Telconomics

Progress report 2020

16 June 2020

Arcep publishes its annual market scorecard: the key figures

Operators' revenue
(retail market)

€35.2 billion

- 1.0 %

Operators' investments

€10.4 billion

+ 0.5 Bn€

Number of broadband and ultrafast access lines

29.8 million (of which **38% UF**)

+ 0.7 M

Number of SIM cards

77.2 million (of which **71% 4G**)

+ 1.6 M

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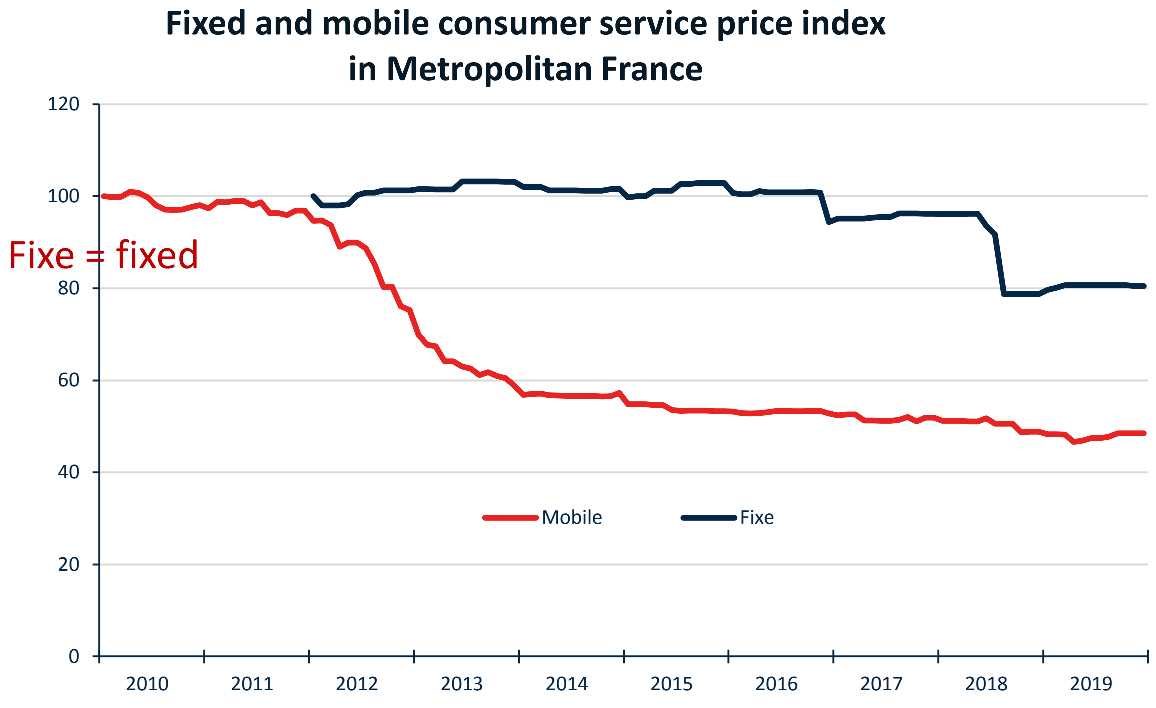
Fixed and mobile service prices

After a sharp decline in 2018 , prices levelled off in 2019



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How society and the networks weathered the crisis

The lessons learned from the public health crisis will be presented in detail at the conference on the State of the Internet in France, on 25 June.

More than ever before, networks are a “common good”.

The need to work together to get back to a steady pace of deployment, setting timetables in the coming weeks with operators and the Government.

