Annual financial report

2019 Universal registration document



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2019 Universal Registration Document

including the Annual Financial Report

Person responsible for the Universal Registration Document

Stéphane Richard, Chairman and Chief Executive Officer.

Statement of the person responsible for the Universal Registration Document

I hereby certify, after having taken all reasonable measures to this effect that the information in this Universal Registration Document is, to the best of my knowledge, in accordance with the facts and makes no omission likely to affect its import.

I certify, to the best of my knowledge, that the financial statements have been prepared in accordance with applicable accounting standards and give a fair view of the assets, liabilities, financial position, and profit or loss of the Company and all the undertakings included in the consolidation, and that the Management Report, whose correspondence table indicating its content is included on page 402 of this Universal Registration Document, presents a fair review of the development and performance of the business and financial position of the Company and all undertakings included in the consolidation, and describes the main risks and uncertainties to which they are exposed.

I have received a completion letter from the Statutory Auditors stating that they have audited the information contained in this Registration Document relating to the financial position and statements and that they have read this document in its entirety.

The Statutory Auditors have reviewed the historical financial information in this document and have issued reports, included on pages 288 et seq.

Without qualifying their opinion on the financial statements, in their report on the consolidated financial statements for the year ending December 31, 2019, set out on page 288 of this document, the statutory auditors drew the reader's attention to the changes in accounting method set out in Note 2.3 "New standards and interpretations applied from January 1, 2019" to the consolidated financial statements regarding the initial application of IFRS 16 "Leases."

Paris, April 20, 2020

Chairman and Chief Executive Officer **Stéphane Richard**



The Universal Registration Document was filed on April 20, 2020, with the AMF as the competent authority under Regulation (EU) 2017-1129, without prior approval in accordance with Article 9 of said regulation.

The Universal Registration Document can be used for the purpose of offering financial securities to the public or admitting financial securities for trading on a regulated market, if it is supplemented by an offering circular relating to the securities and, where applicable, a summary and all amendments made to the Universal Registration Document. The document thus supplemented is approved by the AMF in accordance with Regulation (EU) No. 2017-1129.

Copies of the Universal Registration Document are available from Orange at its registered office.

This document is also available on Orange's website: www.orange.com and on the AMF website: www.amf-france.org.

Reports included in the Universal Registration Document

This Universal Registration Document includes:

- the Annual Financial Report, prepared pursuant to Article L. 451-1-2 of the French Monetary and Financial Code;
- the Management Report of the Board of Directors to the Shareholders' Meeting, prepared pursuant to Articles L. 225-100 et seq. of the French Commercial Code;
- the Board of Directors' Report on Corporate Governance, prepared pursuant to Article L. 225-37 of the French Commercial Code.

Correspondence tables between the information legally required in these reports and the content of this document are provided in Section 7.1 *Correspondence tables*.

Information incorporated by reference

Pursuant to Article 19 of Regulation (EU) 2017-1129, the following information is incorporated as reference into this Universal Registration Document:

- the consolidated financial statements, the annual financial statements and the corresponding audit reports, the analysis of the Group's financial position and earnings as well as other information on the Company's financial statements are provided on pages 74 to 286 of Registration Document D. 19-0182;
- the consolidated financial statements, the annual financial statements and the corresponding audit reports, the analysis of the Group's financial position and earnings as well as other information on the Company's financial statements are provided on pages 78 to 277 of Registration Document D. 18-0260.

The references to websites contained in this document are provided for reference purposes only; the information contained on these websites is not incorporated as reference in this document.

Forward-looking statements

This document contains forward-looking statements, including in Sections 1.2 Market, strategy and business model, 1.4 Operating activities, 3.1 Analysis of the Group's financial position and earnings (in particular in Sections 3.1.1 Overview) and 3.2.2 Outlook.

Although Orange believes these statements are based on reasonable assumptions, these forward-looking statements are subject to numerous risks and uncertainties and there can be no assurance that the anticipated events will occur or that the objectives set out will actually be achieved.

The important factors that could cause Orange's actual results to differ materially from the objectives set out are described in Section 2.1 *Risk factors*. Other than required by law (in particular pursuant to Article 223-1 et seq. of the AMF General Regulations), Orange does not undertake any obligation to update forward-looking statements.

Documents available

All documents made available to shareholders under legal conditions can be viewed at Orange's registered office, 78 rue Olivier de Serres in Paris (15th arrondissement), in France.

In addition, Orange's Articles of Association are available on the website www.orange.com, under the heading *Group/Governance*.

Orange's consolidated financial statements for the last three fiscal years are also available on the www.orange.com website under the *Investors/Results* and *presentations* heading and at www.info-financiere.fr.

In this document, unless otherwise indicated, the terms "the Company" and "Orange SA" refer to Orange, société anonyme (French public limited company), and the terms "Orange," "the Group" and "the Orange Group" refer to the Orange company together with its consolidated subsidiaries.

Overview of the Group and of its business

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Overview

This chapter contains forward-looking statements about Orange, particularly in Sections 1.2 *Market, strategy and business model* and 1.4 Operating activities. These forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to

differ materially from the results anticipated in the forward-looking statements. The most significant risks are detailed in Section 2.1 *Risk factors*.

1.1 Overview

Orange is one of the world's leading telecommunications operators with revenue of €42 billion and 147,000 employees worldwide, including 87,000 in France, on December 31, 2019. The Group served 266 million customers at December 31, 2019, of which 207 million mobile customers and 21 million fixed broadband customers. The Group operates in 26 countries. Orange is also a leading provider of global IT and telecommunication services to multinational companies, under the brand Orange Business Services. In December 2019, the Group presented its new strategic plan, Engage 2025, which looks to

reinvent its operator model, guided by exemplary social and environmental conduct. Whilst accelerating in growth areas and placing data and Al at the heart of its innovation model, the Group aims to be an attractive and responsible employer, adapted to emerging professions.

Orange SA has been listed since 1997 on Euronext Paris (symbol: ORA) and on the New York Stock Exchange (symbol: ORAN).

1.1.1 Company identification

Company name: Orange

Place and registration number:

Paris Trade and Companies Register (Registre du commerce et des sociétés) 380 129 866

APE (principal activity) code: 6110Z

Legal Entity Identifier (LEI): 969500MCOONR8990S77

Date of incorporation and term:

Orange SA was incorporated as a French société anonyme (a public limited company under French law) on December 31, 1996 for a 99-year term. Barring early liquidation or extension, the Company will expire on December 31, 2095.

Registered office:

78, rue Olivier de Serres, 75015 Paris, France Telephone: + 33 (0) 1 44 44 22 22

Website: www.orange.com Legal form and legislation applicable:

Orange is governed by French corporate law subject to specific laws governing the Company, notably Act 90-568 of July 2, 1990 on the organization of public postal services and France Télécom, as amended.

The regulations applicable to Orange as a result of its operations are described in Section 1.7 Regulation of activities.

Purpose:

"As a trusted partner, Orange gives everyone the keys to a responsible digital world."

The purpose of Orange unveiled on December 10, 2019 is part of the new Strategic Plan, Engage 2025, which is guided by exemplary social and environmental conduct. See chapter 4 *Non-financial performance*, Section *The Purpose of Orange*.

The addition of the purpose in Orange's Articles of Association will be submitted to the Shareholders' Meeting of May 19, 2020.

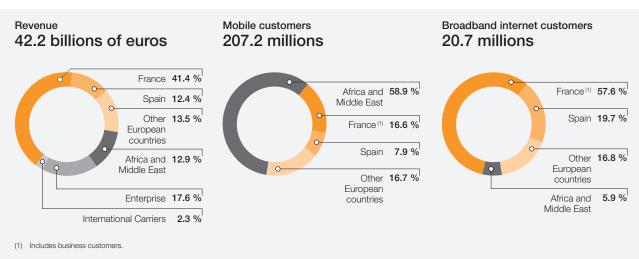
Corporate scope:

The Company's corporate scope, in France and abroad, specifically pursuant to the French Postal & Electronic Communications Code, shall be:

- to provide all electronic communication services in internal and international relations;
- to carry out activities related to public service and, in particular, to provide, where applicable, a universal telecommunications service and other mandatory services;
- to establish, develop and operate all electronic communications networks open to the public necessary for providing said services and to interconnect the same with other French and foreign networks open to the public;
- to provide all other services, facilities, handset equipment, electronic communications networks, and to establish and operate all networks distributing audiovisual services, and especially radio, television and multimedia broadcasting services;
- to set up, acquire, rent or manage all real-estate or other assets and businesses, to lease, install and operate all structures, businesses, factories and workshops related to any of the purposes defined above:
- to obtain, acquire, operate or transfer all processes and patents related to any of the purposes defined above;
- to participate directly or indirectly in all transactions that may be related to any of the purposes defined above, through the creation of new companies or enterprises, the contribution, subscription or purchase of securities or corporate rights, acquisitions of interests, mergers, partnerships, or by any other means;
- and more generally, all industrial, commercial and financial transactions, or transactions involving movable or fixed assets, that may be related directly or indirectly, in whole or in part, to any of the aforementioned corporate purposes, or to any similar or related purposes, or to any and all purposes that may enhance or develop the Company's business.

1.1.2 Group's main footprint and key figures





1.1.3 Organizational structure

Orange SA is the parent company of the Orange group and also carries the bulk of the Group's activities in France.

The list of the main consolidated entities of the Orange group on December 31, 2019 is provided in Note 19 to the consolidated financial statements (Section 3.3).

The Group's organizational structure is reflected in the composition of the Executive Committee (see Section 5.1.3).

Geographical divisions

- → France
- → Spain
- → Europe
- → Africa and Middle East

Cross-cutting divisions

- → Orange Business Services
- → Wholesale and International Networks
- → Mobile Financial Services, Orange Bank and Orange Money
- → Orange Cyberdefense
- → Orange Content

Cross-cutting functions

- → Finance
- → Group transformation
- → General Secretariat
- → Strategy
- → Technology and Innovation
- → Communication and Brand
- → Human Resources
- → CSR, Diversity, Partnerships and Solidarity

1.1.4 History

Orange, formerly France Télécom, is France's incumbent telecommunications operator. The Group has its origins in the Ministry for Mail, Telegraphs and Telephone, later to become the General Directorate of Telecommunications, which in 1990 was accorded the status of independent public entity and, on January 1, 1991, renamed France Télécom. On December 31, 1996, France Télécom became a société anonyme (limited company). In October 1997, France Télécom shares were listed on the Paris and New York stock exchanges, allowing the French government the disposal of 25% of its shares to the public and Group employees. Subsequently, the public sector gradually reduced its holding to 53%. The law of December 31, 2003 authorized the transfer of the Company to the private sector and between 2004 and 2008 the public sector sold a further 26% of the capital, and then again 4% in 2014 and 2015. On December 31, 2019, the French State retained 22.95% of the share capital, held either directly or jointly with Bpifrance Participations.

France Télécom's area of activity and its regulatory and competitive environment have undergone significant changes since the 1990s. In a context of increased deregulation and competition, the Group has, over that period, undertaken several strategic investments, in particular the acquisition of the mobile operator Orange Plc and its brand created in 1994, and the acquisition of a controlling stake in Poland's incumbent operator. Telekomunikacia Polska.

Since 2005, the Group has expanded strategically in Spain by acquiring the mobile operator Amena, then in 2015 the fixed-line operator Jazztel.

Over the last twelve years, the Group has pursued a policy of selective, value-creating acquisitions by concentrating on the markets in which it is already present. Mainly targeting the emerging markets of Africa and the Middle East where the Group is historically present (in particular Cameroon, Côte d'Ivoire, Guinea, Jordan, Mali and Senegal), this strategy was implemented through the acquisition of Mobinil in Egypt (2010) and of Méditel in Morocco (2015) and more recently by the acquisition of a number of African operators (in Liberia, Burkina Faso, Sierra Leone and the Democratic Republic of the Congo) (2016).

It also resulted in the joint venture with Deutsche Telekom that combined

UK activities under the EE brand (2010) followed by the disposal of EE in 2016, as well as the disposal of Orange Suisse (2012), Orange Dominicana (2014), Orange Armenia (2015) and Telkom Kenya (2016).

As part of its corporate services and since the acquisition of Equant in 2000, Orange has been pursuing its strategy of becoming a global player in digital transformation and has accelerated its shift to services through a number of targeted acquisitions, notably in the fields of cyber security and Cloud services, such as those of Business & Decision and Basefarm in 2018 and SecureLink and SecureData in 2019.

Business diversification is one of the major pillars of Orange's strategy. The acquisition of Groupama Banque, now Orange Bank, in 2016, which launched its new banking offer in November 2017, illustrates the goal of diversifying into the mobile financial services sector.

In 2006, Orange became the Group's main brand for Internet, television and mobile telephony services in the majority of countries where it operated, most importantly France and Spain. In 2013, the Company adopted the Orange name, offering the full range of its telephony services in France under the Orange brand. This policy continued with the adoption of the Orange brand by Telekomunikacja Polska in 2013, by Mobinil in Egypt, Mobistar in Belgium and Méditel in Morocco in 2016, and by several of the Group's subsidiaries in Africa in 2017. Corporate services in the world are offered primarily under the brand Orange Business Services.

In December 2019, the Group presented its new strategic plan, Engage 2025, which looks to reinvent its operator model, guided by exemplary social and environmental conduct. For more information on Orange's strategic plan and its business model, see Section 1.2 *Market*, *strategy and business model*.

1.1.5 Selected financial information

The selected financial information presented below, relating to the years ending December 31, 2015, 2016, 2017, 2018 and 2019 is extracted from the consolidated financial statements audited by Ernst & Young Audit and KPMG SA.

The selected financial information relating to the years ended December 31, 2019, 2018 and 2017 must be read together with the Group's consolidated financial statements and Management Report for those years.

The information provided thereafter for the years 2017 and 2016 have been restated in accordance with IFRS 15. The information provided thereafter for the year 2015 has not been restated.

Consolidated income statement

Amounts in accordance with IFRS	2019	2018	2017	2016	2015
(in millions of euros, except for per share data)					
Revenue	42,238	41,381	40,859	40,708	40,236
Operating Income	5,927	4,829	4,778	3,917	4,742
Finance cost, net	(1,254)	(1,362)	(1,715)	(2,097)	(1,583)
Net income of continuing operations	3,226	2,158	2,011	869	2,510
Net income (per share) of discontinued operations	-	0	29	2,253	448
Net income (attributable to owners of the parent company)	3,006	1,954	1,843	2,813	2,652
Earnings per share attributable to owners of the parent company					
Net income of continuing operations					
basic ⁽¹⁾	1.03	0.63	0.58	0.10	0.72
diluted (1)	1.02	0.62	0.58	0.10	0.72
Net income (per share) of discontinued operations					
basic (1)	-	0.00	0.01	0.85	0.17
diluted (1)	-	0.00	0.01	0.85	0.17
Net income					
basic (1)	1.03	0.63	0.59	0.95	0.89
diluted (1)	1.02	0.62	0.59	0.95	0.89

⁽¹⁾ Earnings per share calculated on a comparable basis.

