

DESI Report 2018

Telecoms chapter

FRANCE

Market developments

1. Competitive environment

a. Fixed Markets

Coverage	FR-2016	FR-2017	EU-2017
Fixed broadband coverage (total)	99.95%	99.95%	97%
Fixed broadband coverage (rural)	100%	100%	92%
Fixed NGA coverage (total)	47%	52%	80%
Fixed NGA coverage (rural)	31%	37%	47%
Ultrafast coverage (total)	no data	42%	58%
4G coverage (average of operators)	78%	89%	91%

Source: Broadband Coverage Study (IHS and Point Topic). Data as of October 2016 and October 2017.

The following four main operators are active on the French fixed market: the incumbent Orange (formerly France Télécom), SFR, Free and Bouygues Telecom.

While fixed broadband coverage is ubiquitous in France, fixed NGA coverage, including in rural areas, remains significantly below the EU average, as a result of the low coverage of cable networks and the relatively high average length of the copper network sub local loop compared to other European countries. This is why France has engaged in nationwide FTTH network rollout plans. In the meantime, new PSTN (Public Switched Telephone Network) lines will no longer be provided from 2018.

While in July 2017 SFR had expressed its intention to cover the whole French territory with its own fibre network by 2025 without any public financing, it declared in December 2017 that it would not proceed with that project.

According to Arcep¹, as of 30 September 2017, the number of subscriptions to high speed Internet ("haut débit", between 512 kbit/s and 30 Mbit/s) and very high speed Internet ("très haut débit", at or above 30 Mbit/s) amounted to 28.2 million, that is 780 000 more than at the same period in 2016. While this figure represents mostly subscriptions to high speed DSL, over the last two years, only subscriptions to very high speed Internet have been increasing, at a pace of a little over a million a year (+1.5 million over the elapsed year). The share of subscriptions to very high speed Internet has increased by five points within a year and reached 23% of all access types by the end of September 2017.

Most of the increase in subscriptions to very high speed Internet is driven by subscriptions to end to end optical fibre (2.9 million, an increase of 990 000 subscriptions within a year) which now amounts to 10% of the Internet access on the French market, all technologies alike.

¹ Observatoire des marchés des communications électroniques en France 3^{ème} trimestre 2017

At the end of September 2017, the number of subscriptions to very high speed Internet amounted to 38% of eligible households all technologies alike (an increase of five points within a year).

The subscriptions to high speed Internet are composed of 98% of xDSL access with a throughput under 30 Mbit/s which are constantly decreasing (-680 000 within a year). The number of subscriptions to other high speed Internet access means (cable, satellite, wifi) is relatively stable.

Fixed broadband market shares	FR-2016	FR-2017	EU-2017
Incumbent market share in fixed broadband	-	-	40.3%
Technology market shares			
DSL	84.9%	81.7%	64.2%
Cable	7.4%	7.6%	19.4%
FTTH/B	6.4%	9.4%	12.9%
Other	1.3%	1.4%	3.6%

Source: Communications Committee. Data as of July 2016 and July 2017.

New entrants' DSL subscriptions by type of access (VDSL excluded)	FR-2016	FR-2017	EU-2017
Own network	-	-	0.5%
Full LLU	85.1%	85.7%	72.8%
Shared Access	4.3%	3.7%	4.1%
Bitstream	10.6%	10.6%	14.7%
Resale	-	-	7.8%

Source: Communications Committee. Data as of July 2016 and July 2017.

Fixed broadband prices	FR-2016	FR-2017	EU-2017
Fixed broadband price index [values between 0-100]	94	94	87

Source: Communications Committee. Data as of July 2016 and July 2017.

b. Mobile market

Mobile market	FR-2016	FR-2017	EU-2017
Market share of market leader	-	-	35%
Market share of second largest operator	-	-	28%
Number of MNOs	4	4	not available
Number of MVNOs	50	50	not available
Market share of MVNO (SIM cards)	9%	8%	not available

Source: Communications Committee. Data as of October 2016 and October 2017.

Mobile broadband prices [EUR/PPP]	FR-2016	FR-2017	EU-2017
Least expensive offer for handset (1 GB + 300 calls basket)	€20	€9	€24
Least expensive offer for tablet and laptop (5 GB basket)	€14	€14	€17

Source: Mobile Broadband Price Study (Van Dijk and Empirica). Prices expressed in EUR/PPP, VAT included. Data as of February 2016 and February (handset) 2017 - July (tablet-laptop) 2017.