Initial current and future concrete measures:

- **25 May**: Assessment of the lockdown’s impact on networks
- **June-July:** Setting timetables for the steady resumption of rollouts with stakeholders and the Government
- **July:** Status report on the universal service and copper network QoS
- **September**: Possible additional measures on coverage or inclusion

The pro-investment doctrine

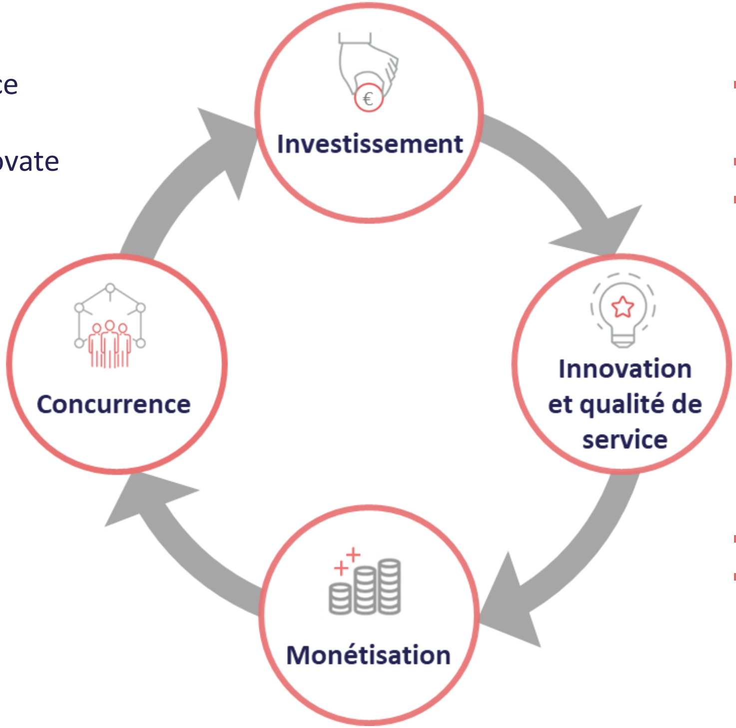
Regulation to improve
fixed and mobile connectivity

Pro-investment regulation

Competition is not an end in itself: it is part of a cohesive scheme for promoting network investments that benefit users and innovation

- Push operators to improve service performance
- Give operators incentives to innovate
- Which drives investment in the networks

- Provide coverage and make services accessible
- Enable the use of ultrafast services
- Foster innovation



- Ensure lasting competition
- Create growth outlets

- Improve QoE
- Enable monetisation

Rollouts: unflagging efforts

On fixed networks

Sharp rise in the pace of rollouts and in infrastructure-based competition

2019 was a record year for FttH: around 4.8 M additional premises passed, or 50% more than in 2018 and 85% more than in 2017