Consolidated statement of financial position

Amounts in accordance with IFRS (in millions of euros)	2019	2018	2017	2016	2015
Intangible Assets (1)	42,381	41,247	41,250	41,581	41,398
Property, plant and equipment, net	28,423	27,693	26,665	25,912	25,123
Total assets	106,303	96,592	95,349	95,411	91,430
Net financial debt (2)	25,466	25,441	23,843	24,444	26,552
Equity attributable to the owners of the parent company	31,727	30,669	30,975	31,241	30,907

Consolidated statement of cash flows

Amounts in accordance with IFRS (in millions of euros)	2019	2018	2017	2016	2015
Net cash provided by operating activities	10,159	9,506	10,174	8,750	9,527
Net cash used in investing activities	(9,370)	(8,552)	(7,941)	(4,879)	(9,406)
Purchase of property, plant and equipment					
and intangible assets	(8,422)	(7,642)	(7,527)	(8,492)	(7,771)
Net cash used in financing activities	55	(1,131)	(2,738)	(1,883)	(3,924)
Cash and cash equivalents in the closing balance	6,481	5,634	5,810	6,355	4,469

Employees

	2019	2018	2017	2016	2015
Number of employees (active employees at end of period)	146,768	150,711	151,556	155,202	156,191

Dividends

(in euros)	2019	2018	2017	2016	2015
Dividend per share distributed for the fiscal year	0.70(1)	0.70	0.65	0.60	0.60

⁽¹⁾ Subject to the approval of the General Shareholders' Meeting of May 19, 2020.

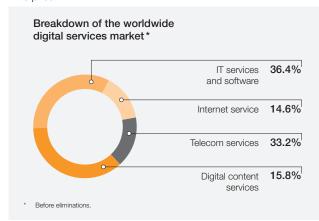
⁽¹⁾ Includes goodwill and other intangible assets.(2) The components of net financial debt are described in Note 12.3 to the consolidated financial statements.

1.2 Market, strategy and business model

1.2.1 The global digital services market

The digital services market is a subsector of the broader Information and Communication Technologies (ICT) sector. It combines IT services and software, telecoms services, digital content TV and video services, and Internet services. On the other hand, it does not include network equipment (1) and devices which are intermediate goods that automatically form part of the added value. The digital services market is an essential component of economic growth and accounts for significant value creation via the distribution of new services and new uses

With growth of 5.1% in 2019, the global digital services market amounts to €3,527 billion and is continuing to grow steadily. The growth of this market is driven by the dynamic Internet services sector (up 13.7% in 2019) and IT (up 7.3%) and digital content (up 4.2%). Revenue from telecoms services stagnated at €1,171 billion (+0.1%)(2). For a presentation of the B2B global digital services market, see Section 1.4.5 Enterprise.



Source: IDATE Digiworld Yearbook 2020

Market growth by region (2)

North America remains the top region in the world in the digital services market with 35.3% of worldwide revenue, ahead of the Asia-Pacific region which is catching up at 30.6%, driven by its economic and industrial development. Europe comes next with 24.8% of the market while Latin America (5.0%) and Africa & Middle East (4.3%) together account for close to 10% of the worldwide market.

In Africa, the digital services market is estimated to have grown by slightly more than 8% in 2019. With Africa accounting for 25% of the world's population in 2050, compared with 17% in 2020, the potential of the Africa & Middle East region, where the Orange Group has a strong presence, is huge: network deployment by operators is still ongoing, the digital ecosystem is being constructed and is emerging by adapting to local conditions to integrate information technologies in all sectors of the economy (health, sales, agriculture, government, mobile payment, etc.). Two-thirds of the population own a smartphone, which will represent almost 700 million smartphones in circulation in Sub-Saharan Africa in 2025, establishing Africa as a high-growth region for connectivity and digital services (source: StatsSSA-GSMA2019)(3).

Key social and environmental trends up to 2025

At the demographic level, a dramatic increase in the African population is expected in the coming years as large numbers of young people will reach adult age.

With the increase in the number of extreme weather and climatic events, the immediate impacts of climate change have become more tangible. The Tech industry, which uses a huge amount of data, is directly concerned: the explosion in data use could consume close to 20% of the world's electricity by 2025 (source: ICT Footprint EU, European Framework Initiative for Energy & Environmental Efficiency in the ICT Sector) (4).

Moreover, by 2025, the major technological developments (Al, Data, Cloud, 5G, etc.) that are transforming all industries will affect all business lines: 65% of current students will have a job in 2025 that does not yet exist (source: Les Echos, Dec. 10, 2018, based on a study by Microsoft and The Future Laboratory) (5). Hence companies will face new challenges in terms of skills and expertise.

Key changes in telecoms services

Network development and growth in telecommunication uses worldwide

While in Africa & the Middle East, Internet access networks are developing mainly via the deployment of 4G mobile networks, in Europe network investments concern very high-speed access, with the development of fiber for landlines, the improvement of the performance of 4G mobile networks and the first commercial 5G launches. At the same time, operators are upgrading their networks to make them more agile and simpler to manage (thanks to the virtualization of network functions and automation).

Usage is continuing to grow under the combined effect of the deployment of new networks, the increase in capacity of existing networks and the penetration of smartphones. The dramatic rise in Internet uses is mainly due to the development of video and Internet services, accessible via multiple screens (computers, smartphones, tablets, connected TVs). Moreover, the development of 5G technology will enable the development of new uses, both for the general public (immersive videos, Cloud gaming) and for businesses, for which 5G will be a real disruption (optimization of production times, remote control of machines, predictive maintenance, etc.).

Consumer and company expectations

Connectivity has become an imperative. Internet has become vital to people for a wide range of services in daily life, and essential to businesses for their development. Customers are becoming increasingly more demanding as regards coverage and continuous quality across the country.

In this context, consumers have strong expectations on the quality and reliability of the communication networks, but also on the protection of their personal data and on having a trusted relationship with their operator. While customers are increasingly concerned about the use of their data, cyber security is becoming a key issue for all: individuals, businesses and governments. According to Gartner, the cyber-security

Notably: the network equipment of telecoms operators, the servers of IT companies, the production and broadcasting equipment of television industry players.

Source: Idate - Digiworld yearbook 2020. https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/GSMA-The-Mobile-Gender-Gap-Report-2019.pdf

https://ictfootprint.eu/en/webinar/decreasing-ict-energy-consumption-%E2%80%93-power-data-centres-and-people %E2%80%99s-will https://www.lesechos.fr/idees-debats/cercle/opinion-les-nouveaux-metiers-du-Ereelance-en-2025-237634

market is estimated to reach USD 175 billion in 2022 (source: Gartner – Forecast: Information Security and Risk Management, Feb. 2019)⁽¹⁾.

In addition to these expectations, society if placing increasingly strong demands on businesses: more transparency, more commitments to major environmental issues, more regional and territorial rooting.

Transformation of the telecoms industry

In this context, the telecoms industry is changing. OTT operators continue to get a great return from the digital services that they offer on the consumer and enterprise markets, becoming increasingly more prominent in the field of communication services. Furthermore, the large digital operators are developing their own infrastructures by

building Data centers and international networks. These infrastructures, which were initially built for their own needs, are now also promoted on the enterprise and wholesale markets.

At the same time, European operators must invest massively in networks of the future to meet the increasing demand for connectivity, against the backdrop of intense competition and stringent regulatory requirements. This imposes a significant financial constraint on the entire industry, leading operators to make structuring decisions in their choice of telecoms infrastructure. In order to better capitalize on them, operators have to further share their networks, and even sell part or all of their infrastructure to financial funds and/or to infrastructure companies.

1.2.2 The Orange group strategy

On December 4, 2019, Orange launched Engage 2025, its new strategic plan looking forward to 2025. This new growth plan follows on from the *Essentials2020* plan launched in 2015, which has enabled Orange to generate revenue and EBITDA growth again.

Engage 2025, which reconciles growth with responsibility, is guided by exemplary social and environmental conduct and is based on four ambitions:

- 1. Reinventing Orange's operator model;
- 2. Accelerating in growth areas;
- 3. Placing data and AI at the heart of its innovation model;
- 4. Co-creating a future-facing company.

As announced at the Shareholders' Meeting of May 21, 2019, the Group has also adopted a Purpose, unveiled on the occasion of the launch of the Engage 2025 Plan:

"As a trusted partner, Orange gives everyone the keys to a responsible digital world".

The Group's Purpose was co-developed with the support of all its internal and external stakeholders: employees, employee representatives, Board members, NGOs, customers, authorities, investors and opinion leaders. It will be submitted for shareholders' approval at the Shareholders' Meeting of May 19, 2020, then enshrined in Orange's Articles of Association. For more information, see chapter 4 Non-financial performance, Section The Purpose of Orange.

A strong commitment guided by social and environmental responsibility

The Group wants to foster a business model that is committed and accountable to its employees, its customers and society as a whole.

Commitment to inclusion

Of the 4 billion people worldwide who do not have Internet access, 3.2 billion are covered by networks but do not use Internet, either because they do not have the means to do so or because they have not received any training. The digital divide is therefore not just a question of network coverage. In addition to its ambitions for the digital coverage of territories, Orange undertakes to train and support the digitally excluded so that everybody can reap the benefits of the digital revolution. By 2025, it is Orange's aim to open an Orange Digital Center in all the regions where the Group is present and in its operational divisions in France, to offer packages for low income households in Europe – like the *coup de pouce* in France and *gigas solidarios* in Spain, and to pursue its efforts to offer increasingly affordable smartphones in Africa & the Middle East.

Environmental commitment

In response to the challenge of climate change, the Group has set the goal of meeting the GSMA targets 10 years earlier by being carbon neutral by 2040, in spite of the huge surge in data on networks. To achieve this, it will increasingly use renewable energies, which should represent over 50% of its electricity mix by 2025, and unprecedented efforts in terms of energy efficiency. To reduce its network energy consumption, Orange also plans to reinforce its *Green ITN* program, ensure a 10-fold increase in the number of electrified vehicles in France and rely more on the circular economy with, for example, eco-designed products, second-hand network equipment and more second-hand terminals available in its stores.

For more information, see Section 2.2.4.4.1 *Orange's environmental commitment*.

Engage 2025, four bold ambitions to tackle a changing ecosystem

Reinventing its operator model by capitalising on its leading position in networks

The telecoms industry is changing. The Group will thus rethink its operator model in Europe, by looking for new sources of differentiation to offer wholesale and retail customers enhanced fixed and mobile connectivity, and by consolidating its leadership in more open and higher-valued infrastructures.

Orange firstly seeks to offer its wholesale and retail customers an enhanced connectivity based on two pillars: speeds up to 10 times faster and new related services.

On the fixed network, whether through its own infrastructure or the use of third-party networks, Orange aims to sell its FTTH packages to more than 65 million households in Europe by 2023, to assert its leadership position in Europe in fiber. At the same time, Orange will seek to:

- continuously improve home connectivity quality (Homelan): boxes and WiFi will continue to improve and Orange will support its customers in optimizing their home network;
- offer new services around the home of the future by leveraging the gradual increase in household speeds: Orange plans to upgrade its TV experience to OTT, to meet the changing uses of contents and to continue its development of security packages, or even remote assistance.

On the mobile network, 5G looks set to create disruption in the history of telecoms. After an initial commercial launch in Romania in

November 2019, the Group aims to start 5G deployment in 2020 in most of the European countries where the Group has a presence. Once it has been launched, 5G will allow for up to 10 times faster connection speeds. From 2023, when the core networks will move to 5G, Orange aims to offer lower latency and to implement network slicing, i.e. prioritizing certain network slices to cover critical usage or specific needs. The technical performance of the 5G technology will enable the emergence of many new uses, both for the general public (immersive videos, Cloud gaming) and for businesses for which 5G will be a catalyst of digital transformation (optimization of production times, remote control of machines, predictive maintenance, etc.). Orange has already started to co-design these future uses with its B2B customers and aims to inaugurate an open co-innovation center in Châtillon in 2020 dedicated to new 5G uses.

To reinvent its business model, Orange also aims to optimize, develop and derive greater value from its infrastructure, while always keeping control over its strategic assets.

For FTTH, Orange will continue to invest in its own infrastructures, in order to fulfill its commitments outside of very densely populated areas, in France for example (see Section 1.3 Significant events). However, to continue its industrial effort in certain areas, while controlling its investments, Orange could link up with partners. Thanks to the pooling, under Orange Concessions, of the 4 million connections of the Public Initiative Networks (PIN) that belong to local authorities and for which Orange is the concession holder, Orange may seize potential opportunities for growth or consolidation of its position on this market. In Spain and Poland, Orange also plans to share future FTTH deployments with other operators via FiberCos, potentially involving third-parties.

At the same time, Orange will continue to optimize its copper network in France, very gradually, so as to support all network users in their transition to fiber. After an initial experimental phase, the decommissioning of copper will begin in 2023 and is expected to end in 2030.

To optimize the deployment of its mobile infrastructure, particularly in 5G, in terms of pace, coverage and financial capacity, Orange plans to rely on RAN-sharing agreements, while maintaining areas of differentiation, in keeping with the agreements already existing in Poland and Romania, and those signed in 2019 in Spain and Belgium (see Section 1.3 Significant events).

At the same time, to optimize the directly owned 40,000 towers of its mobile network in Europe, Orange will create in most European countries *TowerCos*, i.e. entities dedicated to the management of towers, with three key objectives: improving operational efficiency and optimizing mobile investments, increasing the co-location rate, while maintaining Orange's competitive advantage, and finally ensuring better understanding of and highlighting the quality and value of these assets. Orange plans to retain control of these entities in all European countries where they are created. The first works are scheduled in 2020 in France and in Spain. Eventually, the merger of all or part of these local TowerCos, under a European TowerCo, in which Orange will retain majority control, will be considered in order to seize opportunities for consolidation of the tower market at the European level.

Accelerating its development in three areas of growth: Africa & Middle East, B2B services and financial services.

Making Orange the benchmark digital operator in Africa & Middle Fast

With a presence of more than 20 years in Africa & Middle East, Orange has significantly developed its activities there: in 10 years, the Africa

& Middle East region more than doubled its share of the Group's revenue. Orange aims to become the benchmark digital operator in Africa & Middle East.

To achieve this, the Group will firstly leverage the growth of mobile data driven by the rise in the smartphone penetration rate and 4G deployment. In 2020, Orange will thus have deployed 4G in almost all countries and will use RAN-sharing agreements and innovative technologies (lighter masts for example) to extend its coverage in the rural areas. Moreover, Orange aims to reinforce its multi-service strategy. The target is that multi-services will account for 20% of the region's revenue by 2025. In financial services, Orange Money aims to generate about 900 million euros of revenue in 2023 and, at the same time, continue to develop its offers of contents, e-health and energy. The Group's target for the period 2020-2023 is an annual growth rate of its revenue of about 5% across the region.

Accelerating the development of IT services for B2B customers and scale up cyber security

With Essentials 2020, the Group is well on track in its shift to IT services, which now accounts for 1/3 of its B2B revenue. To address the surge in the demand from businesses for on-demand and virtualized connectivity services (such as SD-WAN), Orange intends to accelerate the transformation of its B2B business. The Group aims to continue to take advantage of the convergence of telco/IT businesses, and to maintain its connectivity leadership by focusing on network virtualization, fiber and 5G. At the same time, Orange aims to continue its development in integration services to offer a comprehensive IT ecosystem to its customers: data analytics to support companies in their digital transformation; Cloud services and in the near future, edge computing, a key foundation for the digital revolution underway, and smart mobility and IoT to deliver on all the promises of 5G and edge computing.

Lastly, cyber security is a growth sector where Orange's presence is expected and has a legitimate place, with the Group's control over networks representing a decisive advantage due to its capacity to detect weak signals of attacks. The Group aims to exceed €1 billion in revenue and to be the European leader in this area in 2023.