The French mobile telecommunications market is characterised by good 4G coverage and strong competition between the same main four operators as on the fixed market: Orange, SFR, Bouygues Telecom and Free (the latter entered the mobile market in 2012).

The market appeared to be stable over the reporting period. Indeed, three of the four main operators improved their respective turnovers within that timeframe.

Besides, France has some of the least expensive mobile broadband offers in Europe.

As far as Mobile Virtual Operators (MVNOs) are concerned, the market has been stagnating and its main trend has been to have prepaid offers.

Regulatory developments

2. Supporting measures for deployment and investment in high-speed networks

a. Spectrum

In Metropolitan France, 63.3% of the spectrum harmonised at EU level for wireless broadband electronic communications services on terrestrial mobile networks has been assigned.

Licences for substantial parts of the 900 MHz, 1.8 GHz and 2.1 GHz band will expire between 2021 and 2024. In January 2018, the French government agreed to forego an auction for the 900 MHz, 1.8 GHz and 2.1 GHz licences coming up for reassignment in 2021-24 and decided to maintain a stable level of annual fees for the subsequent years. In this context, Arcep has worked out conditions for reassigning the licences while incorporating new coverage requirements in the future licences. Fees have not been determined yet. Work is ongoing at national level.

The aim is to ensure ubiquitous 4G coverage on mobile networks, drastically reduce ‘white spot’ areas currently not covered by mobile networks, speed up coverage of priority transport routes, improve quality of service, and generalise indoor telephony coverage.

Meanwhile, in exchange for the stability of spectrum fees in the coming years, operators made commitments, which will be added to the terms of their existing licences in 2018². They pertain, on the one hand, to improving mobile voice and data services and, on the other hand, to using 4G to improve fixed Internet access.

Arcep was expected to hold a public consultation on the competitive reassignment procedure, including the new obligations shortly³. Those obligations will be binding and failure to meet them could result in sanctions from Arcep.

In the meantime, according to Arcep, most of those frequencies have been neutralised, i.e., they are not restricted to 2G or 3G anymore. Arcep has decided to assign the 3410 - 3460 MHz spectrum for the deployment of superfast wireless solutions for fixed internet access, which come to complete the toolkit available to the regions for ensuring broadband and superfast broadband coverage. To this end, on 11 December 2017, Arcep published the terms and conditions for the relevant assignment procedure, following a public consultation. Two

²A historical deal was made public on 12 January 2018 between the French Government, Arcep and the four main telecommunication operators (Mobile Network Operators), in order to reduce “white spot areas” currently not covered by mobile networks.

³ The relevant public consultation was launched on 5 April 2018 and is running until 16 May 2018.

applications are currently being handled namely one in the Loiret department and another one in the Seine et Marne department. First licences are expected to be awarded in early 2018.

On 13 December 2017, the French Authorities launched a public consultation on 5G technologies with the view to setting up a national strategy in that field. Stakeholders were invited to participate until 16 February 2018. The aim of the public consultation is to identify which key measures would be needed to address 5G-related challenges such as finding favourable conditions for 5G roll-out, experimenting new use cases and fostering the emergence of new technologies and services. On the basis of the replies received to the public consultation, the French Government shall publish a national strategy for 5G in 2018⁴. In the meantime, the following two frequency bands have been identified as being usable for 5G: the 3400-3800 MHz band and the 26 GHz band. In the 3400-3800 MHz band, some frequencies are already available in a number of cities e.g., Lyon, Bordeaux, Nantes, Lille, Le Havre, Saint-Étienne, Douai, Montpellier and Grenoble⁵.

Finally, Arcep has decided to dedicate the central 40 MHz of the 2.6 GHz TDD band (i.e. the 2575 - 2615 MHz sub-band) to enabling professional mobile radio (PMR) networks' upgrade to LTE, in Metropolitan France.⁶

b. National and EU investment in broadband

According to the 2013 French National Broadband Plan 'Plan France Très Haut Débit' (France's Plan for Ultra-Fast Broadband), all French households and businesses should be covered by broadband speeds of 30 Mbit/s and above by 2022. The plan supports the roll-out of different technologies, with a large share of FTTH. The plan features a Government funding of 3.3 billion euros, with an equivalent funding from local public authorities.