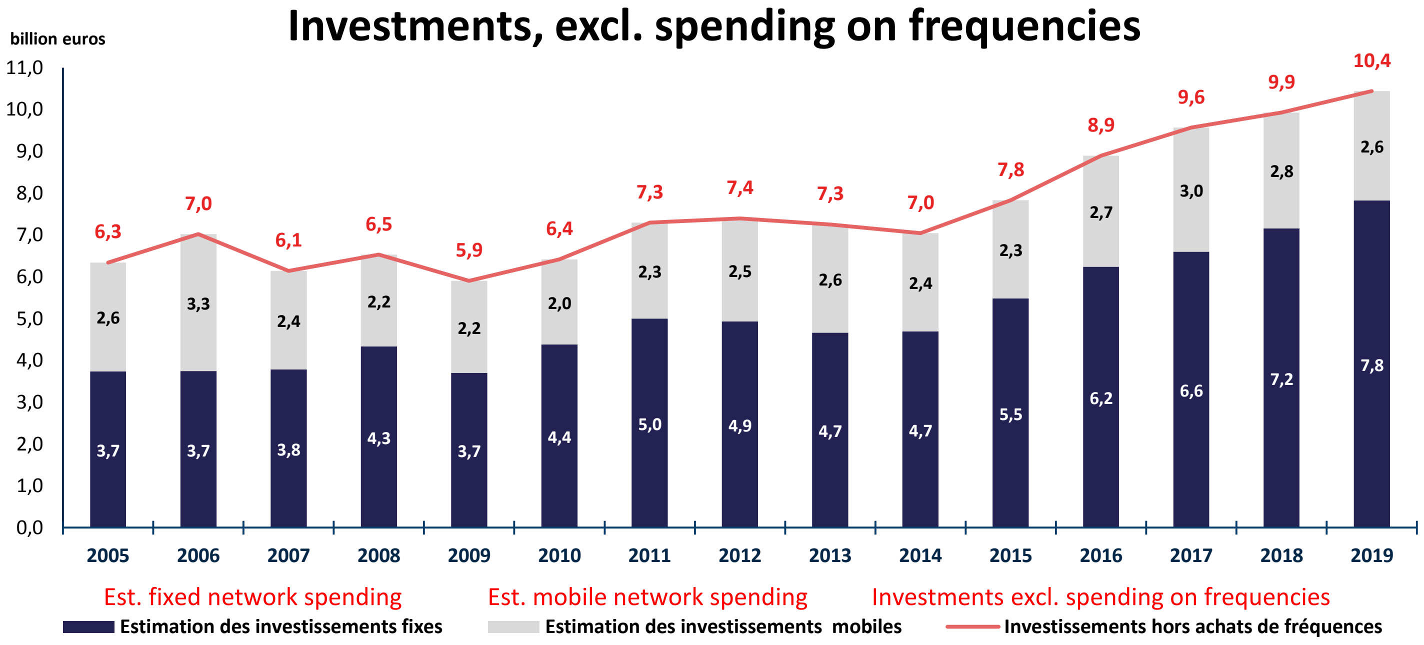
On mobile networks

Ongoing momentum in 4G rollouts, keeping pace with the objectives set in the New Deal

Aside from Government "white zone" programmes, more than 95% of operators' cell sites are now 4G capable

Investments: close to 50% increase in five years

Growth (+500 million euros in 2019) spurred by more than 400 million euros spent on FttH local loop deployments



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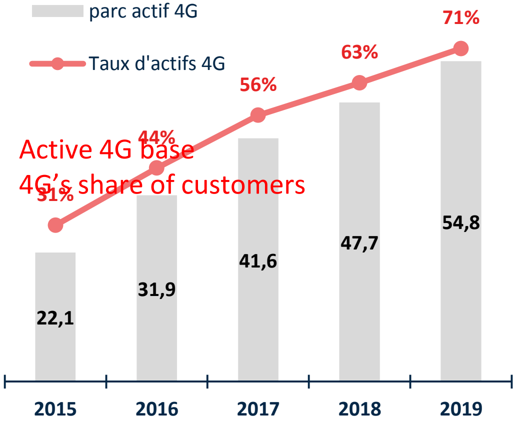
Usage and equipment: ongoing steady rise

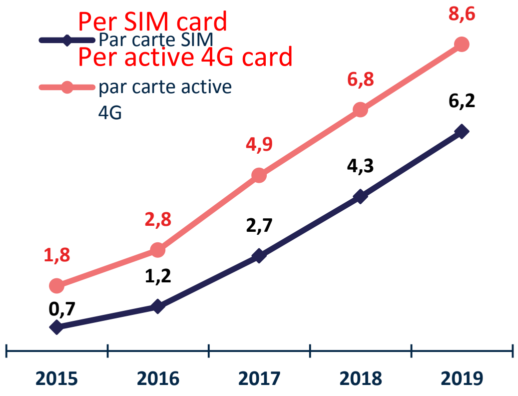
Number of active cards on 4G networks (million)*



Active 4G user base x2.5 since 2015

- More than 80% of residential smartphone owners active on 4G networks in June 2019**

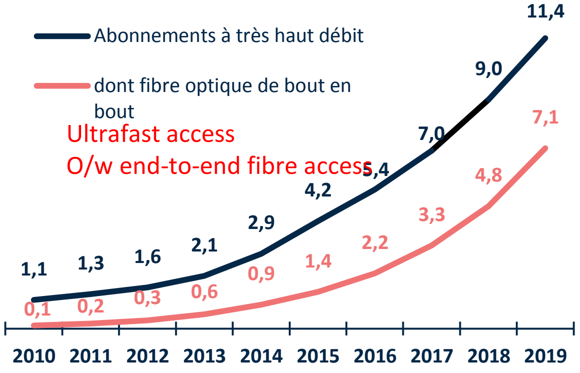
Average monthly mobile data consumption (Gb)*