The Group's target is that more than half of its revenue in the Enterprise segment come from new connectivity services (SD-WAN, 5G) and IT services in 2023.

Continuing its expansion in financial services across its footprint

The Group aims to capitalize on the success of Orange Bank in European countries, and of Orange Money in Africa where demand in countries with limited banking access is very strong.

With over 500,000 customers at the end of 2019, Orange Bank aims to launch its offer by 2025 in all European countries where the Group is present. The launch of banking services such as micro-credit is also planned in Africa & Middle East in 2020 in order to extend the range of services already offered by Orange Money. Capitalizing on the success of offers combining banking and telecoms (device financing, cash back on in-store purchases, etc.), Orange Bank will seek to develop new products around payment, credit and insurance and is working on a specific digital banking offer for professionals and small businesses. Orange Bank aims to break even in Europe towards the end of 2023, with nearly 5 million customers and around €400 million in net banking income. Orange Bank Africa aims for nearly 10 million customers by 2023 with an NBI of about €100 million.

The Group's growth will also be based on its historic business lines:

- in France, services revenue is expected to experience moderate grow in the 2020-2023 period, mainly due to increased penetration of fiber and mobile services (5G), which secures market shares and encourages the acquisition of new customers;
- Spain aims to return to growth in 2021, with an increasingly optimized use of its brands in order to capture their full potential value and an increase in B2B and wholesale, excluding activities with international operators:
- Europe targets growth that is better than the market average in each
 of its six countries, driven in particular by strong commercial
 momentum on convergence thanks to the deployment of very
 high-speed fixed broadband.

Crossing a new milestone in its digital transformation by placing AI and data at the heart of its innovation model.

Orange seeks to use these new technologies to reinvent customer experience, by combining digital and human interactions, to offer a customer experience that is simple, expert and responsible. The Group will deploy 100% digital pathways and streamline its distribution network, which will remain essential for customer proximity and for marketing new services. Al and data will be used to to provide more personalized offers, leading to greater satisfaction and improved commercial efficiency. Beyond commercial interactions, Orange aims to increase the share of the digital channel in its day-to-day relationship with its customers, and to reduce the number of calls to call-centers in Europe by 55% by 2023. At the same time, Orange plans to rely on Djingo, which is intended to become a direct vocal interface with customers, and on the My Orange app, with the aim of doubling the number of users of the application by 2023 to reach nearly 50 million. Thanks to smoother customer pathways and better customer insight, the Group aims to have 9 out of 10 customers recommend Orange in all its countries by 2025.

Orange seeks to use AI and data to serve smarter networks, capable of optimizing the deployment of new mobile and fiber sites, facilitating daily network maintenance, and thus reducing costs and improving quality of service. Lastly, AI will also enable Orange to improve the operational efficiency of its internal processes and its back-office operations, such as fraud detection.

Creating a future-facing company

Addressing the skills challenge, guiding everybody towards a sustainable digital transformation and being one of the most attractive employers

Thanks to its size and the diversity of its business lines, the Group is able to give its employees the possibility of improving their skills to keep up with and anticipate market developments, in line with its "digital and caring" employer promise. Orange's aim is that in 2025, the face of the Group will be more international, more B2B oriented and at the cutting-edge of new technologies.

To support this structuring development, Orange will put in place an ambitious upskilling and professional retraining plan, and will invest more than €1.5 billion in a skills reinforcement program open to all employees. It aims to train 20,000 employees in network virtualization, artificial intelligence, data, Cloud Computing, coding and cyber security. For the successful conduct of this project, the Group will rely on Orange Campus, which will become a network school open to all employees and new external trainees and, at the same time, endeavor to enhance the company's appeal to attract new talents.

Lastly, Orange aims to create the right conditions for a sustainable and responsible transformation to ensure the social and human cohesion of projects undertaken by the Group in the world.

A growth ambition accompanied by an operational effectiveness program

In order to secure its objectives, Orange will pursue operational efficiency programs and committed to achieve by 2023 net savings of €1 billion within a defined perimeter of indirect costs from telecoms activities of €14 billion at the end of 2019. This committment is based on a combination of targeted initiatives relating to:

- the Group's transformation plan launched in 2019, which aims to improve agility and efficiency and achieve better internal cooperation;
- digitization which should reduce the cost of customer care, and enable the automation of network management and maintenance processes to absorb the expected surge in the number of connections and data traffic;
- the development of shared services initiatives as is already the case in the Group with IT services;
- optimization of certain expenses ("smart spend") such as the reduction of 5% per year up to 2023 of the cost of central functions, other than personnel costs, or the control of energy costs which is a major challenge for the future.

Financial objectives 2023

See Sections 3.2.2 Outlook and 6.3 Dividend distribution policy.

1.2.3 Business model

By deploying a robust network and developing innovative and responsible products and services, Orange plays an active role in society and enables customers around the world to take advantage of digital technologies.

A business model focused on creating and sharing value

Trust, a fundamental value at Orange

Orange champions a vision of a positive digital world through four key values: trust, proximity, service quality and humanity. Trust is at the heart of both Orange's business model and the relationships that it builds with its customers, stakeholders and partners. It forms the foundation for its vision, offering an alternative to other major operators in the world of technology, connectivity and, more generally, inclusive digital relationships.

Orange's business model

Orange's infrastructure provides greater connectivity to its retail, business and wholesale customers. Indeed, Orange is offering faster speeds by rolling out fiber optic broadband, deploying 5G and developing additional services in customers' homes (content, at-home services as well as remote surveillance and assistance). Its expertise as both a network operator and digital services integrator all along the digital value chain means it combines the full range of skills required to support businesses with SDN technology, data and AI, cyber security, mutlicloud and smart mobility services and more. It's through its smart and reliable networks that Orange develops financial services for Orange Money and Orange Bank.

Each of Orange's Engage 2025 ambitions – which include reinventing its operator model, accelerating in growth areas, placing data and Al at the heart of its innovation model and co-creating a future-facing company – has been designed to maximize the value Orange creates. Orange also strongly believes that financial performance goes hand in hand with social and environmental responsibility, which is why its goals of promoting digital equality and achieving net zero carbon emissions by 2040 underpin its new strategic plan.

Understanding the impact of, and the role it plays in the technological, economic, environmental and social factors that shape the world, has led Orange to champion a vision of a digital world that is people-focused, inclusive and responsible.

Sharing value for a digitally responsible world

The following pages illustrate the way in which Orange shares the value it creates with its stakeholders.

The Group's employees represent its most valuable asset, which is why Orange promotes employability and skills development to effectively implement its strategy. Its infrastructure enables Orange to offer a customer experience that combines the best in human and digital services. In 2019, Orange invested €672 million in research and development to drive responsible innovation centered on inclusive products and services, cyber security and eco-design.

Orange's robust financial position ensures profitability and performance for its lenders, investors and shareholders. External purchases accounted for €19.3 billion in 2019, demonstrating that Orange's suppliers are the first to benefit from its cash flows. Orange fosters responsible, ethical collaboration with its suppliers, to ultimately create jobs and improve the quality of working conditions across its entire value chain. The strong presence it has built up in regional communities means Orange actively contributes to digital inclusion and wealth creation both locally and nationally. Furthermore, Orange is taking action to respond to the climate emergency by reducing its CO₂ emissions and improving energy efficiency.

Technological considerations

High-speed connectivity, Al and big data, network and data security, network virtualisation

Economic considerations

Competition, regulation, key suppliers, macroeconomic context

Consideration Our commitment Digital equality Our ambitions Reinventing our operator model Accelerating in growth areas **Enhanced connectivity** (retail, business and wholesale customers) A trusted operator offering inclusive access to a responsible digital world **Financial** Cybersecurity services **Business IT support** services Placing data and AI at the heart of Co-creating a future-facing company our innovation Our ambitions model Net zero carbon by 2040 ur commitments Consideration

Social considerations

Social cohesion, human rights, demographic changes, privacy and data protection, and regional development

Environmental considerations

Climate change, preservation of resources and biodiversity

Our assets		Value created
People	 147,000 employees across the world 31.1% of women in management roles 	Developing skills for the future and employability for all
Industrial and commercial assets	 A mobile network of 40,000 towers directly owned in Europe 39.5 million homes connectable to very high-speed broadband 450,000 km of submarine cable owned or co-owned A powerful brand: ranked 64th in the BrandZ Top 100 most valuable global brands 5,169 stores across the world and 900,000 resellers in Africa 	Leading the field
Intellectual assets	 €672 million invested in Research & Innovation Operator with the most patents filed in Europe, developing 230 patent-protected inventions in 2019 	Responsible innovation
Financial assets	 Significant equity of €34.4 billion Reasonable debt ratio: net debt/EBITDAaL of telecoms activities = 1.96x A stable and long-term shareholder base: 23% public sector, 5.42% employees and former employees 	Solid financial performance
Our ecosys	stem	
Suppliers and partners	 Buyln, a joint venture between Orange & Deutsche Telekom, optimises procurement of networks, terminals and IT services platforms and equipment Every critical supplier has signed a CSR clause 24 CSR audits conducted under the Joint Audit Cooperation (JAC) 	Responsible and ethical working relationships throughout the value chain
Regions and society	 26 countries for consumer services and a global presence with Orange Business Services 4G network covers 98% of the population in 8 operating countries in Europe with networks set up in 17 countries (including 2 minority interests) in Africa and the Middle East Network of 17 Orange Fabs, 109 Solidarity FabLabs and 2 Orange Digital Centers, Orange Foundation present in 30 countries 	Regional presence and digital inclusion
Environment	 CO₂ emissions: 1.3 million tons (Scope 1 and 2) Environmental management (ISO 14001) certification for 60% of the Group's scope 	Towards net zero carbon and a circular economy

- 11,000 recruitments on unlimited contracts across the Group, including 3,000 in France
- Over 6,000 internships and work-study programmes in France
- 26 hours of training per Group employee (65% of the workforce)
- 266 million customers, including 3,000 multinationals outside France
- No.1 in convergence in Europe with 10.8 million customers
- No.1 in mobile network quality for the 9th year running (Arcep)
- 18 million active Orange Money customers and over 500,000 Orange Bank customers
- Accessibility: Over 70% of Orange stores in mainland France are Autonomy-certified, and 117,000 telephones adapted for the elderly were sold in France
- Eco-design approach to products: the carbon footprint of the Livebox
 5 is 29% lower than the Livebox 4
- Cybersecurity: over 200 malicious websites shut down every day
- EBITDAaL: €12.9 billion
- Organic cash-flow from telecoms activities: €2.3 billion

- Improved working conditions for 1.3 million people employed by suppliers since 2010 through audits conducted by the JAC
- Responsible supplier relations and procurement label in France, which integrates ISO 20400 guidelines
- Contribution to wealth creation, such as 11% of GDP in Senegal and 2% in Moldova
- €23 million invested by the Orange Foundation, primarily to help young people and women in difficulty
- €295 million invested to support entrepreneurship over the last 10 years
- 5.4% reduction in CO₂ emissions and 2.3% reduction in energy consumption between 2018 and 2019
- 82.2% of electrical and electronic waste recovered at Group level
- 16.3% of unwanted mobile devices sold by Orange across Europe are collected

Customers

€42.2 billion

Revenues

Suppliers and partners

€19.3 billion

External purchases and leases

Employees

€8.5 billion

Wages and employee benefit expenses

Regions

€5.0 billion

Investments in the networks

Public sector

€3.8 billion

Licences and taxes

Shareholders

€2.1 billion

Dividends paid

Lenders and financial investors

€1.5 billion

Finance costs

1.3 Significant events

Engage 2025, a new Orange strategic plan for 2025

In December 2019, Orange presented its new strategic plan Engage 2025. The new growth plan, which continues the work of the Essentials2020 plan launched in 2015, looks to achieve exemplary social and environmental conduct based on four ambitions:

- reinventing its operator model, by capitalizing on its leading position in networks thanks to increased connectivity (FTTH and 5G), and consolidating its leadership in more open and higher-valued infrastructures:
- accelerating Orange's development in three areas of growth, i.e.
 Africa and the Middle East, B2B services (focusing on cyber security) and financial services;
- placing artificial intelligence (Al) at the heart of Orange's innovation model, to enter a new stage in the digital transformation process.
 Al will be used to reinvent the customer experience, create smarter networks and improve our operational effectiveness;
- and co-creating a future-facing company, addressing the skills challenge in line with Orange's "digital and caring" employer promise, which includes a mass employee training program, network virtualization, Al, data, Cloud Computing, code and cyber security.

For further information on the Engage 2025 strategic plan, see Section 1.2.2 The Orange Group strategy.

Investment in networks

The rollout of networks providing broadband and very high-speed broadband Internet access was one of the five levers of the Essentials2020 strategic plan, and will remain a priority focus for Engage 2025. In 2019, investments in networks (excluding telecommunications licenses) represented over two-thirds of the Group's economic CAPEX.

Fixed access networks

The Group is continuing accelerated deployment of its very high-speed fixed broadband networks with 7.0 million new households connectable year-on-year. On December 31, 2019, Orange had 39.5 million very high-speed broadband connectable households throughout the world (up 21.5% year-on-year), including 16.3 million in France, 14.9 million in Spain and 7.4 million in the rest of Europe (operational areas).

In France, Orange signed in December 2019 a 700 million euros loan agreement with the European Investment Bank to part-finance the deployment of a very high-speed broadband network in the "AMII" areas (less densely populated areas where private operators have expressed an interest in deploying a very high-speed broadband network). In 2019, Orange also continued with its accelerated fiber optic deployment in other less densely populated areas by signing a number of different agreements, to enable it to market its FTTH services on Public Initiative Networks (PIN). They include:

- an agreement with Axione in 15 regions (départements), covering 2,234,000 homes and business premises spread over 4,000 municipalities, in which Axione is the agent responsible for operating the very high-speed network;
- an agreement with Covage in the regions of Calvados, Essonne, Haute-Savoie, Hérault, Seine-et-Marne, The Somme, the Lille urban area and the Dunkirk urban community;

- an agreement with TDF in the Val d'Oise, Yvelines, de Indre-et-Loire, Loir-et-Cher and Maine-et-Loire regions. The agreement covers more than 1,000 municipalities outside of very densely populated areas:
- and an agreement with Altitude Infrastructure, as part of a national framework agreement for 3.5 million FTTH connections in 22 regions.

Also see Note 15.1 to the consolidated annual financial statements.

In Spain, in April 2019, Orange and Vodafone announced the enhancement of their fixed network sharing agreement. This agreement will allow more rapid and efficient deployment of new generation networks over a larger geographical area, offering significant advantages to the respective business and residential customers of both groups (also see *Mobile networks* below). Based on the same network sharing and joint investment premise, in October 2019, Orange signed an agreement with Masmovil, enabling it to strengthen its position on the Spanish wholesale market (also see *Mobile networks* below).

Mobile access networks

In 2019, Orange continued installing its 4G/4G+ networks. On December 31, 2019, 4G coverage rates exceeded 95% of the population in all European countries in which the Group operates (including 99% in France, 97.2% in Spain and 99.9% in Poland). As of December 31, 2019, the Group had 67.5 million customers with 4G packages throughout the world (up 20.1% year-on-year), including 15.9 million in France, 11.0 million in Spain, 16.8 million in Europe (operational area) and 23.8 million in Africa and the Middle East. In addition, the Group is continuing to actively prepare for the arrival of 5G technology, deploying it progressively over existing 4G sites. After an initial commercial launch in Romania in November 2019, 5G will start to be rolled out in 2020 in most of the European countries in which the Group operates.