As of 30 June 2017, 16.7 million of dwellings were eligible to fixed broadband at or above 30 Mbit/s all technologies alike. Among those 16.7 million of dwellings, 10.9 million were located outside of very dense areas.

8.9 million of dwellings were eligible to get Fibre To The Home (FTTH) (+37% increase within a year), 12.3 million of dwellings were eligible to fixed broadband at or above 100 Mbit/s.

In July 2017, French President Macron declared that he wished to offer "good high speed" Internet (at or above 8 Mbit/s) to all by 2020 and very high speed Internet to all by 2022. In

⁴It should be noted that, on 16 January 2018, Arcep opened, on its part, a "5G pilot" desk (5G@arcep.fr) with the view to facilitating information exchange with interested stakeholders and ultimately frequency assignment for 5G testing purposes.

⁵ On 23 February 2018, Arcep allocated frequencies to Bouygues and Orange in the 3.6-3.8 MHz bands for 5G testing.

⁶ On 6 March 2018, Arcep launched a public consultation until the 22 April 2018 on the terms and conditions for allocating 2.6 GHz TDD band spectrum for broadband professional needs. The purpose of the consultation is to set out the terms and methods that Arcep plans to use, along with the obligations, to allocate those frequencies through the future licenses. Contributions and remarks can be submitted until 22 April 2018.

order to achieve this goal, France aims to speed up the roll-out of fibre network and considers alternative means to fibre in remote areas, e.g. fixed 4G or satellite solutions⁷.

A total of 3.3 billion euros will be allocated by the government to support the deployment of NGA networks in areas where private initiative is lacking. In December 2017, the government announced a specific investment of 100 million euros with the view to addressing the digital divide while fibre roll-outs take place and enabling those end-users based in remote areas to get access to alternative technology to fibre, through end-user subsidisation schemes.

Finally, a Senate-proposed bill to better secure public and private FTTH investments was tabled on 10 November 2017⁸. The bill's aim is to provide the relevant public authorities with the appropriate legislative and/or regulatory means to avoid any risk of overlaying of an FTTH network deployed or in the process of being deployed by another existing FTTH network (overbuild). This initiative is said to be designed to promote a more effective implementation of France's National Broadband Scheme, *Plan France Très Haut Débit* mentioned above. The bill notably details Arcep's possibility to impose fines on operators that would not comply with network roll-out binding commitments they would have undertaken in accordance with the Electronic and Postal Communications Code (Article L33-13).

c. Implementation of the Broadband Cost Reduction Directive

In so far as France had not yet fully transposed Directive 2014/61/EU⁹ of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks by the first of January 2016, the Commission launched infringement proceedings against France in March 2016. Indeed, while legislation to transpose the Directive into French Law had been adopted, some secondary legislation was still missing to complete its full transposition. On 23 November 2017, the French Authorities notified a number of additional national implementing measures for the Cost Reduction Directive. The Commission Services are assessing those measures.

3. Regulatory function

After receiving the Commission's observations, Arcep adopted three analysis decisions on 14 December 2017 about broadband and superfast broadband markets, for the period running from 2017 to 2020¹⁰.

⁷ In April 2018, French companies have signed an agreement for launching by 2021 a high throughput satellite over Europe that would offer very high speed connectivity for all French and European citizens at affordable price

⁸ <https://www.senat.fr/leg/pp17-083.html>

⁹ Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L 155, 23.5.2014, p. 1).

¹⁰ Décision n° 2017-1347 de l'Autorité de régulation des communications électroniques et des postes en date du 14 décembre 2017 portant sur la définition du marché pertinent de fourniture en gros d'accès local en position déterminée, sur la désignation d'un opérateur exerçant une influence significative sur ce marché et sur les obligations imposées à cet opérateur sur ce marché, Décision n° 2017-1348 de l'Autorité de régulation des communications électroniques et des postes en date du 14 décembre 2017 portant sur la définition du marché pertinent de fourniture en gros d'accès central en position déterminée à destination du marché de masse, sur la désignation d'un opérateur exerçant une influence significative sur ce marché et sur les obligations imposées à cet opérateur sur ce marché, Décision n° 2017-1349 de l'Autorité de régulation des communications électroniques et des postes en date du 14 décembre 2017 portant sur la définition des marchés pertinents de gros

The purpose of those decisions is to define asymmetric regulation which applies only to the incumbent operator Orange for the following three markets: wholesale local access provided at a fixed location (Market 3a); wholesale central access provided at a fixed location for mass-market products (Market 3b); wholesale high-quality access provided at a fixed location (Market 4).

