OECD basket of mobile telephone charges for large-scale users, August 2002



Pre-paid subscriptions grew by 35.4% between 1999 and 2001 (Figure 7). However, the ART's Annual Report for 2002 noted that the number of subscribers making use of pre-paid products in 2002 had declined as a result of a change in statistical reporting methods whereby the definition of the inactive subscribers' account was made more restrictive by shortening the time periods for classification in the category of inactive subscribers.

The cost of access to mobile telephony services in France ranges from reasonable for small-scale users (Figure 8) to fairly cheap for medium-scale and large-scale users compared with other OECD Member countries (Figures 9 and 10).

3.6 Investment

Investment in the telecommunications sector in France has experienced steady growth since the late 1980s followed by a sharp decline in 2002 (Table 10). In terms of the ratio of investment to revenue in the sector, on the other hand, the growth curve has been far more disjointed, ranging from 27.6% in the early 1990s to 17% in 1999. Compared with other OECD Member countries (Figure 11), investment in France

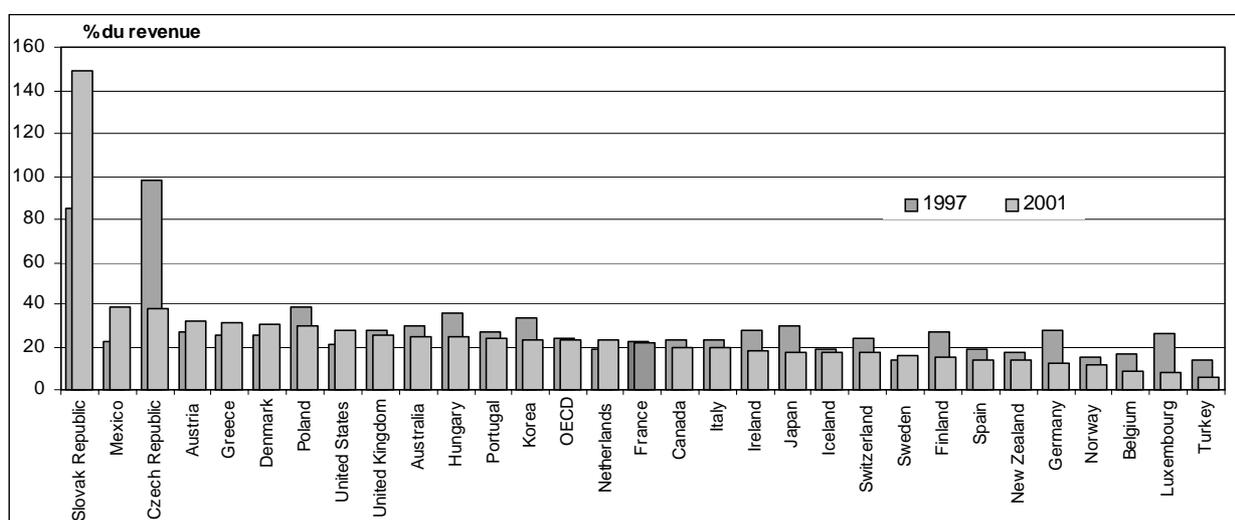
in terms of percentage revenue from telecommunications is slightly below the OECD average. The reason for this may well lie in the fact that France completely digitised its telephone network in the later 1980s and early 1990s, during which time there was substantial investment. The rate of digitisation (of the fixed-line network) in France reached 100% by as early as 1995, whereas the OECD average was merely 82%. Several other OECD Member countries are currently completely such digitisation at the moment and this can be seen in their level of investment.

Table 9. Investment by telephone operators (Euro millions)

	1998	1999	2000	2001	2002
	5.538	5.909	7.841	9.182	5.800

Source: ART.

Figure 12. Percentage investment by public telephone operators in terms of revenue



3.7 Internet

Despite the lack of data, we can note a substantial increase of 17.9% in revenue from the supply of Internet access and associated services (Table 11). Revenue from subscriptions for high-speed Internet access accounted for 72.4% of total revenue. The number of subscribers to Internet services has also increased substantially, with a growth rate of 117.5% during the previous year. The number of subscribers to high-speed services has risen at the very high rate of 161.5%. In September 2002 (Figure 12), France had a penetration rate of 1.6 Internet subscribers per 100 inhabitants, compared to the European average of 2.3. According to ISP associations, this delay can apparently be attributed to France Télécom's unwillingness to install telephone switches compatible with the supply of ADSL services because of its interest in the supply of cable-based Internet access through the intermediary company NOOS-Net. Focusing on cable technology in this manner has delayed the development of high-speed Internet access and in particular that of ADSL which is easier for competing operators to exploit. These delays in unbundling and lack of access for data transfers have held back the development of the high-speed Internet services market in France. In September 2002, France ranked 18th in terms of the rate of penetration of high-speed Internet access (Figure 12).

The cost of switched Internet access is high competitive in France, which is ranked in 3rd position for 40 hours of peak-period access (Figure 3). Since 1999 the costs of switched Internet access have fallen by more than the OECD average, both during peak and off-peak hours (Figure 13).