For the ninth year running, Orange confirmed its ranking as the number one mobile network in France, according to the results of the annual survey of mobile operator service quality in mainland France, published by Arcep (Autorité de Régulation des Communications Electroniques et des Postes) in October 2019. Overall, Orange was first or tied for first for Voice, SMS and Mobile Internet on 227 of the 238 criteria measured. Orange is also continuing to roll out its mobile network beside very densely populated areas. Therefore in December 2019, Orange announced that it had entered into an agreement with ATC France (subsidiary of American Tower Corporation and a leader in telecom hosting, specializing in network infrastructure management and marketing) for the deployment of 900-2,000 new sites over the 2020-2024 period, primarily located in rural areas and on major transport routes (see Note 15.1 to the consolidated annual financial statements). In France, 5G spectrum blocks will be allocated in the 3.4-3.8 GHz band during the first half of 2020, covering a total of 310 MHz. Spectrums are allocated for a 15-year period, with the option of a 5-year extension under conditions which are not yet known. Initially, each operator may purchase a 50 MHz block at a fixed price, in return for certain commitments. Subsequently, a traditional multiple round auction procedure will be implemented for each 10 MHz block, for residual spectrums (for further information see Section 1.7.1.2.3. Regulation of mobile telephony). In January 2020, Orange announced that it had selected Nokia and Ericsson as equipment suppliers for its 5G rollout in mainland France.

In Spain, the network sharing agreement announced by Orange and Vodafone in April 2019 (see *Fixed networks* above) also covered mobile

networks. This will allow overall improvement of 2G, 3G, 4G and 5G technology management for the two companies and will allow faster and more efficient deployment of 5G technology. The active national sharing of the mobile network will cover more than 14,800 mobile sites. In total, this project will generate gross savings of approximately €800 million over 10 years, but will involve an initial €300 million investment over four years (including nearly €56 million in 2019). Moreover, the sharing and joint investment agreement signed with Masmovil in October 2019 (see *Fixed networks* above) will also develop and optimize costs for the 5G rollout. In addition, in December 2019, Orange announced the sale of 1,500 non-strategic Spanish mobile sites to Cellnex for €260 million (of which €185 million was paid in 2019). This deal forms part of an approach which involves retaining control of the Group's strategic assets.

In Belgium, Orange Belgium and Proximus signed a memorandum of understanding to enter into a mobile access network sharing agreement in July 2019 for 2G, 3G, 4G and 5G technologies. This agreement aims to allow the two companies to meet growing customer demand in terms of mobile network quality and domestic coverage. Subject to approval of the agreement by the Regulatory Authority, the shared mobile access network will be planned, built and operated by a new equally-owned joint venture starting in the second quarter of 2020. In financial terms, Orange Belgium expects the agreement to deliver cumulative savings in operating and investment costs of approximately €300 million over 10 years and shall spend €130 million over the next three years to implement the agreement.

In Africa and the Middle East, 4G deployments continued in 2019, particularly in Egypt, Morocco and Mali. With the addition of Burkina Faso, Sierra Leone and Guinea in 2019, at the end of the year the 4G network had been rolled out to 15 Africa and the Middle East countries (excluding associates and joint ventures).

Transmission networks

In 2019, Orange strengthened its position on the submarine cables market. The Group's goal is to raise the quality of the services it offers on its global network, while optimizing costs, so as to handle the ever-increasing volume of data exchanges. A number of major milestones over the year have consolidated this position:

- in January, Orange inaugurated the Kanawa cable with a length of 1,750 kilometers, connecting French Guiana, Martinique and Guadeloupe;
- in February, Orange and the members of the FLY-LION3 (Lower Indian Ocean Network) consortium completed deployment of a new submarine cable connecting Grande Comore Island and Mayotte. Brought into service at the end of 2019, this cable enhances connectivity in the Indian Ocean;
- in September, Orange, PCCW and PEACE (Pakistan and East Africa Connecting Europe) officially sealed their agreement to deploy the new PEACE Med submarine cable, initially covering a length of 12,000 kilometers. By 2021 the cable will connect Europe to Asia, via East Africa. The agreement marks the arrival of the first Chinese submarine cable on French soil:

In March 2019, moreover, Orange and Nokia announced the successful complete migration of the Orange long-distance network in France, Europe, and Asia, to a smart, distributed software system enabling optimized management of network resources. This represents a major step in the evolution of the Orange transmission network toward more rapid and flexible production of transmission links, automation and creation of new services with added value for its customers.

Finally, in November 2019, Orange announced the construction of a new international backbone network to link eight countries in West Africa. In addition to recent investments in the cutting edge MainOne submarine cable linking Senegal and Côte d'Ivoire to Europe, this

infrastructure constitutes a new phase in Orange's international connectivity development strategy in Africa. The West African backbone will be centrally operated, relying on a network of land-based fiber optics and submarine cables. The network will be interconnected with the rest of the world using various submarine capacities, as well as linking the main West African capitals. The commercial launch of the West African backbone is planned for the second half of 2020.

The multi-services and enhanced services strategy

Mobile financial services, content, connected objects and energy are key pillars of the Group's diversification, and fall within an enriched services development strategy.

Mobile financial services (Orange Bank – Orange Money)

In France, Orange Bank, which celebrated its second anniversary in November 2019, reaffirmed its strategy to diversify its financial services in 2019 by improving its new mobile service offer, including a Visa Premium card, cashback offers for a proportion of selected purchases, credit assigned to cover the costs of mobile handsets and other Orange store purchases, and mobile payment through Google Pay. In August, Orange Bank was rated the "best digital offer" for the second year running by the D-Rating agency. As of December 31, 2019, Orange Bank had over 500,000 customers won via Orange stores, Groupama branches and digital channels, of which 390,000 were account holders.

Orange Bank launched its international development plan in 2019. Following its successful launch in France, Orange expanded its presence by launching Orange Bank in Spain in November 2019. Orange Bank's digital offer in Spain includes various services such as bank accounts, Mastercard debit cards, savings accounts, mobile payment through Apple Pay and a group expense management feature. In Romania, Orange launched a debit card and an assigned credit offer in 2019. The Group obtained a banking license in Africa from the Central Bank of West African States, which should allow it to roll out its credit and savings offer in 2020.

Finally, the Group has continued to expand Orange Money services in the Africa and the Middle East. As of December 31, 2019, Orange Money had a total of 45 million customers, 18 million of whom are active customers who use the service every month, across 14 countries (excluding associates and joint ventures, and excluding Niger following its sale in November 2019).

Content

Orange's content strategy will give priority to the broadest possible distribution of the best content offerings on the market, and to invest in movies and series via Orange Studio and OCS. This has resulted in a series of agreements signed in 2019:

In France, in September 2019, OCS and Canal+ renewed their multi-year distribution agreement to provide Groupe Canal+ subscribers with access to OCS programs. OCS, which as of December 31, 2019 had 3.1 million subscribers, therefore now has access to the first pool of French paid TV subscribers.

In other European countries, the Group pursued the rollout of content services, notably related to TV, a key element of fixed/mobile convergence offers. As such, Orange is marketing TV channel packages in Spain in different themed areas, including movies, TV series and soccer (La Liga and Champions League), for which the distribution rights were renewed for the 2019-2020 season.

In Africa and the Middle East, in September 2019, Orange signed a structured partnership with Canal+ Afrique to offer Canal+ TV packages to all Orange households. This will be rolled out gradually in countries in Sub-Saharan Africa in 2020.

Internet of Things (IoT)

As announced in January 2019, thanks to the creation of Protectline, a joint venture with Groupama, Orange has entered a new stage in its multi-service operator strategy by becoming a fully-fledged player in the remote property surveillance market.

In April 2019, Orange launched its remote property surveillance offer *Maison Protégée*, for its fixed and mobile customers in France, enabling it to meet expectations in terms of security. Orange also launched its *Maison Connectée* solution for fixed and mobile customers in France. Via a simple and unique application, this offer makes it possible to manage connected objects in the home, providing Orange customers comfort and peace of mind in their day-to-day lives.

In November 2019, Orange launched the Djingo voice assistant in France, to make day-to-day activities easier for its customers. Djingo includes a smart speaker and a voice-activated TV remote control. The Djingo voice assistant provides smooth, intuitive and secure access to Orange and partner services. The Djingo smart speaker, which was developed with Deutsche Telekom, is voice-activated and includes the Djingo virtual assistant. It also incorporates Amazon's Alexa voice assistant so that additional services available on Alexa can be accessed. Orange is continuing to implement its multi-service strategy to offer its customers a complete range of services for their homes.

In June 2019, AT&T, KPN, Orange and Swisscom enabled data roaming between their LTE-M IoT networks, enabling low-power IoT equipment to benefit from service continuity on multiple networks in North America and Europe. LTE-M technology will offer the possibility of developing a number of applications in the Internet of Things sector, in order to reduce costs, offer more compact equipment, with greater autonomy, and reach geographical regions that are difficult to access.

Orange Energy

As part of its multi-service strategy, Orange is now offering a range of innovative Orange Energy services to facilitate energy access in the African countries covered by the Group. In 2017, Orange began to provide its customers in the Congo (DRC) with solar kits, which are now available in eight African countries.

In November 2019, Orange joined forces with Greenlight Planet, the largest supplier of prepaid energy services in Africa. The aim of the partnership is to provide Orange customers with their own energy solutions in a number of African countries, including Burkina Faso, the Central African Republic, the Congo (DRC), Liberia, Mali and Sierra Leone. As part of this partnership, Greenlight Planet will provide bespoke equipment and support to enhance Orange's range of energy services. Orange Energy customers are able to use the service to buy solar equipment, which they can use to power essential household devices. Affordable and flexible subscription fees for the service can be paid remotely by mobile phone and through Orange Money, providing wider access to solar power due to the versatility of mobile payments.

Digital transformation of business customers

Orange positions itself as a partner of companies in their digital transformation. Following its acquisitions of Basefarm, Business & Decision and Enovacom in 2018, Orange shored up its business offering with two major acquisitions in 2019:

In January 2019, Orange acquired 100% of SecureData, the United Kingdom's top cyber security services provider, in the largest market in Europe, for a total amount of €95 million net of cash acquired (see Note 3.2 to the consolidated annual financial statements).

In July 2019, Orange agreed the 100% acquisition of SecureLink for the total amount of €371 million net of cash acquired (see Note 3.2 to the consolidated annual financial statements). This new acquisition positions Orange as a major player in the European cyber security sector, with operations in eight European countries representing 75% of the market.

In addition, in July 2019 Sony selected Orange Business Services to strengthen and overhaul the communications infrastructure of the Japanese manufacturer's Film and Electronics entities within its global network. Orange will use its versatile SD-WAN (Software-Defined Wide Area Network) solution to improve the agility, transparency and security of Sony's entire global business activities.

Orange, a people-oriented and digital employer

Creating a future-facing company, addressing the skills challenge while supporting everyone as part of a responsible transformation and being one of the most attractive employers are the priorities defined by the Group during the presentation of its new strategic plan Engage 2025, and follow on from Orange's "digital and caring" employer promise.

In May 2019, Orange announced that it was signing an agreement with four trade unions regarding the implementation of a Central Committee of the Orange Works Council (Orange CCUES), which covers 80,000 employees. Following the 2017 arrangements and given the specific nature of its business, Orange has used this agreement with social partners to define a new structure for its Employee Representative Bodies (IRP), with a Central Labor and Economic Committee (CSEC), 14 Labor and Economic Committees specific to each Establishment (CSEE) and 86 Commissions for Health, Safety and Working Conditions (CSSCT).

In July 2019, the Group signed a global agreement on gender equality in the workplace with the UNI global union. This is the first agreement of its kind for CAC 40 and telecom companies. The agreement is scalable and can be adapted to all countries in which the Orange Group operates, in order to cover all 147,000 employees worldwide.

Orange has opted to place skills at the heart of its new Engage 2025 plan, both to support major technological changes and their effects, i.e. the need to continually adapt the workplace, and to support the changing face of the Group between now and 2025, to become more international, more B2B-oriented, younger while remaining multi-generational, and at the cutting-edge of new technologies. With this in mind, Orange plans to invest more than €1.5 billion in an ambitious skills development and professional retraining program. The aim of this commitment is to strengthen, adapt and renew all employees' skills, while also addressing a new external audience in order to build the employment resources of the future. To address this challenge, Orange has set itself three major priorities: (i) strengthening its technological expertise, (ii) developing data practices and applications, artificial intelligence (AI) and cyber security in all business lines, and (iii) offering each employee the chance to develop their soft skills, regardless of their business area or country. In order to meet these priorities, the Group is structuring its training around three main areas, including (i) the launch and development of Orange Campus for all company employees based on four priority areas: data and Al, cyber security, management and soft skills, (ii) the wide-scale deployment by 2025 of a work-based training scheme (Formation En Situation de Travail - FEST), and (iii) Orange's 2020 launch of its own Apprentice Training Center (Centre de Formation d'Apprentis - CFA) to drive growth and share knowledge on digital professional roles.

Changes to the asset portfolio

In June 2019, Orange sold its remaining 2.49% equity interest in BT Group for a net amount of £486 million, i.e. €543 million, at the indicative ECB rate of July 2, 2019 (settlement day). The effects of the BT Group shareholding on the net finance cost are presented in Note 12.7 to the consolidated annual financial statements.

In November 2019, Orange sold all of its 95.5% equity interest in Orange Niger to Zamani Com S.A.S, which is fully owned by Orange Niger's minority shareholders. There will be a transition period during which the company's services will continue to be marketed under the

Orange brand. This sale did not have any significant effect on the Group's financial statements (see Note 3.2 to the consolidated annual financial statements).

In February 2020, Orange announced a planned public repurchase offer and squeeze-out for its Business & Decision SA subsidiary. As of December 31, 2019, Orange held 93.6% of the capital of Business & Decision SA through its subsidiary Orange Business Services SA. The planned offer requires a notice of compliance from the French Financial Markets Authority (Autorité des marchés financiers – AMF) (see Note 18 to the consolidated annual financial statements).

1.4 Operating activities

Orange provides consumers, businesses and other telecommunications operators with a wide range of services including fixed telephony and mobile telecommunications, data transmission and other value-added services, including mobile financial services. The Group is present as an operator in 26 countries (including two in which it holds a minority interest). In addition to its role as a supplier of connectivity, the Group also provides enterprise services, primarily in digital working solutions, security and improving business processes.

In accordance with segment information from the consolidated annual financial statements, the Group's business is presented in this Section under the following business segments: France, Spain, Europe, Africa

and the Middle East, Enterprise, International Carriers & Shared Services and Orange Bank (see Section 3.3 Note 1 Segment information).

The results of Orange's activities in 2019 and its principal operating indicators in its various business segments are detailed in Section 3.1 *Analysis of the Group's financial position and earnings*.

Unless otherwise indicated, the market shares indicated in this chapter relate to market shares in terms of volume, and the data related to customers does not include SIM cards dedicated to connected objects (Machine to Machine).

1.4.1 France

Orange is France's incumbent telecommunications operator (see Section 1.1 *Overview*). The bulk of its business is carried by Orange SA, which is also the parent company of the Orange group.

The France business segment includes all fixed and mobile communication services to consumers and companies with less than 50 employees (1) in France (2) as well as services for carriers. Activities developed for companies with more than 50 employees, as well as content activities and those of Orange Bank are covered respectively in Sections 1.4.5, 1.4.6.2 and 1.4.7 of this document.