On the basis of those decisions, Orange shall grant access to reasonable requests to its copper local loop, its civil engineering infrastructure, and shall publish information about the relevant accesses to its network. The latter obligation is designed to enable potential investors in networks to decide whether or not it would be worth investing on a case by case basis depending on the market dynamics at hand. In the meantime, Orange shall also grant access to its optical fibre local loop as a result of the symmetric regulation applying to any operator rolling-out FTTH networks.

As to the supervisory regime for Orange's residential FTTH access, Orange has reportedly proposed changes designed to address the operational difficulties its competitors have been facing in marketing their fibre products. Arcep has taken note of those changes and will monitor that Orange implements them by performing an assessment before 1 September 2018.

Besides, as far as the business market is concerned, Arcep has imposed on Orange to provide passive fibre offers with or without improved quality of service (QoS) with the view to allowing the development of a competitive wholesale bitstream market for retail market business operators to build on. In the meantime, Orange has to provide for wholesale resales of its business FTTH retail products.

In addition, Arcep has adopted (i) an updated decision on the prices charged for using Orange's local loop civil engineering with the view to providing market players with a more simplified and thus more predictable framework¹¹, as well as (ii) a new decision on price caps for access to Orange' copper local loop for the years 2018-2020¹².

Moreover, Arcep reviewed the markets for access to the public telephone network at a fixed location (market 1 of the 2007 Recommendation) and for wholesale call origination (market 2 of the 2007 Recommendation)¹³.

The provision of wholesale services in those markets allows Orange's competitors to provide stand-alone fixed telephony offers (not bundled with internet broadband or other services) to their residential and non-residential customers, using Orange's public switched telephone network (PSTN). Arcep found that the market for access to the public telephone network aimed at residential customers was no longer susceptible to *ex ante* regulation. As regards the market for non-residential customers, Arcep proposed to maintain the current regulation imposed on Orange.

des accès de haute qualité, la désignation d'opérateurs exerçant une influence significative sur ces marchés et les obligations imposées à ce titre.

¹¹ Décision n° 2017-1488 de l'Autorité de régulation des communications électroniques et des postes en date du 14 décembre 2017 définissant les conditions économiques de l'accès aux infrastructures de génie civil de boucle locale d'Orange,

¹² Décision n° 2017-1570 de l'Autorité de régulation des communications électroniques et des postes en date du 21 décembre 2017 fixant un encadrement tarifaire de l'accès à la boucle locale cuivre pour les années 2018 à 2020,

¹³ Arcep's draft measures were notified to and reviewed by the Commission under cases FR/2017/2038-2039, C(2017) 8890,

The notification of the draft analysis decisions for market 1 and market 2 of the 2007 Recommendation gave rise to Commission comments. After receiving the Commission's comments, Arcep adopted a final decision on 21 December 2017¹⁴.

Finally, Arcep also reviewed the markets for wholesale fixed and mobile call termination (market 1 and 2 of the 2014 Recommendation)¹⁵.

4. Consumer matters

Since October 2017, Arcep has put into use a new dialogue tool via its website: it is called "*J'alerte l'Arcep*". Through this functionality, end-users can notify the Authority of issues they have experienced with telecommunication operators and receive dedicated feedback in return (regarding the obligations of operators and means of redress available to the end-user). It should nevertheless be stressed that this functionality is not designed to officially seize the Authority of a complaint but is dedicated to information exchange only.

Overall, there has been an increased number of consumer complaints about services offered by telecommunication operators. Since "*J'alerte l'Arcep*" started running, Arcep received about 20000 alerts within three months related to matters such as the quality of service of fixed or mobile internet and increased prices for mobile services without prior notice. By way of comparison, Arcep had received 6 500 complaints in 2016.

On its part, the mediator for electronic communications received 13 030 complaints in 2017 (namely an increase of 8% compared to 2016) out of which the main topics of complaints were mobile telephony (48%), Internet and bundled offers (38%), fibre (11%), fixed telephony (3%). More specifically, the main complaint types related to contracts (27%), billing (21%), and technical issues (24%)

a. Roaming

Overall, since 15 June 2017, operators have noticed that consumers have been increasingly using data roaming. Indeed, following the introduction of Roam Like at Home¹⁶ (RLAH) in June 2017, French subscribers consumed 1.6 times more voice and 4.2 times more data roaming services when travelling in the EU in summer 2017 compared to summer 2016¹⁷.