Table 10. Turnover and subscribers to Internet services

Internet revenues - turnover	2000	2001	2002	Cagr 2001-2002
<i>(in euro millions)</i>				
Supply of Internet access and associated services	134	320	445	17.9
Of which low-speed		6	46	176.9
Of which high-speed		49	322	156.3
Revenue from "pay as you go" minutes		109	384	87.7
Revenue from ISP collection services		102	307	73.5
Internet revenue from end-users	731	1 161	1 136	-1.1
Internet subscribers				
<i>(Units)</i>				
Internet subscribers (source: AFA)		6 986 500	33 055 000	117.5
Low-speed Internet subscribers (source: AFA)		6 385 000	28 940 500	112.9
High-speed Internet subscribers (source: AFA)		601 500	4 114 500	161.5
Subscribers to cable-based Internet (source: AFORM)		190 322	975 287	126.4
Subscribers to Internet via ADSL (source: FT)		408 386	3 453 809	190.8

Source: ART, Quarterly Surveys.

Figure 13. OECD basket of Internet access charges for 40 hours of peak-period access, based on reduced PSTN rates, September 2002.

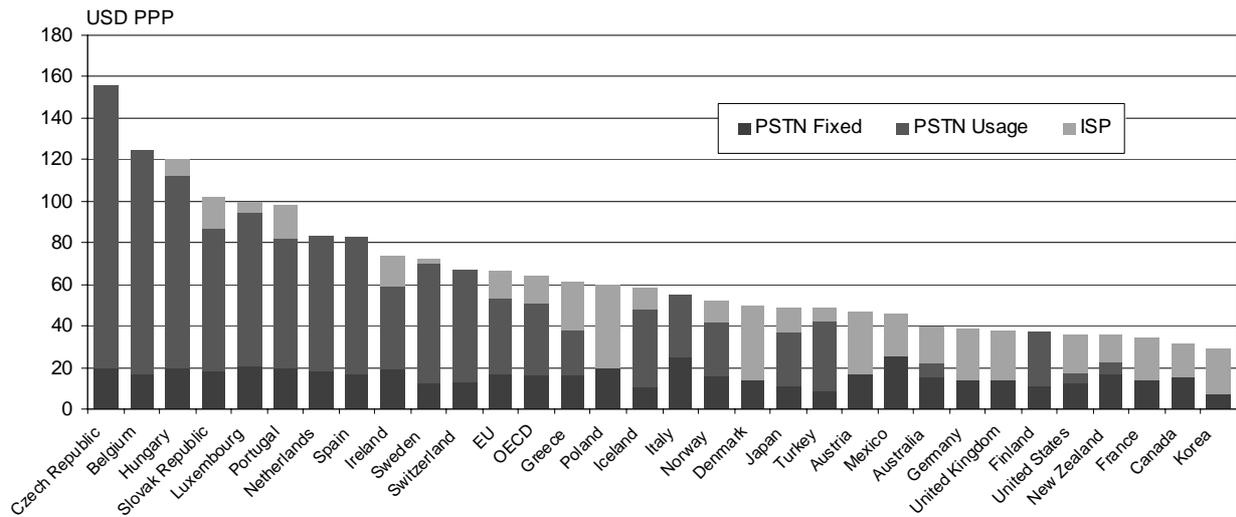
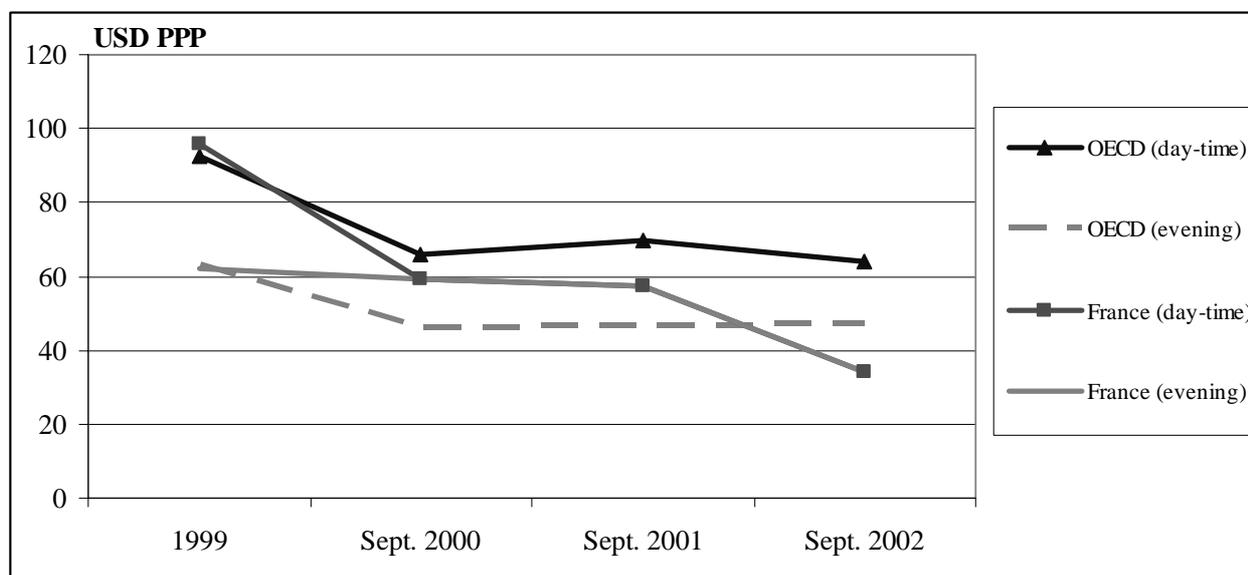