In 2019, the France business segment generated 41.4% of the Group's consolidated revenue.

The market

At September 30, 2019, the revenue of French telecommunications operators declined by 1.3% on a sliding 12-month basis (source: Arcep, 3rd quarter 2019). While fixed narrowband telephony revenue continued its downward trend as a result of the steady decline in the number of lines, fixed broadband revenue continued its growth due to the increasing number of accesses. Despite intense competition, mobile services revenue rose driven by a sustained growth in access numbers.

The French broadband and very high-speed broadband Internet market is dominated by four main operators that account for over 99% of broadband customers. With a 40.1% market share, down 0.1 points compared with end-2018, Orange is the market leader on this market ahead of Free, Altice-SFR and Bouygues Telecom (ranked as 2, 3 and 4, respectively, in number of customers). (3)

The French mobile market is dominated by the same four operators as the fixed market, which account for 89% of mobile customers

(excluding M2M). With a market share of 31.9% in 2019 compared with 32.5% in 2018, Orange also remains the leader in this market ahead of its competitors Altice-SFR, Free Mobile and Bouygues Telecom (respectively ranked 2, 3 and 4 in number of mobile customers excluding M2M) and all of the MVNOs. (3)

Orange's business activities

Orange France's core business involves the provision of fixed-line, broadband and very high-speed broadband Internet and mobile telephony services for the Retail and Pro-SME markets. Its strategy is based on improving speeds on fixed networks (fiber) and mobile networks (4G and in the future 5G), promoting the take-up of new services and conquering new growth areas, while continuing to propel its customer relations to a new level of excellence (see Section 1.2.2 The Orange Group strategy).

In the Retail mobile market, Orange has segmented its offers into four main categories: 2-hour 100 MB or 2-hour 5 GB for customers looking for basic communication and Internet connectivity; 10 GB which offers a combination of enhanced Internet connectivity and increased communication options; 50 GB adapted to meet the needs of heavier Internet users; and 100 GB and 150 GB for customers wanting the best smartphones and who have very intense connectivity needs both in France and abroad.

Orange is present in all market segments, including the entry-level market, with four types of mobile contract marketed under the Sosh brand at affordable prices that are available only on the Internet, with no commitment and no handset. At the end of December 2019, Sosh had 3.9 million mobile customers.

Since 2015, Orange has only marketed 4G offers, including entry-level packages.

⁽¹⁾ Respectively the Retail and Pro-SME markets.

Mainland France, Overseas Departments and Overseas Territories.

⁽³⁾ Source: Orange estimates.

Orange pursued its family-based strategy with the development of multi-line contracts through its flagship *Open* offer. *Open* mobile offers are available in the same ranges as traditional mobile offers and include the same levels of service.

Segmenting offers on the Retail and Pro-SME markets allows Orange to continue to grow its subscriber base while the decline in prepaid offers continues.

At the same time, the MVNO customer base hosted on Orange's network has remained stable on a sliding 12-month basis.

In the Retail broadband Internet market, Orange has segmented its offers into two main categories: Livebox designed for customers looking for basic Internet and TV services, and Livebox Up which meets the needs of customers who want the highest speeds and a premium TV experience. In terms of equipment, in October 2019 Orange launched a new Livebox 5, designed to have a lower carbon footprint and vastly improved speeds to meet customers' growing needs, and to incorporate the fact that many households share bandwidth.

Sosh has also been present on the broadband Internet market since 2018, with affordable offers, available exclusively online and without commitment.

Orange's and Sosh's broadband Internet access offers are marketed with FTTH technology in eligible areas, or alternatively, with ADSL. Orange is the leader in terms of FTTH access sold, with a portfolio of nearly 3.3 million subscribers at the end of 2019.

Since the telecommunications market was opened to competition, Orange has been the operator responsible for part of the provision of universal services. These include a minimal set of basic services available to all citizens who request them, including connection to a fixed network open to the public, and the provision of quality telephone service at an affordable rate. See Section 1.7.1.2.4 Regulation of fixed-line telephony, broadband and very high-speed broadband Internet.

Furthermore, Orange offers services to carriers, an activity which includes the interconnection of competing operators, as well as unbundling and wholesale services (ADSL and fiber optic), regulated by Arcep, and construction and marketing services for very high-speed fiber optic networks. Unbundling services saw another decrease in their price regulated by Arcep on January 1, 2019. In addition, since 2011, Orange has been providing to Free Mobile national roaming services on its 2G and 3G networks. See Section 3.2.1 Recent events.

With the steady growth in full unbundling, as well as the wholesale of contracts and naked ADSL access to third-party Internet service providers, the decline in revenue generated by the traditional telephony service business continues. When it unveiled its new strategic plan, Orange announced that an initial experimental phase of copper decommissioning is due to start, with implementation planned between 2023 and 2030.

Orange is also pursuing advertising activities via its websites, which are available in multi-screen web, mobile and tablet format with more than 28.2 million unique visitors per month. The most frequently visited French website on a daily basis, Orange.fr ranks seventh behind Google, Facebook, YouTube, Amazon, Wikipedia and Instagram, with an average of 9.5 million unique visitors per day. On mobile screens, Orange attracts 19.1 million mobile users as well as 3.8 million tablet users each month (source: Médiamétrie and Médiamétrie// NetRatings – Total Internet Audience – October 2019).

Against a backdrop of fierce competition, Orange has also continued to innovate, notably with the launch of its services around the home (Maison Connectée, home automation service, Maison Protégée service and Djingo smart speaker) and the ongoing development of mobile financial services (see Section 1.4.7 Orange Bank).

Distribution

Orange is pressing ahead with its digital development strategy with a 100% digital customer experience in Orange online stores (available on Orange.fr) and Sosh (via Sosh.fr), with Sosh offers available only on the digital channel. In 2019, the digital channel accounted for 24.8% of sales actions. Orange's contract management app *My Orange* continued to attract visitors, with 5.2 million unique visitors at end-December 2019.

The dedicated customer centers, based on the type of services marketed, accounted for 19.1% of sales actions.

The network of retail stores spread across France continues to roll out the Smart Store concept launched in 2015. At end-2019, this network, which consisted of 370 stores owned by Orange (including 17 Megastores and 274 Smart Stores), and 196 *Générale de Téléphone* Stores (including 124 Smart Stores), accounted for 51.8% of sales actions.

Lastly, the other channels, which include direct marketing, door-to-door and the multi-operator network, accounted for 4.3% of sales actions.

The Network

Orange's commercial leadership is partly based on its leadership in fixed and mobile networks.

On the fixed network, in 2019 Orange ramped up its rollout of very high-speed broadband on its own and third-party networks. In one year, Orange ensured that 4.5 million households were connectable to FTTH (compared with 2.7 million in 2018), a new record in France. 69% of fiber optic installations were deployed by Orange in 2019 (source: Arcep, 3rd quarter 2019). At end-2019, Orange had 16.3 million households connectable to FTTH.

Actions to improve the fixed network speed with a view to significantly improving the Internet experience of households and professional customers in rural areas continued, with fiber deployment in town centers (subscriber connection node opticalization, fiber to sub-distribution frames), and participation in FTTH Public Initiative Networks (PIN) of local and regional authorities. Orange has enjoyed considerable success regarding its expertise in PIN deployment. Three new agreements were signed in 2019 relating to the operation of fiber optic networks for local authorities (Réunion, Kourou and Auvergne phase 3). Moreover, in December 2019, Orange announced its plan to combine its industrial weight with that of one or more major financial partners by creating the Orange Concessions subsidiary, which will eventually pool 4 million connections of the public initiative networks (PIN) assigned to Orange.

As regards the mobile network, 2019 saw the continued deployment of 4G reaching a coverage rate of 99% of the French population (up 0.4 points compared with end-2018), which is still the best 4G coverage rate in France (1). At the end of 2019, Orange had deployed 20,938 4G sites in France (2) (source: ANFr, January 1, 2020).

For the ninth consecutive year, the Orange mobile network was ranked first by Arcep in 2019 (source: Arcep, October 2019).

This deployment involves the continued extension of coverage in tourist areas, stadiums, trains (LGV and TER), subways and on the motorway network. In December 2019, Orange entered into an agreement with American Tower Corporation, a leader in telecoms hosting, specializing in network infrastructure management and marketing, for the deployment of 900-2,000 new sites over the 2020-2024 period, primarily located in rural areas and on major transport routes.

Orange also announced that it planned to create a towerco in France, responsible for managing the directly owned towers of its mobile network. This project meets three key objectives: improving operational efficiency and optimizing investments in the mobile network, increasing

⁽¹⁾ Source: Orange estimates.

⁽²⁾ Mainland France, excluding Overseas Departments and Overseas Territories.

the towers co-location rate while maintaining Orange's competitive advantage, and finally ensuring better understanding of and highlighting the quality and value of these assets. Orange plans to retain control of this subsidiary, and the project forms part of a wider move towards creating a European Towerco.

5G spectrum blocks will be allocated in the 3.4-3.8 GHz band during the first half of 2020, covering a total of 310 MHz. The 5G rollout will begin in 2020 (see Section 1.7.1.2.3 *Regulation of mobile telephony*).

As regards the cluster, transmission, and transport network, Orange carried on with (i) the simplification of fixed-line broadband access engineering (vDSL and FTTH) to accommodate the high growth in traffic, and (ii) works aimed at the transition from traditional telephony services to IP telephony.

1.4.2 Spain

The Group has been present in Spain since the liberalization of the Telecom market in 1998. Initially present in the fixed-line telephony market, it acquired the mobile telephony operator Amena in 2005, and then adopted the Orange brand in 2006. The acquisition of the Jazztel fixed-line operator in 2015 enabled Orange to consolidate its position in terms of convergence thanks to Jazztel's fiber coverage. The Group has also strengthened its presence in the low-cost market with the acquisitions of MVNO Simyo in 2012 and República Móvil in 2018, thereby consolidating its multi-brand strategy designed to cover all segments of the market.

In 2019, the Group generated 12.4% of its consolidated revenue in Spain.

The market

Since the consolidation was launched in 2014, the telecoms market has been dominated by four operators: the incumbent Telefónica, operating under the Movistar brand which acquired D+ in 2014; Orange; Vodafone, which bought ONO in 2014; and MásMóvil Ibercom, initially an MVNO, which acquired Yoigo in 2016, then signed a commercial agreement to access Orange's fixed and mobile networks.

In addition to competing on the B2B and B2C segments through their main brands, these four operators also compete via other brands in the low-cost market: Orange with Jazztel, Amena, Simyo and República Móvil; Telefónica with Tuenti and O2; Vodafone with Lowi; and MásMóvil with Pepephone.

Together, the four convergent operators control more than 90% of the market, with Telefónica ranked first, followed by Orange (whose market share in 2019 reached 26.1% for broadband Internet and 25.1% for mobile), then $Vodafone^{(1)}$.

Spanish market growth slowed in 2019, and was marked by increasingly aggressive sales tactics with a move towards low-cost services driving growth in this market segment, and a proliferation of new brands.

Orange's activities in Spain

On the Retail market, Orange is pursuing in Spain a multi-brand and multi-service strategy aiming to offer high-quality services at the best price, including entry-level packages, in order to meet the needs of all customer segments. In 2019, Orange adapted its offer to meet growing demand for data and services, and developed a multi-service approach, going beyond connectivity to set itself apart from its competitors. As part of this strategy, in 2019 it:

 continued to offer high-quality high-definition TV content available on different devices, and also enhanced its TV offer by renewing broadcasting rights for soccer matches and other premium content, which allowed it to reach a TV penetration rate of more than 18%; (1)

- launched new services for the residential market, which form an integral part of consumers' daily lives in the digital era, such as security services;
- integrated Big Data into its day-to-day activities, enabling it to analyze 300,000 events per second and generate decision-making tools, both for business and network deployment;
- launched Orange Bank in November 2019, providing customers with financial services through its mobile banking offer (see Section 1.4.7 Orange Bank).

Orange also improved its SD-WAN offer and strengthened its services on the B2B market. In 2019 it was able to sign a number of agreements with public authorities, based on new technical solutions which both improve communications and guarantee their security.

Moreover, Orange offers (primarily interconnection) services to competing operators as part of its wholesale activities. See the *Network* Section below.

In keeping with its Group strategy, in 2019 Orange in Spain also committed to promoting entrepreneurship and digital transformation through initiatives like Lanzate-Sé Digital. Orange's actions include Gigas Solidarios, to ensure that as many people as possible can reap the benefits of the new digital society, and the #porunusolovedelatecnologia initiative, to raise awareness amongst adults and children on responsible use of new technologies.

The Network

Orange continued to deploy its FTTH network, with 1.1 million new connectable households in 2019. At end-2019, Orange was able to offer very high-speed broadband connections to 15 million households through its own fiber optic network and thanks to the network sharing agreement signed with other operators.

In April 2019, Orange and Vodafone announced the enhancement of their RAN-sharing agreement. This agreement will allow more rapid and efficient deployment of new generation networks over a larger geographical area, offering significant advantages to Business and Retail customers.

In October, Orange signed an agreement with Masmovil, renewing and extending their wholesale links both for fiber optic and mobile networks. This deal will enable Orange to improve the ROI of its networks, and reinforce its position as number one wholesale alternative player on the Spanish market. The national 5G roaming agreement together with the RAN sharing agreement signed with Vodaphone will enable 5G to be rolled out efficiently and profitably.

1.4.3 Europe⁽¹⁾

Outside France and Spain, the Group is present in six countries in Europe, where it is implementing its convergence strategy through the deployment of very high-speed fixed and mobile broadband, and the launch of new offers. After launching its *Love* convergence offers in all European countries in 2018, Orange is now developing its convergence strategy in each country, based on the local context and the strengths of each of its subsidiaries:

- in Poland, where the Group is the incumbent operator, leader in fixed and number two in mobile;
- in Belgium and Luxembourg, where the Group launched its convergence offers via partnerships;
- and in other countries in Central Europe (Romania, Slovakia and Moldova) where the Group, leader in mobile, is a convergent player via the deployment of fiber optic, the use of 4G for the development of fixed via LTE, and its partnerships.

1.4.3.1 Poland

The Group has been present in Poland since 2000, the year it acquired an interest in the incumbent operator, Telekomunikacja Polska (renamed Orange Polska). In 2006, Orange became the single brand for mobile activities in accordance with the Group's brand policy. In 2012, it also became the single brand for all fixed-line telephony services offered by the Group in Poland. Orange owns 50.67% of the shares of Orange Polska, which is listed on the Warsaw Stock Exchange. In 2019, the Group generated 6.2% of its consolidated revenue in Poland.

Poland has four main mobile telephony operators: Orange, T-Mobile (owned by Deutsche Telekom), Polkomtel (operating under the Plus brand, owned by the Cyfrowy Polsat Pay-TV by satellite group) and P4 (operating under the Play brand, controlled by Tollerton Investments Ltd and Novator Telecom Poland SARL). At the end of 2019, these four mobile telephony operators accounted for 98% of the total number of SIM cards in Poland, with Orange being the leading operator with a market share of 28.1% at end-December 2019 (2).

In the broadband Internet market, Orange ranks second with a market share of 28.3% in the third quarter of 2019 (2). Its principal competitors are cable TV operators (mainly UPC Polska, Vectra and Multimedia Polska), as well as Netia, a traditional telecommunications operator.

The Polish telecoms market is fragmented and consolidation is slow. The Cyfrowy Polsat Group acquired Netia in 2018. However, several takeover bids for Multimedia Polska, Poland's third largest cable company, have failed.