Monthly mobile data traffic since 2015:

- x9 on SIM cards
- x5 for 4G users

Number of end-to-end superfast and optical fibre access lines (million)*



FttH subscriptions up x5 since 2015:

- x3 ultrafast subscriptions since 2015
- +2.3 M FttH subscriptions in 2019

* Data as of 31/12/2019
** Estimate

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Actions carried out this year

Several core initiatives for the sector

Fibre: the new infrastructure of reference

Confirmation of the regulatory framework's relevance

- Confirmation of the lasting nature of co-financiers' rights
- Promotion of this new modality for access in the new European Code

Guarantee of balanced environments and rollouts

- Monitoring compliance with legally binding FttH rollout commitments
- Opinion issued on 10 calls for EoI in local projects and examination of some 40 PIN offers
- Ongoing improvement in transparency over rollouts (maps)
- Upholding homogeneity of wholesale pricing nationwide
- Window opened for the 3.5 GHz band to enable use of high-speed radio access to accelerate the pace of ultrafast deployment in rural areas

Preparation for the next round of fixed market analysis

- Fibre: the new infrastructure of reference
- Non-discrimination guarantees made symmetrical
- Focus on quality of service
- Preparation for the transition from a copper to a fibre-based system

Building a truly competitive business market

Initially

A business market split between copper and very costly dedicated optical fibre LL, making little use of FttH networks

- Lack of competition in FttH products for businesses → need to develop a competitive wholesale activated FttH market for businesses
- Lack of access products designed to meet all of enterprises' needs on FttH networks → need to foster the emergence of better quality wholesale passive and activated solutions

Today

The market gradually embracing FttH to target the business market

- Growing momentum in the wholesale activated FttH market: arrival of three national payers (Kosc, Bouygues Telecom and SFR), strong increase in FttH lines eligible to supply at least one activated solution (85% in Q4 2019 vs. around 11% in Q1 2017)
- Wholesale products with guaranteed fault repair time of 10 hours and 4 hours introduced on some FttH networks
- Players have renewed their commitment (Bouygues) or announced upcoming market entry (Iliad)

Next market analysis

Goal written into the next round of market analysis

- The situation is evolving, even if distribution of market share is shifting very slowly
- This confirms the need to maintain the strategy of FttH-centric regulation in the next round of analysis

New Deal for Mobile: concrete progress in mobile connectivity

An unprecedented investment push to achieve nationwide mobile coverage

2019 sees the first fruits of the New Deal for Mobile introduced in 2018

- All operators have improved their 4G coverage nationwide
- Increased average speeds in rural areas (28 Mbps in 2019 vs. 14 Mbps in 2018)
- Development of indoor solutions and fixed 4G access products
- Deployment of first cell sites under the targeted coverage scheme (six Orders issued in 2018 and 2019)

Milestone deadlines in 2020

- Rendez-vous clause for the first Orders issued under targeted coverage scheme: in June and December
- Virtually all cell sites upgraded to 4G
- Coverage of priority transport corridors

Ongoing 4G rollouts after 2020

- Continuation of the targeted coverage scheme, with three deadlines in 2021 (March, July, December) involving some 700 sites
- In-vehicle coverage on priority transport corridors by 2022
- 4G coverage of the last “white areas” in 2022
- Deadlines for providing “good coverage” to the entire population starting in 2024, leading to increased network density
- Full coverage of railway lines in 2025
- NEW: strengthened 4G+ performance obligations (75% of cell sites in 2022)

Frequencies and mobile solutions for businesses

Giving businesses the means to be competitive and to innovate

2019-2020

Frequencies for ultrafast professional mobile networks

- Growing interest in vertical industries: nine expressions of interest received thus far by the window for 2.6 GHz TDD frequency allocations
- Three frequency licences awarded in late 2019 and early 2020