Figure 14. OECD basket of Internet access charges for 40 hours of peak-period access, based on reduced PSTN rates, from 1999 to 2002



3.8 Leased lines

The ART considers leased lines to be a structural component of the market. The cost of lines leased by France Télécom must comply with the principle of which tariff guidelines are based. Revenue from leased lines is constantly growing and the stock of leased lines has grown at an even higher rate of 41.7% a year since 1999 (Table 7). Growth in the leased line stock is directly linked to the development of competition in the fixed-line and mobile telephony sectors.

Table 11. Market for leased lines in France

	1999	2000	2001	2002	CAGR 1999-2002
Revenue from leased lines (in euro millions)	1469	2011	2883	2433	18.3
Leased line stock (units)	321837	357916	399919	361951	4.0
Revenue from data carriage (in euro millions)	404	530	1011	1150	41.7
Of which fixed-line operators	482	
Of which mobile telephony operators	668	

Source: ART.

3.9 Other performance indicators

3.9.1 Quality of services

The quality of telephone services in France is relatively high and has been since the early 1990s according to available indicators. It is, however, unfortunate that the regulator does not publish the incumbents quality of service statistics. As mentioned earlier, France installed a modern digital fixed-line network in the early 1990s and there is therefore every reason to believe that the quality of the network has been improved in consequence.

Since the major expansion of mobile telephony, the assessment of the quality of mobile telephone networks has played a central role in the assessment of the quality of telephone services in general by the ART, which has never been the case for the assessment of the quality of fixed-line telephone services whose evaluation left to the discretion of France Télécom.

Since 1997 the ART has conducted rigorous surveys of the quality of mobile telephone communication networks. The results of these surveys indicate a constant improvement in quality.

3.9.2 Quality of fixed-line telephony services

The French Posts and Telecommunications Code has been amended to introduce targets for the level of quality of fixed-line telephony services. This amendment to the Post and Telecommunications Code was made in accordance with European Directive 98/10/EC on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment, together with the decision by the Commission of 22 December 2000.

This amendment modifies the situation whereby France Télécom could itself evaluate the quality of such services without reference to any legally defined targets.

The changes in the Post and Telecommunications Code, further to the Order of 8 November 2002, specify the contents of telephone services, including:

- Maximum time for initial connection to network (8 calendar days).
- Failure rate per connection (7.5%).
- Time to repair a fault on a telephone line (15%).
- Call failure rate (0.7%).
- Time to establish connection (2.9 seconds).
- Response times for directory enquiries (70%).
- Proportion of public pay-telephones in working order (0.6%).
- Accuracy of invoice (0.08%).

These changes have been made to meet a requirement arising from the opening-up of the market to competition and perhaps also to certain complaints made by consumer associations aimed at securing the independent monitoring of studies made of quality. In contrast, there were seem to be no structure of clear methodology for assessing the quality of fixed network services, unlike the situation with regard to mobile networks.

3.9.3 Quality of mobile telephony services

The Telecommunications Authority acted more swiftly to introduce surveys of the quality of mobile telephony services. This monitoring of the quality of mobile telephony services can be seen as a response to wide-scale demand from user as a result of the diversity of supply of the three operators and also to accelerating technical change due to the growing use and densification of networks. One of the aims of this survey was to reduce the disparities between the quality of the service supplied by the various mobile phone operators.

A survey of the quality of mobile telephony services was conducted in 2002 for the sixth year running. The purpose of this survey was to evaluate the service quality of the three mobile phone

operators. The indicators addressed by this survey show a constant increase in the quality of communications. These indicators consist of speed of SMS delivery, hourly assessment of service quality in major conurbations, and measurements in public transport (suburban trains, TGV, etc.).

3.10 *Employment and productivity*

The difficulties in the telecommunications sectors in 2000 and 2001 led to a 1.6% decline in the number of employees compared with 1998 (Table 13). Productivity, in terms of earnings per employee, have been rising steadily, at an average rate of 10.5% a year, since 1999. A large number of France Telecom's employees have civil servant status; because of this France Telecom is not able to reduce its workforce, compared to new entrants. On the other hand, 708 FT employees have requested to be redeployed in the civil service in 2003. From the perspective of some new entrants this allows FT to avoid the costs associated with redeploying workers or redundancy. In the case of voluntary departures FT, as is the case for other companies, has to make compensatory payments.