Nevertheless, increasing numbers of operators are opting to adopt a fixed and mobile convergent offer strategy on the B2C market, based on infrastructure partners; primarily T-Mobile, (so far mobile-only) started offering convergent offers that use Orange Polska's fiber network. Other players include major cable operators such as UPC and Vectra, which as MVNOs have started to offer mobile as well as fixed services. Finally, Play has signed a cooperation agreement with Vectra to offer its customers high-speed fixed broadband. While these developments underscore the validity of Orange's convergent strategy in Poland, they are likely to boost competition.

In 2019, operators increased the prices of their mobile plans based on the "more for more" principle, whereby subscriptions cost more in

return for additional benefits for subscribers. Orange Polska initiated this price increase, which marked a major change of strategy in the extremely competitive Polish market. Play and T-Mobile were not far behind. These measures follow many years of strong competition, which has driven down prices in Poland's telecoms sector to amongst the lowest in the EU.

Orange's activities in Poland

In 2019, Orange Polska continued to implement its Orange.one strategic plan. The plan is designed to generate long-term value and sets forth the strategic vision of the company by 2020. Orange Polska is aiming to become a benchmark Polish operator in the B2C and B2B markets, while creating a business model that can deliver sustainable revenues and profit growth. Orange plans to meet these objectives by developing high-quality unrivaled products and services, boosted by the development of its fiber optic network and digital capacity, and by significantly improving its operational efficiency. In financial terms, the strategic plan should provide ongoing improvements in revenues and EBITDAaL trends, together with the sustainable growth of these indicators.

Orange's main strategic objective in Poland is to be the leader in convergence, by marketing packaged offers of fixed and mobile broadband access with financial incentives. Convergence enables Orange to differentiate itself from its competitors and gain a larger share of the household media and telecommunications budget and is an effective retention tool. Orange pursued this strategy in 2019 by focusing on its *Love* convergent offer. *Love* is a package which includes both fixed and mobile services in its basic formula at an affordable price, and can be extended for higher fixed broadband speed, additional SIM cards, additional TV content and other value-added services. At end-2019, the number of convergent customers totaled 1.37 million, representing 62% of the fixed broadband customer base.

Orange focuses on a differentiated approach in large cities and medium and small towns, as well as rural areas, by taking into account the local competitive environment, the potential in relation to population density, and customer needs. In large cities, Orange focuses on developing the FTTH coverage and improving its fixed broadband market share, by leveraging its excellent positioning in the mobile market via the cross-selling of fixed and mobile telephony services. Mobile technologies in rural areas remain the first solution for broadband access.

The number of fixed voice lines continued to decline in 2019, with a net loss of voice customers (traditional PSTN or VoIP) due to structural demographic factors, as well as the growing appeal of mobile telephony services offering unlimited calls across all networks.

The Network

In 2019, Orange continued to roll out its FTTH network in Poland, and extended it to $4.2\ \text{million}$ connectable households.

Orange provides LTE (4G) services via 11,222 mobile mast sites. To meet the strong growth in 4G traffic, Orange focused on spectrum refarming in 2019 to increase the allocation made to 4G, by lowering allocations to 2G and 3G technologies. Orange also focused on increasing the number of sites allowing spectrum aggregation. At end-2019, Orange's 4G network covered 99.9% of the population (2).

⁽¹⁾ Business segment.

⁽²⁾ Source: Orange estimates.

1.4.3.2 Belgium & Luxembourg

In Belgium and Luxembourg, Orange operates via Orange Belgium (previously Mobistar) and its subsidiary Orange Communications Luxembourg. Orange Belgium is listed on the Brussels Stock Exchange. The Orange group holds 52.9% of the capital. Historically present in the mobile segment in Belgium, in 2016 Orange launched convergent offers across the entire country, based on the regulation of wholesale access to cable, and then adopted the Orange brand the same year. In 2019, Orange Belgium generated 3.1% of the Group's consolidated revenue.

Belgium

The competitive structure of the fixed-line telephony market remained relatively stable in 2019, with the predominance of the incumbent operator Proximus and the regional cable operators Telenet and VOO. In September, Telenet announced that it was setting up a high-speed 1GB broadband network to cover Brussels and the whole of the Flanders region.

Orange has two main competitors on the mobile telephony market: Proximus (the incumbent operator, 53.5% owned by the Belgian State) and Telenet (57.9% owned by the Liberty Global Group), which acquired Base in 2016. With a market share by volume of 28.1% in the third quarter of 2019, Orange is ranked second after Proximus (1).

In 2019, Orange continued to set itself apart from the competition as a "bold challenger" by offering added value to its customers, and particularly by introducing new features at no extra cost:

- Orange is the first operator to include MMS in its prepaid services for Retail customers:
- Eagle customers also receive an unlimited package (data, calls and SMS) within the EU;
- the data included in the Cheetah package has increased from 8 GB to 15 GB.

On the convergence market, Orange launched the Love Duo package, which combines a mobile subscription with an unlimited very high-speed broadband plan.

On the B2B market, Orange acquired Upsize NV and its subsidiaries BKM NV and CC@PS. Following this acquisition, Orange Belgium is now able to extend its offer with Unified Communications & Collaboration and BKM ICT services, in order to meet increasing demand from B2B customers for a single supplier for connectivity and ICT-related services.

For its mobile network, Orange signed a mobile access network sharing agreement with incumbent operator Proximus. This agreement will improve the mobile experience thanks to wider coverage, improved *indoor* coverage and a faster 5G rollout. In addition it will generate significant environmental benefits and will also save on operating costs. A new joint venture owned in equal shares by Orange Belgium and Proximus will be set up to design, develop and operate the shared mobile access network.

At end-2019, Orange Belgium became the first operator in Belgium to open a dedicated business 5G test center. By creating this innovation hub, and therefore working with industrial partners in such real-life settings, Orange Belgium has begun to use the full potential of 5G technology.

Luxembourg

Orange started its operations in Luxembourg in 2007 via the acquisition of Voxmobile. The company adopted the Orange brand in 2009.

On the mobile segment, Orange Communications Luxembourg is ranked third behind Post Luxembourg, the market leader and incumbent operator, and Proximus Luxembourg, a subsidiary of the Belgian operator Proximus with its own brand, Tango (source: ILR for the year 2018). Post Luxembourg also has the largest market share in the fixed-line and Internet market.

In 2019, Orange changed its mobile packages by launching the new BeUnlimited and MoveUnlimited offers. These two packages offer unlimited data, calls and text messages, marking the first stage of Orange's quest to establish itself as a "bold challenger" on the Luxembourg market.

In 2019, Orange continued to reap the benefits of its convergent offers with *Love* Essential, a mobile subscription combined with very high-speed unlimited fiber optic broadband.

1.4.3.3 European countries

Romania

Orange Romania was founded in 1997 and adopted the Orange brand in 2002. Historically present on the mobile segment, Orange launched its satellite TV offers in 2013, then its fiber offer in 2016, following a wholesale agreement with Telekom. In 2019, the Group generated 2.6% of its consolidated revenue in Romania.

The Romanian Telecom market is dominated by four operators: Orange, Vodafone, Telekom (the incumbent fixed telephony operator, also present on the mobile segment, jointly owned by the Romanian government and OTE, which is itself jointly controlled by Deutsche Telekom and the Greek government) and RCS&RDS (operating under the Digi brand, owned by Digi Communications).

In the mobile telephony market, Orange's market share was estimated to be 33.8% in 2019, compared with 34.1% in 2018. Orange maintained its leading position, followed by Vodafone, Telekom and Digi⁽¹⁾.

Following the launch of its fixed offers and its own fiber optic network, Orange's market share in the fixed-line market increased by 1.2 points, but remains limited at 6.8%, in a market dominated by Digi, followed by incumbent operator Telekom and then Vodafone (1).

Orange's activities in Romania

2019 marked a turning point for Orange Romania, which is in the process of changing from an exclusive mobile operator to an integrated multi-service operator, while retaining its basic priorities throughout its transformation process.

Orange continued to increase its 4G presence, which is the largest in Romania and now covers 98.1% of the population throughout the country as a whole, and 100% in urban areas ⁽¹⁾. Orange continued to integrate more data into its offerings, enabling the rapid adoption of smartphones and significant growth in traffic and in revenue from data services, thereby reinforcing its leadership in 4G.

In the first quarter of 2019, Orange launched new services including Voice HD Plus, a first for Romania and for the Group, as well as the eSim integrated SIM card.

Orange Romania became the first Group country to market 5G in November 2019, when customers in Bucharest, Cluj-Napoca and lasi were able to access the 5G network. Customers on the 5G network enjoy mobile speeds of up to 1.2 Gbps, which is comparable to high-speed fiber broadband. This enhanced connectivity goes hand in hand with the new Number Share service, enabling customers to use the same number for their smartphone and smartwatch. This highly sought-after feature in Romania is exclusive to Orange.

Orange Romania is also involved in EU Horizon 2020 Research and Development projects to develop and also standardize 5G. It is therefore the only Romanian operator involved in the standardization of this new technology on a European scale.

Moreover, at the end of 2019, Orange Romania opened its own FTTH network (directly to customers' homes) in three areas: Bucharest, Pascani (lasi municipality) and Apahida (Cluj municipality). In Bucharest, Orange Romania has also deployed its own fixed infrastructure specifically dedicated to business clients.

As part of Orange Romania's diversification strategy, in the second half of the year, the Enterprise Division adopted the Orange Business Services (OBS) brand for its IT&C services.

In the interests of retaining a positive direct link to its customers, in 2019 the Group opened its 1,000th Smart Store in Botosani. Meanwhile, the Orange Digital community was launched, attracting over 6,000 members.

Mobile money and banking services launched new payment methods (debit cards and NFC in March 2019, and Apple Pay in June 2019). In the second half of the year, Orange Money started marketing My Reserve, a financing solution to buy phones and accessories, which provides customers with a simple and transparent credit tool.

Slovakia

Orange Slovensko started operating in 1996 and adopted the Orange brand in 2002. Historically present on the mobile segment, Orange reinforced its position in the area of convergence thanks to a new fiber deployment program in 2016 and the launch of fixed-line solutions via LTE in 2017. In 2019, the Group generated 1.3% of its consolidated revenue in Slovakia.

The fixed broadband market in Slovakia is dominated by the incumbent operator Slovak Telekom, whose infrastructure covers the whole country. Orange, which rolled out its own fiber optic network in Slovakia and markets DSL Internet services via a commercial agreement with Slovak Telekom, is ranked second in this market with a market share of 12.9% (1).

In the mobile telephony market, Orange competes with three other operators: O2 (owned by the O2 Czech Republic group), Slovak Telekom (owned by Deutsche Telekom) and Swan (national operator). The Slovak post and Swan started to offer mobile services in October 2015, only in prepaid formulas, available in all post offices. Orange is still the leading market operator with a market share of 38% in the third quarter of 2019(1). Slovak Telecom is ranked second in value terms, followed closely by O2(1).

1.4.4 Africa and the Middle East

The Orange group is present in 18 countries in Africa and the Middle East of which 16 where it has controlling interests and two (Tunisia and Mauritius) where it has minority interests. Part of the activities of the business segment is structured into sub-groups (Sonatel and Côte d'Ivoire). In Africa and the Middle East, Orange primarily operates in the mobile markets, with the exception of countries where the Group operates through the incumbent operator (Senegal, Côte d'Ivoire, Jordan and Mauritius) and Morocco, where it also provides fixed telephony and Internet services. These markets are mainly prepaid markets, largely driven by the accelerated development of voice and data usage.

Orange's activities in Slovakia

In 2019, Orange continued to execute its strategy focused on strengthening its position on the convergent market. This is supported by its solid market share in mobile telephony and by a growing share of the fixed and television market. The TV offer has been enhanced by exclusive content including Premier League soccer matches.

Orange markets a number of innovative offers, particularly its convergent offer Love. At the same time, Orange has simplified its portfolios of mobile and fixed-line contracts and launched its new flexible Smart Packages contracts for Funfon prepaid customers.

Orange continued to expand its 4G network in 2019. It also focused on extending fixed broadband by increasing its FTTH coverage (which exceeded 522,000 connectable households at the end of the year).

Moldova

Orange Moldova started operating in 1998 and adopted the Orange brand in 2007. Historically present on the mobile segment, Orange launched its fixed and convergent telephony offers in 2017, following the acquisition in 2016 of SUN Communications, Moldova's main cable operator. In 2019, the Group generated 0.3% of its consolidated revenue in Moldova.

The main telecommunications operators active in Moldova are Orange, Moldcell (only operating in the mobile market) and Moldtelecom. The latter is the incumbent operator whose infrastructure provides coverage throughout the country. It is the market leader for fixed telephony, but is also present in the mobile segment under the Unite brand. In 2019, Orange maintained its position as the number one in the mobile telephony market with a 55.9% market share, followed by Moldcell and Unite⁽¹⁾.

Orange's activities in Moldova

In 2019, Orange Moldova launched television and fixed broadband services using FTTH in both the fixed and convergent markets, providing customers with speeds of up to 500 Mbps. Orange is also continuing to roll out its convergence strategy. Orange's 2020 ambition is to grow its convergent customer base, while providing fast deployment of fiber to households. Exclusive HBO content has set Orange apart on the market, attracting new TV and convergent customers.

In the mobile segment, Orange launched its VoLTE service to provide customers with HD-quality calls, together with reduced call connection times.

Orange is pursuing a 4G rollout strategy in Africa and the Middle East, and is investing in all countries to upgrade and extend their access networks. The rollout program was ramped up in 2019, particularly in Egypt, Morocco and Côte d'Ivoire. The Group has also seen rapid development in mobile financial services. Orange Money increased its reach with 45 million customers by December 31, 2019, 18 million of whom are active customers who use the service every month.

Africa and Middle East countries are generally tightening their regulations with regard to service quality and environmental standards, while tax levels are rising.

In 2019, Africa and the Middle East accounted for 12.9% of the Group's consolidated revenue.

As part of its new Engage 2025 strategic plan, Orange aims to become the benchmark digital operator in Africa and the Middle East (see Section 1.2.2 *The Orange Group strategy)*.

1.4.4.1 Sonatel Sub-group

The Sonatel sub-group operates under the Orange brand in five countries. With a presence in Senegal since 1997, it began its international development in Mali in 2002. It generates 74.5% of its revenues in these two countries. The Sonatel sub-group also operates in Guinea, Guinea-Bissau (operations launched in 2007), and in Sierra Leone, where it acquired Airtel Sierra Leone in 2016. In 2019, it generated 4% of the Group's revenue.

With respective mobile market shares of 53.6% in Senegal, 59% in Guinea (sources: ARTP and ARPT, 3rd quarter 2019), 59.9% in Mali, 47.4% in Guinea-Bissau and 33.2% in Sierra Leone (source: GSMA), the Sonatel sub-group is a leader in Senegal, Mali and Guinea, and is the second largest operator in Sierra Leone and Guinea-Bissau.

It has two or three competitors in each country, including Free (brand launched on October 1, 2019, to replace Tigo) and Expresso (Sudatel Group) in Senegal; Sotelma/Malitel (Maroc Telecom Group) and Alpha Telecom (Planor-Monaco Telecom International consortium) in Mali; MTN and Cellcom in Guinea; MTN in Guinea-Bissau; Sierratel (incumbent operator), Africell and QCell in Sierra Leone.

Following 4G launches in Sierra Leone in March 2019 and in Guinea in June 2019, all the countries in the Sonatel sub-group now offer a 4G or 4G+ service to their customers.