Ongoing

Supporting project owners of 26 GHz band trials

- Identification of 5G use cases: logistics, smart city, mobility, etc.
- Arcep has already awarded spectrum to 14 “open 5G trial platforms”, for a period of up to three years
- 5G trial networks are due to be operational by 1 January 2021

Ongoing

Developing the market for multi-network mobile plans for businesses

- Call issued to businesses, public sector players and operators

Award of new frequencies for 5G

The 3.4 – 3.8 GHz band is the core 5G band. Its deployment will pave the way for improved mobile services, more competitive business and thriving innovation

Early 2019

Preparation of the procedure

- Arcep in dialogue with local authority associations, verticals, operators
- Laying out Government objectives and procedure framework
- Public consultation on the call for candidates for 3.4 – 3.8 GHz band awards

Late 2019

Definition of a two-part award procedure

- Obligations for frequency use (notably: mobile coverage with rapidly improved speeds, gradual 5G deployment)
- A two-part procedure: award of 50 MHz in exchange making optional commitments, and auction to obtain additional frequencies

2020

310 MHz frequency award

- Four candidates made the optional commitments in exchange for a block of 50 MHz each
- Action for the award of the remaining 110 MHz to begin in late September
- Commercial rollouts will be performed on operators' initiative

Mobile network sharing (1/2)

- **Widespread active network sharing** in very rural areas. Also implemented by two operators in medium-density areas.
- **Passive sharing:** several mobile operators can install their equipment on the same cell site. This system is widely used across the country.

Metro areas > 200k inhab.

~42% of the pop.
~ 29% of cell sites

4 networks deployed
No active sharing

Medium-density areas

~57% of the pop.
~ 59% of cell sites

3 networks deployed
Active sharing between Bouygues Telecom - SFR

Very rural areas

~1% of the pop.
~ 12% of cell sites

1 network deployed
sharing between all four operators
Various sharing schemes in place in these areas

More than **45%** of cell towers nationwide currently host several operators' equipment (passive sharing)

Mobile network sharing (2/2)

Promoting effective infrastructure-based competition

2016

Application of guidelines for network sharing between mobile operators

2018-2019

Sharing obligations to achieve nationwide coverage

- Implementation of network sharing under the New Deal for Mobile to ensure coverage in lower density areas
- Sharing obligations also written into the terms of 3.5 GHz frequency licences

Tomorrow

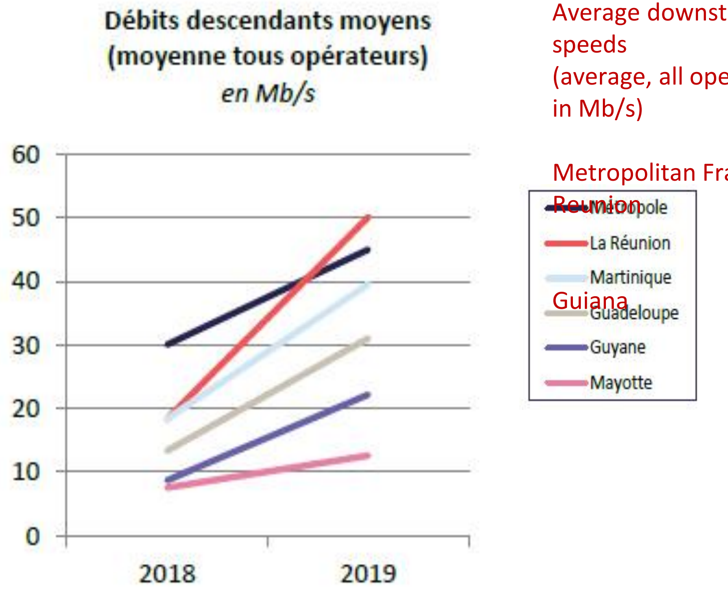
Arcep closely monitors mobile network sharing operations

- Market players continue to implement various sharing schemes: 2G/3G/4G sharing and 2G/3G roaming for Free Mobile
- Ongoing 4G rollouts and the advent of 5G calls for a certain degree of pragmatism, subject to the imperatives of balanced regulatory