Number of telecommunication employees in France

	1998	1999	2000	2001	2002	CAGR 1998-2002
	155 992	155 297	154 522	151 191	146 200	-1.6
Revenue per employee (euro thousands)						
	1998	1999	2000	2001	2002	CAGR 1999-2002
	..	173	192	218	233	10.5

Source: ART

3.11. *SMS services*

SMS services have been growing at the explosive rate of almost 100% a year since 2000 (Table 14). The associated revenues have been growing at the even higher rate of 106.8% a year since 2000 with regard to the share of revenue for the carriage of data relating to SMS, which apparently amounted to 96.7% in 2002. According to a survey by the ART, the quality of networks demonstrates the high reliability of this service with 98% of messages transmitted within less than 30 seconds over the past two years. As the ART points out, successful evaluation of the quality of these services opens the door to the evaluation of other services such as WAP and MMS.

Table 12. SMS

In million units	1999	2000	2001	2002	CAGR 2000-02
SMS	..	1 472	3 267	5 877	99.8
Data carriage services on mobile telephone networks					
In million euros	1999	2000	2001	2002	CAGR 2000-02
Data carriage	..	151	390	668	110.3
Of which SMS	..	151	382	646	106.8

Source: ART.

3.12. *Public pay-phones*

The number of public pay-phones in France has fallen by a fairly substantial -5.7% since 1999 (Table 15). This decline is due to growth in the mobile telephone market and therefore to lower demand

for public pay-phones. In addition, both the number of minutes and revenues have been steadily declining, with revenue down by 8.7% and volume in terms of minutes consumed through the use of pre-paid cards down by 6.1% since 1999.

Table 13. Statistics relating to public pay-phones

	1999	2000	2001	2002	CAGR 1999-2002
Revenue from calls (in million euros)	651	516	469	426	-13.2
Volume of calls (in million minutes)	3 334	2 397	1 960	1 627	-21.3
Number of public pay-phones as of 31/12/02	241 721	229 620	213 993	202 459	-5.7
Revenue from (post- and pre-paid) cards for fixed-line services (in euro millions)					
	315	332	251	240	-8.7
Traffic on post- and pre-paid cards (millions of minutes consumed by means of cards)					
	1 899	2 611	1 903	1 571	-6.1

Source: ART.

4. Conclusions and recommendations

4.1. General assessment of current strengths and weaknesses

Significant progress has been made since 1998 in opening Telecommunications markets in France to competition and putting in a framework supportive of competition. Continued efforts are required to ensure that competition develops especially in alternate infrastructures, the local loop and in broadband markets.

In the past France has not been a leader in the liberalisation and regulatory reform of the telecommunications market in the OECD or in Europe. Reform has to a large extent been driven by virtue of France's membership in the European Community and, even in this context, full transposition of Directives has not always taken place or has taken place with a delay. This has consequences for the creation of competition in telecommunication markets as well as the longer term viability of new entrants. The delay in the transposition of the latest "telecommunication packet" is a case in point. In a number of cases more rapid policy formulation and full transposition of EU Directives would have ensured that the stat-owned incumbent did not benefit from delays and given new entrants better opportunities to compete.

In contrast, the regulator, after a hesitant start, has shown its independence but has not always fully used its powers nor has it had in all cases the full powers that have been necessary to ensure that its decisions are carried out on time and in full or the powers to intervene when it was thought necessary to ensure effective competition. The regulator has, at least in its initial five year period, tended to "split the difference" taking decisions which looked for the middle ground rather than trying to implement best practice regulation which would favour new entrants. However, it has gained the respect of the industry for its independence.

The result has been that the development of competition has been slower than in a number of European member countries. The number of operators in the market has been less than even small countries (both in population and in geography), and the pricing offers in the market less innovative than many other OECD countries. The last few years, especially following local carrier pre-selection and unbundling, have seen a marked improvement in the strength of competition and in the regulator playing a more aggressive role in helping to shift the market from a monopoly to a competitive market structure.

The lack of a sufficient dynamic alternate infrastructure, in particular the cable television network, has dampened competitive forces. Opportunities have existed to eliminate the obstacles which have

constrained the development of an independent cable industry but they were not used. In particular, the divestiture by France Telecom of its cable assets would have helped in stimulating competition from alternative infrastructures. The law of 31 December 2003 and the fact that cable operators are no longer faced with size of market limitations has made it easier for FT to disengage from the cable sector. Since the size of market constraint has been lifted, the cable market in France has begun a phase of active consolidation: UPC and Noos have merged into a single entity. In this context FT has made it known that it wishes to associate its cable activities with Canal + and to provide 60% of a new enterprise to third parties. In addition, the mobile sector with only 3 GSM licences in contrast to other EU members has also been slower in growing. This may continue to be the case given that only three 3G licences have been taken-up.