Growth in the fixed market very high-speed broadband market continued in 2019, particularly in Senegal and Mali based on the *Flybox*, TDD-LTE (fixed Internet on 4G) and fiber optic offers. Orange Money also continued to grow, both in terms of its revenues and active customers.

The Sonatel sub-group implements a Corporate Social Responsibility policy which is in line with the Orange Group strategy and the guidelines on sustainable development defined with stakeholders in each operational country. To honor its commitment to digital inclusion, Orange has opened its first West African Orange Digital Center in Dakar. This digital innovation hub is a showcase for Orange's commitment to society.

1.4.4.2 Côte d'Ivoire sub-group

The Côte d'Ivoire sub-group operates under the Orange brand in three countries. The activity covers Côte d'Ivoire, where the Group has operated since 1996 and which accounts for 68.5% of its revenues, and Burkina Faso and Liberia where it acquired Cellcom Liberia and Airtel Burkina Faso in 2016. It operates in a geographical region with a population of more than 50 million inhabitants. In 2019, it generated 2.7% of the Group's revenue.

In 2019, the markets in which the Côte d'Ivoire sub-group operates underwent a range of changes, against a backdrop of more robust identification requirements for mobile customers, a deteriorating security situation in Burkina leading to a loss of access to part of the network, and an increased tax burden, particularly in Liberia which is undergoing a severe economic and social crisis.

With mobile market shares of 42% in Côte d'Ivoire (source: ARTCI, 3rd quarter 2019), 43.2% in Burkina Faso (source: Arcep BF, 3rd quarter 2019) and 62.5% in Liberia (source: GSMA), the Côte d'Ivoire sub-group is now ranked first in all of the countries in which it operates. In Côte d'Ivoire, the sub-group is also the leader in the mobile financial services market.

The three entities have the following competitors in each of their regions: MTN and Moov in Côte d'Ivoire; Onatel and Telecel in Burkina Faso; MTN in Liberia.

The 2019 sub-group activity was characterized by a return to growth of Orange Côte d'Ivoire's revenues (against a backdrop of a stagnating telecoms market), another two-figure increase in revenues for Orange Burkina, and Orange Liberia's revamping of its voice and data offers after the Liberian regulator imposed new minimum pricing.

In 2019, Orange Côte d'Ivoire embarked on an ambitious transformation plan to improve its financial profitability and resume growth. The plan is due to continue in 2020.

The Côte d'Ivoire sub-group continued to develop FTTH, with more than 21,000 active customers for approximately 77,000 available connections at the end of 2019. It also boosted its international connectivity with the commissioning of the Main One submarine cable in Côte d'Ivoire.

1.4.4.3 Countries of North Africa and the Middle East

Egypt

The Orange group entered the Egyptian Telecom market in 1998 through a partnership with Orascom and Motorola in the operator Mobinil. It gradually increased its stake following the withdrawal of Motorola in 2000 and Orascom in 2015. Since 2016, all services are marketed under the Orange brand. In 2018, Orange Egypt delisted from the Cairo Stock Exchange. In 2019, the Group generated 1.8% of its consolidated revenue in Egypt.

Since end-2017, the buoyancy of the market has been driven by the launch of 4G services by all operators, and the simultaneous increase of 30% in the price of prepaid recharges following the regulator's decision. At the same time, Telecom Egypt, the incumbent operator until then present only in the fixed-line market, launched a new mobile operator under the brand WE, operating under a roaming agreement with Etisalat. The markets also saw a considerable slowdown following the introduction of a tax for each new sale.

With a market global share of 30.4% (Source: GSMA), Orange is still the country's second mobile operator, behind Vodafone and ahead of Etisalat.

Among the highlights for 2019, Orange notably:

- launched a new portfolio of packages (Alo, Elking, Control Plus), together with its new #012 program of personalized promotions to meet the customers' latest needs, particularly for mobile data;
- reached an out-of-court settlement for long-lasting litigation with the Egyptian regulator regarding the domestic interconnection system between operators;
- won an important tender on the B2B market for the development and monitoring of a data center in the new administrative capital.

Morocco

The Orange group entered the Moroccan Telecom market in 2010 through a partnership with Médi Telecom. The company, which was operating under the Méditel brand, became a consolidated subsidiary of the Group in July 2015 after Orange increased its interest to 49% of the capital. Since end-2016, all services are marketed under the Orange brand. In 2019, the Group generated 1.3% of its consolidated revenue in Morocco.

With 34.7% of the mobile market (source: ANRT, 3rd quarter 2019), Orange is the second largest mobile operator in the country (behind the incumbent operator, Maroc Telecom, and ahead of Inwi).

In 2019, Orange maintained its sales momentum. The year was also defined by a gradual fall in prepaid mobile plan revenue and a move towards monthly billed plans, both in the mobile and fixed segments. Unlimited Internet plans saw particularly strong growth, with successful

fiber optic and 4G TDD-LTE offers accounting for a total 200,000 customers by end-2019.

Jordan

The Orange group entered the Jordanian Telecom market in 2000 through a partnership with the incumbent operator Jordan Telecom. The company became a consolidated subsidiary of the Group in 2006 after Orange increased its interest to 51% of the capital. Since end-2007, all services are marketed under the Orange brand. In 2019, the Group generated 0.9% of its consolidated revenue in Jordan.

With 25.7% of the mobile market at the end of 2019 (source: GSMA), Orange is the third largest mobile operator in the country, behind Zain and Umniah.

Orange is also present in the fixed-line market through its ADSL Internet offers together with FTTH, launched in 2016. Zain and Umniah are also competitors in this segment.

In 2019, Orange continued its large-scale deployment of fiber optic to all of the country's major towns and cities.

Orange has also implemented an ambitious internal digital transformation plan by creating a digital hub of 100 people, following its launch of both internal and customer-facing chatbots. It has also started using robots for the first time.

Finally, Orange has continued to implement measures to develop the country's digital transformation, by opening new Coding Academies, providing coding tuition for young people and women.

Tunisia

Orange Tunisie launched its activity in May 2010 after acquiring its license in July 2009. The Orange group is a partner with 49% of the capital.

Orange's mobile market share is 25.6% (source: INT, 3rd quarter 2019), placing it in third position behind Ooredoo, which maintains its leading position, and Tunisie Telecom.

Orange Tunisie's B2B business has retained its momentum and maintained strong revenue growth in 2019.

In the fixed segment, in June 2019 Orange Tunisie launched an unlimited Internet service based on 4G TDD-LTE technology. The service was popular with users, 85% of whom opted for the premium 10 Mbps package. The service quality is excellent, with a churn rate of close to zero.

1.4.4.4 Countries of Central and Southern Africa

Democratic Republic of the Congo

The Orange group entered the Congolese telecoms market in 2011 through the acquisition of Congo Chine Telecom. In 2016, Orange acquired Oasis, the Congolese subsidiary of the Millicom group, which operated under the Tigo brand. In 2019, Orange RDC generated 0.7% of the Group's consolidated revenue.

With a market share of 29.1%, Orange is the second largest mobile operator in the country behind Vodacom and ahead of Airtel and Africell (source: ARPTC, 2nd quarter 2019).

In 2019, thanks to robust commercial momentum following the end-2018 4G launch and widespread 3G coverage, Orange was also the second largest operator on the data services market (source ARPTC, 2nd quarter 2019). 2019 was also defined by strong offer appeal, and the success of Orange Money in particular.

Orange was the first operator to launch 4G, and in 2019 continued to roll out the mobile broadband network to DRC's main towns and cities.

Cameroon

The Orange group has been present in Cameroon since the liberalization of the Telecom sector in 1999. All services, initially launched under the Mobilis brand, have been marketed under the Orange brand since 2002. In 2018, the Group generated 0.7% of its consolidated revenue in Cameroon.

With a market share of 33.4% in 2019 (Source: GSMA), Orange is the country's second mobile operator, behind MTN and ahead of Nexttel.

Orange Cameroon maintained robust sales activity in 2019 thanks to the steady development of Orange Money and mobile data activity, and a positive outbound voice performance.

2019 was also characterized by multiple regulatory and tax-related cases brought by various Cameroonian authorities.

Botswana

The Orange group has been present in Botswana since 1998 and since 2003 under the Orange brand. In 2019, the Group generated 0.2% of its consolidated revenue in Botswana.

In a saturated market, with a penetration rate of 150% (source: GSMA), Orange is the second largest mobile operator with a market share of 36.8% (source: BOCRA, August 2019), behind Mascom and ahead of Be Mobile. Orange also consolidated its leading position on the mobile financial services market (source: BOCRA, November 2019).

In 2019, Orange Botswana recorded buoyant sales figures due to the success of its abundance voice and data offers and Orange Money.

Madagascar

The Orange group has been present in Madagascar since 1998 and since 2003 under the Orange brand. In 2019, the Group generated 0.2% of its consolidated revenue in Madagascar.

Orange is the third largest mobile operator in the country with a market share of 25.1% (source: GSMA), behind the incumbent operator Telma and Airtel and ahead of MVNO Blueline.

In 2019, Orange's activity in Madagascar was marked by the 2018 launch of new abundance voice and data offers. Orange also enhanced the innovative positioning of its Orange Money financial service business by developing its "pico" and "micro" credit solutions with the M-kajy offer

Central African Republic

The Orange group entered the telecoms market in the Central African Republic in 2007 as the fourth entrant. In 2018, the Group generated 0.1% of its consolidated revenue in Central African Republic.

With revenue growth of nearly 30% in 2019, Orange became the largest mobile operator in the country with a market share of 48.5%, ahead of Telecel, Moov and Azur (source: Arcep RCA, Q3 2019).

The strong growth observed in 2019 was due to a significant improvement in service quality, and to investments in the country with the opening of around 15 new sites. Development of B2B activity was consolidated by gaining an important project with MINUSCA.

Mauritius

The Orange group has been present in Mauritius since 2000 through a partnership with the incumbent operator Mauritius Telecom, in which it holds 40% of the capital.

Mauritius Telecom is the leader in Internet and fixed-line telecoms services in Mauritius, ahead of DCL, and in mobile services ahead of Emtel and MTML, with a market share of 50.6% at end-2019 (source: GSMA).

The operator offers a comprehensive range of fixed and mobile data and voice services. It also offers convergence packages (voice, IP and TV) through its *MyT* service. The first operator to launch 4G and mobile

payment services in 2012, Mauritius Telecom launched its fiber optic network (FTTH) in 2013.

The main growth drivers for Mauritius Telecom lie in content, in particular with a strategy of investing in premium content, enabling Mauritius Telecom to strengthen its position as the market leader.

The company also offers international connectivity via fiber optic submarine cables.

1.4.5 Enterprise

The Enterprise operating sector includes all services to key accounts, local authorities and companies with over 50 employees in France, as well as multinationals around the world. Operating under the Orange Business Services brand, Orange is one of the world leaders in supporting the digital transformation of enterprises. As an infrastructure operator, technology integrator and value-added services provider, Orange Business Services has a complete portfolio of offers designed to assist its customers to carry out their digital transformation projects and implement their communication projects. Orange provides its customers with a high level of expertise in terms of collecting, transporting, storing, processing, analyzing and sharing their data and creating value. Under the Orange Cyberdefense brand, Orange also offers its customers enhanced data protection during all these stages.

Enterprise services (connectivity and IT integration services) are one of the growth drivers identified by the Group and are key to the new Group strategy, Engage 2025, (see Section 1.2.2 *The Orange group strategy*).

In the light of increasingly sophisticated and global threats, cyber security is now a crucial issue for companies and institutions. It is a growth market which requires both critical mass, to respond to the complexity of the attacks, and closer contact with customers. In 2019, Orange continued its growth strategy with the aim of increasing its international presence and its expertise in this field, through two major acquisitions:

- SecureData, the largest independent provider of cyber security services in the United Kingdom, which is the largest market in Europe, with 200 employees in the United Kingdom and South Africa;
- SecureLink, one of the leading independent players in cyber security services in Europe, with over 660 employees and over 2,100 customers from a wide range of sectors and with a strong foothold in the Nordic, Belgian, Dutch, German and UK markets.

In 2019, the Enterprise sector generated 17.6% of the Group's consolidated revenue.

The market

The B2B market for communication services and IT services is part of the wider ICT market, which combines the technologies used in the processing and transmission of information. In 2019, it accounted for nearly €1.3 trillion (source: Gartner, 3rd quarter 2019), up 4% on a constant currency basis. The value of this market by region breaks down as follows: North America for 39%, Asia Pacific for 27% and Europe for 25%. The markets for consulting and integration services and for managed services and Cloud infrastructure services grew in 2019 and respectively accounted for 32% and 29% of the world market in value terms (source: Gartner, 3rd quarter 2019).

The provision of telecommunication and IT services to companies is a highly competitive market. It is shared by many players, notably telecommunications operators, network integrators, managed IT

service providers, and Internet or digital players. Given the large number of players, there is no reliable, relevant information available on market shares.

Specifically with regard to the cyber security services market, Orange is now a major operator, with a presence in 8 European countries, and was ranked as the leading operator in France and fifth in the Europe, Middle East, Africa region in 2018 (source: Teknowlogy Group study – November 2019).

Orange Business Services activities

Orange offers a wide range of products and services, including those that are packaged or tailor-made and using different methods such as integrated, managed or Cloud, aimed at guiding businesses in their digital transformation, and structured around their main challenges (connectivity, mobility, streamlining of processes, fluidity of exchanges with customers and support for their projects).

Orange has structured its portfolio of offers around four main types of products and services:

- fixed telephony (traditional and IP) and audio conference services;
- enterprise mobile telephony offers;
- network offers, including certain service guarantee levels (mobile and fixed-line connectivity, data transfer, hybrid networks, fixed-line and mobile convergence offers);
- IT service offers and integration solutions, including:
 - Cloud solutions (virtualization, development of "aaS" (as a Service) solutions and business models), which is the direction that many business customers are taking. Orange is particularly well placed in terms of the multi-cloud solutions that its customers are increasingly demanding and for which it can share its experience in the construction, management and orchestration of large-scale complex structures.
 - Digital & Data solutions, strengthened by the recent acquisition of Business & Decision. These make it possible, in addition to system integration and supply, business applications and API (Application Programming Interfaces), to design digital customer solutions in the fields of Big Data, Data Analytics and Artificial Intelligence,
 - cyber-defense solutions covering infrastructures and users, in managed and integrated or Cloud (safe work environments and infrastructure, cyber-defense, management and governance), supervised from a security operations center (see Section 4.1.1.2 Business opportunity: Orange Cyberdefense),
 - intelligent mobility solutions based not only on mobile technologies, but also on the IoT (Internet of Things),
 - unified communication and collaboration services (interoperability between telephony, messaging and video conference solutions, in triple play or quadruple play),

 consulting and customer services (analysis of needs, solutions architecture, deployment and installation support, user training, administration of services and solutions) in various areas: switching to "all-IP," adopting Machine to Machine and the Internet of Things, supervising and managing quality of service, switching to Cloud infrastructure solutions, and the digital transformation of businesses.

These offers are also used to develop cross-sector business solutions (finance, transport, energy, government and public sector, geolocation and fleet management, etc.).

As regards its core business as an operator, Orange relies on international partners to supplement its offer and geographical coverage in areas where its customers operate and where its presence does not offer a comprehensive solution. The Group is working to build this type of partnership in the most developed markets, preferably with the leading operator or its direct competitor, like NTT Communications in Japan or AT&T in the United States.