No significant issue pertaining to roaming is to be noticed on the consumers' side, besides a reportedly limited number of cases where roaming was confused with international calls.

On the operators' side, a distinction should be drawn between mobile network operators and mobile virtual network operators. While the four main mobile network operators have not

¹⁴ Décision n° 2017-1568 de l'Autorité de régulation des communications électroniques et des postes en date du 21 décembre 2017 portant sur la définition des marchés pertinents de l'accès au service téléphonique pour la clientèle non-résidentielle et du départ d'appel en position déterminée, la désignation d'opérateurs exerçant une influence significative sur ces marchés et les obligations imposées à ce titre,

¹⁵ Arcep's draft measures were notified to and reviewed by the Commission under cases FR/2017/2028-2029, C(2017) 8078

¹⁶ Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, p. 10), as amended by Regulation (EU) 2015/2120 and Regulation (EU) 2017/920.

¹⁷ Figures compare Q3/2017 with Q3/2016 retail roaming volumes according to the BEREC International Roaming Benchmark Report, April 2017-September 2017, published on 14 March 2018.

requested to use the sustainability mechanism (some of them even offered roaming services without any surcharge before 15 June 2017), a number of operators have obtained derogations from Arcep in that regard. Indeed, Arcep has granted derogations to three MVNOs and eight resellers (representing altogether less than 3% of the mobile market) allowing them to apply surcharges still to retail roaming¹⁸.

b. Net neutrality

Regarding net neutrality¹⁹, on 11 December 2017 Arcep launched a public consultation on the open Internet²⁰. It is the follow-up to some dedicated work the Authority has been carrying out in 2017. Indeed, a number of specific workshops were organised in October and November 2017 so as to exchange views with stakeholders notably on the specific issue of the impact that devices can have on users' ability to access the internet and its different contents.

c. 112

While the European emergency number 112 is in service in France, the Commission services are monitoring whether the obligation of caller location laid down by Article 26(5) of the Universal Service Directive 2002/22/EC is properly implemented in practice. It has in particular been brought to the attention of the Commission services that not all relevant public entities would yet be properly connected to the PFLAU ("plateforme de localisation des appels d'urgence", technical platform dedicated to establishing caller location) which would generate delays in readily establishing the 112 mobile caller location.

d. Universal service

As regards fixed telephony, on 27 November, the Minister of economy and finances designated the operator in charge of providing the plug in and telephony related part of the universal service²¹ as provided for by Article L-35-1 of the "Code des postes et communications électroniques" (Electronic and Postal Communications Code). The operator would be the incumbent Orange for a period of three years.

5. Conclusion

In order to further improve its high speed connectivity coverage throughout the country, France aims to speed up the roll-out of fibre network and considers alternative means to fibre in remote areas, e.g. fixed 4G, as a transitory complement.

A total of 3.3 billion euros will be allocated by the Government to support the deployment of NGA networks in areas where private initiative is lacking. French Authorities are also looking

¹⁸ The following operators may apply roaming surcharges until 14 June 2018: Adista, Afone, Budget Telecom, Euro-Information Telecom (NRJ Mobile, CIC Mobile), Euroditel, International Telecommunication Network, ITC Ariane Services, MC Infinity, Scopelec, Sybord, Thales Communications & Security (zdnet.fr)

¹⁹ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (OJ L 310, 26.11.2015, p. 1).

²⁰ Following the public consultation, Arcep adopted a report on 15 February 2018, which sets out some proposals for guaranteeing an open internet.

²¹ 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 (OJ L 108, 24.4.2002, p. 51).

at ways of making deployment commitments more effective and avoid overbuild of new networks in less dense areas.

Finally, French Authorities are steering new investment into mobile networks with the view to reducing zones without coverage and improve quality of services, including indoor coverage. In exchange for investing more than EUR 3 billion in improving network coverage, the French mobile operators would not have to face new spectrum auctions in the years to come as current spectrum licences expire. Instead, reinforced requirements would be introduced in their licence obligations.

Both strategies are expected to contribute to better high speed connectivity results throughout the country by 2020 already.