The slow process in ensuring implementation of local loop unbundling and bitstream access has also slowed growth and competition in the broadband market. Recent acceleration in broadband growth has been insufficient placing France as fifth among the G7 and ninth among the European Union countries in terms of broadband penetration.

France chose not to create a single communications regulator, covering telecommunications and broadcasting, with the new law and the implementation of the new EU Directives on electronic communications. The countries that have created a single regulatory body have argued that it facilitates the future regulation of the broadcasting and telecommunications sectors as they change as a result of digital technologies and the development of new platforms and services. In addition a converged regulator is viewed by these countries as facilitating the introduction of a more efficient spectrum allocation process which could allow for more flexible use of spectrum and spectrum trading.

There is no limitation in France to market access except the case of limited spectrum resources. Equal access is ensured through interconnection and numbering policies, but full carrier pre-selection ("CPS") was introduced quite late with local CPS only available in 2002.

Significant improvement in the regulatory framework should arise from the transposition of the new EU Directives ("the telecommunication packet"), but these Directives should be fully transposed. Much will also depend, however, on the contents of government Directives which will implement the new draft law. It is too early to judge how these will be implemented. The government should pay more heed to the views of the regulator in this context given that it has the sectoral experience and expertise. In addition, with increased powers and less constrained by a "dual approach" to regulation resulting from the powers of the Ministry in tariff and licence approval, as well as more direct oversight over the cable industry, ART should be in a position to tackle the industry's problems in creating effective competition with renewed vigour.

Strengths

Box 5. Strengths of French policy and regulatory system

- A modern high quality telecommunications infrastructure.
- Upgrading of infrastructure to support broadband taking place relatively rapidly.
- An active competition authority.
- A competent regulatory authority.
- Rapid implementation of Wi-Fi framework.
- Positive steps taken to allow government's share in incumbent to go below 50% threshold;
- The basic building blocks for a high quality effective regulatory framework largely in place.

Weaknesses

There are also a number of important weaknesses that characterise the French telecommunications sector. There has been insufficient separation between the government as the core shareholder of the incumbent and its role as regulator. A further effort to accelerate privatisation would help in this regard. There has been insufficient effort by the government to spur competition for voice and broadband through providing the right framework for the development of alternate platforms. The fact that the incumbent telecommunications operator has important cable interests has been a factor in slowing down the development of alternate platforms. The eventual divestiture of these cable interest by the incumbent and the proposed changes in the new law for the cable sector should help strengthen the competitiveness of the cable industry

The Government participates in the decision making process of the European Union and in this context accepts the Directives adopted so that it should have no hesitation in transposing Directives fully. This has not always taken place. The telecommunications sector regulator, ART, needs to be able to initiate action and impose its decisions more effectively than it has in the past.

The regulator should try and enhance transparency by ensuring that the methodologies it uses are publicised and have benefited from comments from interested parties. Further, given problems with arm's length relations with the incumbent's wholesale and retail affiliates further work is needed to create effective accounting separation and firewalls to ensure non-discrimination in the market. In this context it would help if the regulatory accounts of the incumbent were made public.

Significant more effort is required to take consumer interests into account in the regulation of telecommunication markets. This includes helping to enhance consumer participation in the consultative process as well as setting up simplified processes for consumers to resolve disputes with telecommunication operators. In addition, it is important for the regulator to provide the consumer with information to facilitate consumers in making choices. More resources need to be allocated by the ART to consumer issues.

Box 6. Weaknesses of French policy and regulatory system

- Insufficient 'distance' between the government as owner of the incumbent and policy maker in the telecommunication sector.
- Insufficient commitment to accelerate the privatisation of the incumbent.
- Insufficient speed in taking rapid action by ART in disputes and in imposing fines when obligations are breached.
- Full implementation of European Directives does not always take place and implementation is slow.
- Insufficient competition through alternative platforms because of the important role of the incumbent PSTN operator in the cable sector and because of the existing cable regulations.
- The local loop is still dominated by the incumbent.
- Greater transparency required in areas such as regulatory accounts of the incumbent, price squeeze methodology used by ART, quality of service indicators.
- Ensure non-discriminatory behaviour by the incumbent.
- More emphasis needed on treating consumer issues and providing information to consumers to facilitate their choice in the market.

4.2. *Potential benefits and costs of further regulatory reform*

Section 3 has shown that market liberalisation and competition have brought significant benefits through:

- Lowering of national and international call prices.

- Introduction of bundled packages including reducing the price of local call services.
- The introduction of “Flat Rate” Internet access.
- An extensive coverage of population and geography by broadband networks.
- Expansion and modernisation of telecommunication networks.

The immediate task is to ensure increased local and broadband competition, noting in particular the need for alternate infrastructures.

4.3. Policy recommendations

The following recommendations are based on the above analysis, taking into account the “Policy Recommendations for Regulatory Reform” set out in the OECD Report on Regulatory Reform (OECD, June 1997).