The situation in the overseas territories

Mobile market

- **Deployments progressing:** Arcep’s first field measurement campaigns in 2018 and 2019 revealed a significant improvement in quality of service
- **Preparation for the award of new frequencies** (700 MHz and 3.5 GHz) to improve existing services and develop new ones (2020-2021)



Fixed market

- **The FttH rollout momentum in Metropolitan France is carrying over to the overseas departments and territories,** with projects from both public and private sector players. Arcep working to prevent any operationally and economically inefficient overlapping deployments from taking place.
- **Dedicated support for rebuilding networks** damaged by Hurricane Irma in Saint-Martin and Saint-Barthélemy.

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Mobilising the crowd to create a virtuous cycle of investment in the sector

Strengthening information gathering tools for better informed users and regulatory action

Concrete manifestations of the co-construction approach

- 2020: publication of the first data measured by third parties on the "mon réseau mobile" (my mobile network) tool
- Implementation of an "Access ID Card" on ISPs' boxes to more accurately measure fixed internet QoS
  - First box outfitted with the API in July 2021
  - Deployment in 95% of operators' boxes by July 2022

Development of an unprecedented fixed internet project: "ma connexion internet" (my internet connection)

- Know which internet access technologies are available at any given address
- Be better informed about fibre rollouts
- Objective: a complete version by autumn

Scorecard and ongoing development of the "J'alerte l'Arcep" user reporting platform

- Improving user satisfaction with their operators
- Identification of areas to watch
- Evolution of the "J'alerte l'Arcep" tool over the course of 2020

Pro-investment regulation confirmed in Europe

Connectivity as a prerequisite for industrial performance across Europe

Preparation for application of the new European Electronic Communications Code

- BEREC guidelines being adopted
- France's own fibre and co-investment stipulations incorporated into the new European framework
- Special attention given to investment in very high capacity networks
- Transposition of the new regulatory framework by decree

The Commission's digital agenda up to 2025 in keeping with the objectives defined in 2016 for a European Gigabit Society

- In late 2019, BEREC published its first work on the role of regulation in enabling investment in 5G, and 5G's potential impact on regulation. Ongoing dialogue with stakeholders in 2020.
- Commission's preoccupation with post-5G: first forward-looking reports to ensure Europe remains competitive on the world stage.

Environmental issues and challenges: a new chapter in regulation

“Future networks” cycle of inquiry leads to concrete steps by the regulator

Crucial need for the regulator’s actions to take societal issues into account

- First work as part of its “Future networks” cycle of inquiry begun in 2018, nine briefs published
- Social acceptability issue, need to deepen the dialogue with civil society

Regulation that factors in digital technology’s environmental impact and sustainability

- Collecting information on telecoms’ (networks, devices) environmental impact from operators
- Launch of the “Achieving digital sustainability” platform: calling on stakeholders to contribute to the discussion and help co-author the first report
- Contribution to national and international work being done on telecoms’ environmental footprint
- Co-chairing the BEREC working group devoted to sustainability in the digital sector

Thank you for your attention

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Annex

The business market

Creating a truly competitive business market (1/2)

Using FttH for every type of application: creating a mass fibre market for SMEs

Access to fibre products with increased QoS: wider range of wholesale products being developed on FttH networks

Customers
Residential
Non residential (freelancers, artisans, SoHo/SME/MSB/Big Business, government agencies, associations)

Retail products
Consumers
Micro-business
Enterprises

Retail access
General access
High quality access (GRT 4h + guar. speeds)

Infrastruc-tures
FttH networks (FttH, FttH+, FttE)
Fibre LL net.
Copper network

Orange SFR ByT Kosc PIN, infrastructure operator Specialised retail market operator

Action de l'Arcep **Infrastructures** **Retail** **Excl. business market**

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Creating a truly competitive business market (2/2)

Leveraging passive access to local loops to achieve dynamic activated markets

Ubiquitous fibre access: a galvanised activated wholesale market