1. Ensure that regulations and regulatory processes are transparent, non-discriminatory, and applied effectively

- The government should proceed with the full privatisation of France Telecom as soon as possible.
- ART should improve transparency and aim to eliminate discriminatory practices in the market.
- The ART should require the incumbent to put in place more effective firewalls to ensure non-discrimination through an arm’s length relationship between its that its wholesale and retail activities.

Privatisation of the incumbent is important to ensure that there is greater arm’s length treatment by the government of the incumbent operator. Consultations, especially those on interconnection, should remain open to all parties until final agreement has been attained. As a standard rule when final decisions are published ART should provide reasons why certain decisions were made and why proposals from interested parties were rejected. It should also indicate which of its original proposals were amended in the light of a consultation. It needs to foster more transparency in areas such as the methodology used to ascertain whether price squeezing is occurring. It needs to review accounting separation requirements imposed on the incumbent with a view to eliminating discriminatory practices. Publishing regulatory accounts of the incumbent would facilitate this process.

2. Reform regulations to stimulate competition and consumer benefits and eliminate them except where clear evidence demonstrates that they are the best way to serve the public interest.

- ART should improve its consultative processes by given a much greater role to consumers than it has in the past.
- ART should develop a policy of regulatory forbearance.
- ART should be given increased powers to take independent action to foster competition in the market and to enforce its decisions.
- Place priority on reforming the cable television sector.

A major aim of regulatory reform in the telecommunication industry is to benefit the consumer. Although consumers have benefited already form declining prices, better service quality and a wider choice their interests have not been taken into account sufficiently nor are they receiving the information

necessary to make choices. The ART, along with the DGCCRF authority (Ministry of Economy, Finance and Industry) has an important role in enhancing their participation, helping consumers in settling disputes with operators, and providing information in such a way as to facilitate market choices. This can also help enhance competition.

As competition develops, the regulation of the telecommunications market should rely on competition law, and sector specific regulation should be reviewed periodically in order to streamline regulations. This requires ART, in addition to its annual report, to develop on a more systematic basis a policy of forbearance and undertake biennial reviews (these should include reviews outside the relevant markets identified by the European Commission) with the objective to minimise the extent of regulation necessary for effective competition and forbear where sufficient competition has emerged and is sustainable. Furthermore more attention needs to be placed on assessing developments in the fixed market especially in the context of how competition is developing, developments in quality of service, and the reasons why certain segments of the population are not connected.

There is scope for streamlining regulation, for example, by eliminating certain pricing approval procedures (*e.g.* international and long distance tariffs). Policy should be introduced allowing any market player to request a streamlining review of specific regulations and that, where it is no longer required because reliance can be placed on *ex post* regulation under the competition law existing sector specific regulation should be removed by ART.

The new French communications law should provide ART with sufficiently strong powers to penalise breaches of the rules in such a way as to provide a clear deterrent to the offenders and provide consumers and operators alike with the confidence that the rules will be swiftly and fairly enforced. ART should not be timid in using its powers to the full as it has in the past.

The French draft law has important provisions which should help reform the cable television sector in France. Priority should be given to implement these.

3. Review, and strengthen, where necessary, the scope, effectiveness and enforcement of competition policy

- *The development of a stronger cable television sector should be a priority to help provide more competition in the local access market and stimulate broadband services; The eventual divestiture of France Telecom's cable affiliates from its PSTN activities would help in this context.*

Considering the lack of nation-wide competition in the local access market, and the slow introduction of competitive broadband services based on ADSL, cable companies could provide increased competition, as long as existing constraints on them are lifted as foreseen in the draft electronic communications law. The eventual divestiture of France Telecom's cable affiliates from its PSTN activities would help ensure the development of an effectively competitive alternate platform to compete against the local loop.

Since there is insufficient competition in the local loop. ART's role is critical to ensure fair access to end customers. To this end, the introduction of the unbundling of the local loop is commendable. ART needs to monitor closely the implementation of unbundling and react rapidly and forcefully when the incumbent fails to meet its obligations on time and in a fair and non-discriminatory way. Disputes also need to be resolved more expeditiously than has been the case to date. The ability to rapidly impose fines would allow ART to ensure that the incumbent meets its requirements to provide adequate services and access to new entrants. Such powers could help speed up the process of unbundling, and local competition.

NOTES

- ¹ The significant increase in investment is illustrated by the change in technology: in 1986 electronic switching equipment accounted for 65% of all network switching compared to 29% in 1982.
- ² By 2001 France's main line penetration rate was 57 per 100 inhabitants, 11th in ranking among OECD countries. Since 1995 rapid expansion in main lines in a number of countries (Germany, Japan, United Kingdom, etc.) has led to a relative deterioration in France's ranking in terms of main line penetration rates.
- ³ Another example is the Biarritz video telephone experiment.
- ⁴ European Commission, COM (87) 290, 30.06.87.
- ⁵ Securities and Exchange Commission, Form 20-F, France Telecom, March 31, 2003, page 19.
- ⁶ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a Common Regulatory Framework for Electronic Communications and Services.
- ⁷ Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities.
- ⁸ Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services.
- ⁹ Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services.
- ¹⁰ These data exclude the sale and rental revenue from terminal equipment and call centre revenue.
- ¹¹ ART, Response to OECD questionnaire.
- ¹² France has 1.4 operators per million inhabitants compared to the EU average of 4.2. The range in the EU is 22.5 to 1.3. See European Commission, Telecommunications Regulatory Package – VIII Implementation Report, Annex 1, Chart 7, Brussels December 2002. France has the lowest number of operators authorized to offer public voice telephony per million of inhabitants.
- ¹³ A maximum of 1% of subscribers have a choice of 2 operators for direct access compared to 18% in Denmark and 50% in Italy. See, European commission, Telecommunication Regulatory Package –VIII Implementation Report – Annex 1, Chart 18, Brussels , December 2002.
- ¹⁴ Ibid., Chart 19. In France at the end of 2002 8.9% of subscribers actually used an alternative provider for local calls compared to 40% in Italy and 29% in the UK.
- ¹⁵ Cegetel also is the owner of SFR, the second mobile operator in France. Vodafone owns 30% of the Cegetel Group and directly 20% of SFR.
- ¹⁶ The Belgium incumbent, Belgacom owns 8.1% of LDCOM and the Italian incumbent, Telecom Italia, 7%.

17 The DGT took the name 'France Telecom in 1988.

18 Law No. 96-660 of 26 July 1996, *Law relative to the national enterprise France Telecom*.

19 See FT, Consolidated Financial Report 2003. The government's shareholding includes direct and indirect shareholding through ERAP.

20 See Securities and Exchange Commission Form 20F, France Telecom, March 21 2003, page 20.

21 Just as an example the investment of FT during 2000 included: Purchasing all shares held by Deutsche Telekom in Global One; acquiring 28.5% Mobilcom in Germany which through its affiliate had a UMTS licence in Germany; purchased 100% of the capital of Orange the 3rd mobile operator in the UK and the holder of a UK UMTS licence; increasing its share holding of Wind in Italy from 43.4% to 56.6%; purchased 35% of TPSA, the incumbent Polish PSTN operator

22 See Ministère des Finances, Press Release of Wednesday 4 December 2002 : Soutien de l'État au plan d'action approuvé par le conseil d'administration de France Télécom.

23 The debt problems of France Telecom can be contrasted with those of BT, the UK incumbent, that had to sell its cellular mobile activities several years ago in the face of large debts.

24 OECD Communications Outlook 2003, Table 4.6.

25 See EC Telecommunications Regulatory Package – VIII Implementation Report – Annex 1, Section 4 Mobile market, Chart41.

26 See Francois Magnien, Mesurer l'évolution des prix des services de téléphonie mobile : une entreprise difficile, *Économie et Statistique* No 362, 2003, page 22.

27 SRT, L'observatoire des mobiles, 30 Juin 2003.

28 Mobile virtual network operators are essentially resellers leasing spectrum from a licensed mobile operator. During the consultation for 3G the regulator had solicited opinions on whether a 4th GSM licence should be offered but no interest was expressed since the focus on the industry was on 3G rather than 2G technology.

29 Se, OECD, Communications Outlook 2003, Figures 6.11 and 6.12.

30 ART has argued that the lower penetration rate in France is due to a large part to measurement differences in that France does not include inactive mobile accounts in its data. This may account for some of the differences in measurement between the French penetration rates and other EU countries but would not be sufficient to account for the 13 percentage points difference between France and the EU average. At the same time longer periods during which pre-paid accounts can remain inactive helps in inciting low users who only need a mobile phone for emergency purposes to enter the market.

31 See OFTEL, Use of multiple SIM cards in mobile phones, by consumers in Italy, Finland and Portugal, July 2001, <http://www.ofcom.org.uk/static/archive/oftel/publications/research/2001/sim0701.htm>.

32 Orange and Bouygues were also condemned for false advertising in that the time made available to a customer in a post-paid plan did not mention that actual time charged was on the basis of an initial minute and then by 30 seconds.

33 Cable networks are subject to « must carry » requirements for programming of terrestrial television programs. The same obligation is not required for the satellite TV operators.

34 These are Noos, France Telecom Câble, NC Numéricable, UPC and NTL France.

35 Insee June 2003.

36 Association des Fournisseurs d'Accès et de Service Internet, <http://www.afa-france.com/chiffres>.

37 Internet revenues increased in France by 1.5% over the 2001-2002 period reaching 1 236 million euros in 2002.

38 For example, at the end of 2002 the CSSPPT was requested by the Minister to provide its views on the draft law on the digital economy.

39 EU legislation can take a number of forms. Regulations have general application, and are binding in their entirety and directly applicable in all Member States. Directives are binding, but national authorities may choose the form and method of implementation.

40 In particular, the new EC regulatory framework:

a) Sets out the rights, responsibilities, decision-making powers and procedures of the national regulatory authorities (NRAs) and the Commission. This includes the NRAs' obligation to submit to the Commission and the NRAs of other EU member states in draft form the regulatory measures that they intend to take with respect to market definition and significant market power, and the Commission's power to require NRAs to withdraw such drafts, if the Commission considers them to create a barrier to the single European market or to be incompatible with EU law.

b) Identifies specific policy objectives that NRAs have to achieve in carrying out their responsibilities (namely, to promote an open and competitive European market for communications services, to promote the interests of European citizens and to consolidate the EU's internal market in a converging technological environment).

c) Provides that operators with significant market power in relevant communications markets will be subject to certain obligations as set out in the directives on universal service and access. Significant market power, a notion that includes cases where a company has market power individually or jointly with other companies, is defined on the basis of the concept of dominance as developed in the case law of the European Court of Justice and the Court of First Instance of the European Communities.

41 According to one report, the EC decided that the leased-lines retail market above 2Mbit/sec is competitive, despite disputes from NRAs from Ireland, the Netherlands and Luxembourg. Tatum Anderson, "NRAs get green light for market reviews," Telecom Markets, 25 February 2003.

42 The one-off fee for a national licence network and voice licence in France is the highest in the EU for and 5 times higher than the UK which has the 2nd highest fixed charge. The annual fee is also the highest in the EU.

43 This can occur when the incumbent increase the wholesale price, *e.g.* the access charge, and reduces its final (retail) price thereby hurting its competitors in the retail market.

44 The services subject to price approval include access to the network, subscription charges, national and international call charges, charges for calling mobile networks from the fixed network, directory assistance, public callbox charges, leased line charges and charges to special services.

45 European Commission, 6th Report on the Implementation of the Telecommunications Regulatory Package, December 2000.

46 The new framework also allows for a procedure to define new markets and undertake analysis to determine whether price controls are necessary in those markets.

47 *Projet de Lois pour la confiance dans l'économie numérique.*

48 Consumer associations argue that requiring fixed and mobile operators to use a single measure, such as seconds, allows consumers to compare prices directly between operators.

49 French government response to OECD questionnaire.

50 SFR, the other operator with SMP in the interconnection market, voluntarily reduced its charges by a similar amount.

51 See EC VIII Implementation Report, section 3.6 page 71.

52 The Socialist government at that time withdrew the amendment because of opposition from the French Communist Party who felt that unbundling would undermine the incumbent. It was fairly clear at the time that the amendment was withdrawn that the EU would introduce a Directive requiring local loop unbundling which France would be required to implement.

53 Décret no 2000-881 of September 2000 modifying the Code of posts and telecommunications.

54 The EC had warned the industry that it intended to adopt a Regulation mandating broadband access earlier in 2000.

55 ART, Access to the local loop and its operational implementation, 30 October 2000.

56 The fine was EUR10.35 million.

57 The process of market reviews are somewhat lengthy and it is not expected that a final designating operators which have dominance will occur before mid-2004 after which the steps which need to be taken to deal with this dominance have to be decided.

58 There has been a tendency for senior government officials to state that France is among the EU leaders in broadband. If the absolute number of broadband subscribers are taken into account France comes second in Europe, which given its population size, would be quite normal. However, diffusion should be measured on the basis of penetration rates, *i.e.* number of subscribers per 100 population and on the basis of this measure France's performance in broadband is weak.

59 See the Prime Minister's speech on 12 November 2002 presenting the RESO 2007 plan at http://www.internet.gouv.fr/article.php3?id_article=429

60 These conditions are applicable to 38 departments as of November 2002.

61 See, <http://www.art-telecom.fr/communiqués/communiqués/2002/index-07-11-2002.htm>

62 The population coverage for Orange and SFR were (for voice) 58% of population by August 2003 and over 98% by August 2009.

63 ART may impose sanctions if coverage requirements are not met. This includes suspension of the licence, reduction in the period of validity of the licence and fines of up to 5% of turnover (repeated defaults in obligations).

- 64 France Telecom is obliged to install a public payphone in every community with less than 1 000 inhabitants and an additional payphone for every 1 500 inhabitants. For communities over 10 000 there is no obligation to install public telephone booths.
- 65 The Association française des opérateurs privés en Telecommunications (L'ÁFOPT) and l'Association des opérateurs de services de Telecommunications (l'AOST).
- 66 The cost per capita data is biased downward and would be higher if the 4th licence were allocated and if the 1% of turnover charge were taken into account.
- 67 See Charts 11 and 12, Annex 1, Corrigendum March 2003, in EC, 8th Implementation Report, 2002.
- 68 See www.francetelecom.com/fr/espaces/investisseurs/gouvernement/textes/att00001799/licence.doc
- 69 As an example the UK regulator, OFTEL, has a web page on Consumer Information providing information on price comparisons, quality of service comparisons, how to make complaints, etc.
- 70 In this context the President of ART in a speech (see <http://www.art-telecom.fr/communiqués/> of 21 March 2003 "Television sur ADSL" argued that regulation should allow for competition between different technologies and argued for a more precise definition of audiovisual.
- 71 Directive 2002/19/ec of the European Parliament and of the Council of 7 March 2002.