Orange also works in close collaboration with an ecosystem of international technological partners, who are leaders in their respective fields of connectivity, unified communication, Cloud infrastructure, effective data use or cyber security.

Lastly, Orange is developing partnerships with service operators to develop a common business approach to offer innovative solutions for its customers.

In 2019, Orange signed a series of major contracts to support its customers around the world, in particular with Sony to consolidate and transform the communication infrastructures of its two largest operating companies and create a future-proofed and standardized network that will offer an enhanced experience to users worldwide, with Mobileye®, an Intel subsidiary, to interconnect its latest generation collision avoidance device, and with Mars Incorporated to roll out an Intelligent Automated Network (IAN).

1.4.6 International Carriers & Shared Services

The operating activities of the International Carriers & Shared Services segment include:

- international carrier activities undertaken by the Wholesale International Networks Division (roll-out of the international and long-haul network, sales of international telephony and services to international carriers, and installation and maintenance of submarine cables);
- and the activities of OCS and Orange Studio in content.

The segment also includes other cross-cutting activities of the Group, in particular research and innovation (see Section 1.6), or real-estate, as well as support and shared activities including corporate functions at the headquarters.

The operating activities of the segment accounted for 2.3% of the Group's consolidated revenue in 2019.

1.4.6.1 International Carriers' activities

The market for wholesale operators is made up of three categories of player: global wholesalers, multinational retail operators (including Orange) and regional players or specialists.

The wholesale market's customer base comprises voice market specialists (call-shop, prepaid cards), fixed and mobile domestic retail carriers (including MVNOs), Internet access and content providers and OTT players. International carriers also sell wholesale traffic to each other.

Wholesale International Networks (WIN) offers a broad range of solutions on the international market. Its business is structured on a large infrastructure of long-haul networks. Its presence in both the retail and wholesale markets means it can develop solutions that are particularly well adapted to the needs of the retail operators.

The Group is notable for being heavily involved in the design, construction and operation of submarine cables. With its ownership or co-ownership of several cable systems, Orange ranks among the world's largest owners of submarine links. This has enabled it to satisfy the increase in transatlantic traffic.

The Group's wholesale activity is based on:

 a seamless global network⁽¹⁾ and an IPX protocol network⁽¹⁾ supporting voice and data with points of presence around the world;

- a global network of dedicated IP routes with end users in more than 220 countries, connections to more than 200 Internet service providers, and connectivity in over 100 countries in a single IP network hop;
- 99.99% network availability, 24/7 centralized network supervision.
 In 2019, IP data traffic continued to experience steady growth (+18%).

Offers

Voice Services

Voice service solutions enable operators worldwide to transit their customers' calls internationally to over 1,200 destinations with 24/7 technical support.

Services to Mobile Operators

With mobile services solutions, Orange offers roaming as a result of direct connections with over 200 mobile operators as well as broad connectivity enabling it to offer messaging services.

Internet and Transmission Services

Orange's data and IP network includes terrestrial, submarine and satellite systems which combine to create a vast global network. With its Internet network, Orange offers adjustable solutions to meet the needs of Internet service or content providers.

Convergence Services

Orange provides operators with a multiservice offer to enable them to manage their voice and mobile data services over a single connection.

Security and anti-fraud services

To protect the value of its customers' business, Orange Wholesale International Networks offers solutions covering the protection of identity and privacy and that of its networks, mobile traffic and voice traffic.

The portfolio of anti-fraud and security services relies on voice, Internet and mobile services solutions. These offers include audit, detection and protection functions as well as the provision of analysis reports. The portfolio also contains offers that focus on the fight against the

dangers of cybercrime and Orange Wholesale International Networks' customers can resell some of these offers to their own customers.

Orange Marine

Orange Marine is a major player in submarine cables, from the early research and engineering stage through to the setting up of intercontinental connections and the maintenance of existing cables. In total, Orange Marine has installed more than 260,000 kilometers of submarine cables (including over 30,000 kilometers of buried cables) across all oceans and carried out surveys on over 80,000 kilometers of seabed. Its vessels carried out more than 800 repairs on defective cables, some of which were performed at a depth of 5,000 meters. Orange Marine has a cable-laying fleet of seven vessels (six cable ships and one submarine research ship). It represents 15% of the global fleet and is one of the most experienced worldwide.

Orange Marine was particularly busy in 2019, with several large-scale projects and, in particular, laid a new fiber optic submarine cable linking Grande Comore Island and Mayotte. Brought into service in the third quarter of 2019, this cable enhances connectivity in the Indian Ocean.

1.4.6.2 Content activities

Content distribution activities (TV, video-on-demand, music, video games) are a key component of Orange's strategy as a multi-service operator with nearly 10 million households connected to its TV universe at the end of 2019. These activities help promote the Group's very high-speed broadband offers.

Orange's content strategy is primarily based on developing partnerships with rights holders and service publishers. Orange is focused on its role of aggregator and distributor by referencing the best entertainment services available in order to offer them to its customers through its broadband networks.

In France, Orange is also developing an ambitious policy of producing and co-producing films and series, and broadcasting them via its Orange Studio subsidiary and its premium service, OCS. All OCS programs are available via scheduled programming and on-demand. Most distributors offer OCS and it can be accessed directly online. At end-2019, OCS had 3.1 million subscribers.

After the broadcast of *Nom de la Rose*, in 2019, Orange Studio co-produced two new original content series, *Devils and Cheyenne & Lola*, which are due to be broadcast on OCS in 2020. In 2019, Orange Studio also co-produced a dozen or so films, including Une Vie cachée by Terrence Malick (Cannes official selection) and La Belle Epoque by Nicolas Bedos which generated over 1.2 million cinema admissions. At the same time, Orange Studio continued to enrich its catalog and expanded its international sales activity via an agreement with UGC and own-brand distribution mandates.

OCS experienced a steady increase in subscribers in 2019 due to its exclusive broadcasting rights to the latest season of Game of Thrones and a number of other new series and seasons, and its exclusive rights to broadcast film premiers.

In other European countries, the Group is pursuing the roll-out of content services, notably related to TV, a key element of fixed/mobile convergence offers. As such, Orange is marketing TV channel packages in Spain based on soccer offers (La Liga and Champions League), for which the distribution rights were renewed for the 2019-2020 season. Orange in Spain also expanded its range with SVoD services such as Amazon Prime Vidéo, FlixOlé and StarzPLay, while continuing to develop its Orange Series 4k channel. The Group's other European subsidiaries are also developing this TV strategy.

In Africa, in September 2019, Orange signed a structured partnership with Canal+ Afrique to offer Canal+ TV packages to all Orange households. This will be rolled out gradually in countries in Sub-Saharan Africa in 2020. Orange is also continuing to invest in production, particularly in Senegal with Season 7 of the Idoles series or in Côte d'Ivoire with the Assinie series. In terms of mobile services, Sonatel launched its Wido video streaming app which gives unlimited access to a catalog of films and series produced or acquired with exclusive rights. Orange also signed distribution partnerships with several content publishers, particularly in Egypt with BelN Sports.

The music market continued to grow in 2019 via streaming. Deezer, in partnership with Orange since 2010, now exclusively offers Rotana's catalog in Arabic. The Deezer service is available with Orange in France, Romania, Luxembourg and Côte d'Ivoire. Orange is also continuing to roll out its radio and podcast service, Orange Radio, which is now available in 17 countries via mobile apps, web TV and connected devices.

In the video games sector, the Orange TV games streaming offer continued to grow in 2019. In the mobile segment, the rise of unlimited subscriptions and *Freemium* games continued with the Orange Juegos offer in Spain and a sustained growth in the African countries where Orange manages more than a million mobile gaming customers. In 2019, Orange also organized the second Orange eSports Experience, which is now the benchmark pan-African video gaming competition.

Lastly, Orange introduced innovations in the field of digital reading in Africa by opening, in association with the French partner "Youscribe," a digital book and press service which is again a mark of its social commitment on this continent. Available in 3 African countries (Senegal, Côte d'Ivoire and Cameroon), it supplements the existing service in Tunisia.

1.4.7 Orange Bank

Mobile financial services are a key component of the Orange Engage 2025 strategy. With the expansion of its multiservice activities on the African continent, B2B and IT services, mobile financial services are one of the Group's three growth drivers.

The banking market

The banking sector is currently undergoing far-reaching change, marked by:

- adaptation to regulatory changes (DSP2, GDPR, etc.) in the light of more vigilant regulatory authorities (ACPR, CNIL, etc.);
- increased competition and fragmentation of supply (online trading, account aggregators, open banking, etc.);

- the integration of new technologies (Instant payment, Data and Al, Blockchain, etc.) for greater innovation and performance;
- safeguarding profitability in an unfavorable economic climate: reduced interest margins, pressure on commissions, capital requirements;
- a digital explosion which is redefining customer behaviors (autonomous, remote, volatile, demanding) in relation to their bank.

Fierce competition on the banking market breaks down into six categories of operator:

 the major traditional banking networks (which are gradually adapting their offers to the new situation);

- online banks (some of which are subsidiaries of the traditional major banking networks), which developed mainly during the 2000s (Boursorama Banque, ING Direct etc.); they now position themselves as offering free basic banking services and adopt an aggressive acquisition policy (e.g.: welcome bonuses) while joining the race for innovation;
- neo-banks, set up in the 2010's, which are based on a mobile application and simplified customer experience. Some have banking licenses, others do not (N26, Revolut, Compte Nickel, etc.). They compete with online banks by capturing market share through innovation (e.g.: freemium and payment services);
- Fintechs (financing platforms, means of payment and account aggregators):
- the tech giants who offer mobile payment solutions: Apple Pay, the Facebook Messenger payment function, Samsung Pay, Android Pay, etc. They can now offer financial services directly via banking licenses:
- large retailers (Leclerc, Fnac Darty, etc.), which aim to take a share of the mobile financial services value chain;
- new operators which continue to come onto the banking market (MafrenchBank, Uber Money, Free, Starling Bank) from all directions.

Online banks and neo-banks have taken market share from traditional banks. In early 2019, neo-banks captured around 15% of new account openings (Source: AT Kearney analysis, Feb-19 – CB insight, 2019 Fintech trends to watch).

Orange Bank activities

Orange Bank is positioned at the frontier of the banking and telecom sectors.

Modeled originally on the mobile uses of customers, in France, the offer carries no conditions related to income, savings or minimum balance. There are no bank charges attached to accounts and their associated bank cards (subject to certain terms and conditions of use). All basic banking services are offered: bank account, bank card, checkbook, authorized overdraft, savings account, à la carte insurance and personal loan. Customers can perform all their banking operations on a mobile handset. When opening a bank account, customers have access to a network of more than 280 Orange-approved stores.

Strongly relying on telecoms functions, Orange Bank's innovations offer customers the option of making contactless payments with credit

cards or via mobile handsets, gaining immediate access to their bank account balance, temporarily blocking and unblocking their credit card from the application, and sending money by text message. Customer relations are based on the virtual advisor, Djingo, the bank's first point of contact, available 24/7. Since the launch, more than two million conversations have taken place between customers and Djingo, 50% of which were entirely managed by the virtual advisor. There is also a customer relations center whose staff are split between Amiens and Montreuil.

2019 was, in particular, marked by the launch of a Premium bank card in March and by ongoing improvements to the app. This was reflected by an increased Apple Store ranking which rose from 3.4/5 in January to 4.5/5 in December. The bank was also ranked as "best digital offer" for the second year running by the D-Rating agency (assessed on the basis of 420 criteria).

Orange Bank also accelerated its cross-sales strategy with its shareholders, Orange and Groupama. Since July, the bank has been offering customers with Visa Premium cards 5% cash back in Orange stores, valid on all equipment, mobile phone and accessory purchases. In addition, since October 2019, financing has been offered to eligible customers in Orange stores to enable them to finance their purchases (smartphones, telephones, tablets, connected objects and accessories). Car loans are also sold within the Groupama network alongside motor insurance. Lastly, the bank has joined forces with a new partner, Nexity, to finance real estate projects.

In France, as of December 31, 2019, Orange Bank had over 500,000 customers won via Orange stores, Groupama branches and digital channels.

On the international stage, Orange Bank was launched in Spain in November 2019. This bank which is 100% mobile, offers Orange customers a selection of savings accounts, checking accounts, Mastercard credit cards, group management as well as numerous discounts on Orange phone bills. Its launch was accompanied by the payment of 1% interest on deposits of up to €20,000, one of the highest savings rates in Spain. Innovations include the Group management function which enables funds and expenses to be shared or transferred between several people, giving customers the option to manage joint subscriptions such as water bills or Netflix accounts.

In July 2019, the Group also obtained a banking license from the Central Bank of West African States to create Orange Bank Africa (1).

1.5 Orange's networks

For Orange Group, the networks are a strategic asset and, as such, are subject to constant supervision, maintenance and modernization. Orange's new strategic plan, Engage 2025, launched in December 2019, is based on four key ambitions, including reinventing its operator model by capitalizing on its network advances (see Section 1.2.2 The Orange Group strategy).

At end-2019, Orange operated networks in 26 countries to serve its customers in the consumer market and in nearly 200 countries or territories to serve its Business customers. Orange is continuing to modernize its networks to provide its customers with ever greater and more enhanced connectivity in all its locations.

The Group's investments in its networks, other than those to maintain their quality (pole, cable and mast replacement) are designed to improve these networks in a number of respects:

- the development of very high-speed fixed and mobile broadband (FTTH and 4G/5G), increased data transfer volumes and reduced connection latency. These investments concern all of the networks, from the mobile radio network and household Internet connectivity to submarine cables;
- user migration from old technologies (analog telephony, copper networks, 2G, 3G) to new technologies;

⁽¹⁾ Name currently in the process of being validated by the regulator.

Orange's networks

- the gradual virtualization of network control functions ("programmability" of networks so that they can be adapted more quickly to new services and uses);
- automation of network operation which improves the quality of service for customers.

The network architecture is broken down into (i) access networks (fixed or mobile), (ii) transmission and IP transport networks and (iii) service control networks.

Access networks connect each customer, whether an individual or a business customer, and provide a first level of customer data

aggregation. Transmission and IP transport networks connect the access networks between them and with the service and data servers, which may be located in other parts of the world. Service control networks, which drive access, transmission and IP transport networks, provide the connection between people and manage the services (voice, TV, Internet access, data).

A glossary defining several of the technical terms used in this Section may be found in Section 7.2.2 at the end of this Registration Document.

1.5.1 Access networks

Fixed access networks

Analog access and ADSL/vDSL broadband access

Copper access is made up of a pair of copper wires that connect each customer to a concentration point and give the latter access, via the distribution and transport network, to a local switch. It is used to deliver analog voice services and broadband access services.

Orange operates copper access networks in France and Poland, and in various countries in Africa and the Middle East (Côte d'Ivoire, Jordan, Senegal), to provide analog voice access services and data to the Retail, Enterprise and wholesale markets.

Fixed broadband ADSL/vDSL access (for voice applications, Internet access and television) is available in:

- France and in Poland, with coverage approaching 100% on the incumbent local loop;
- Africa and the Middle East countries where Orange is the operator of the copper local loop;
- other countries (including Egypt, Spain and Slovakia), where Orange uses the local loop of the incumbent operators, either unbundled or via bitstream-type offers;
- Belgium and Romania, where broadband offers are marketed using the network of third-party operators;
- Moldova where, following the acquisition of Sun Communications, Orange operates a cable network.

Networks and services based on copper access are used less and less as users move to very high-speed broadband. This means that they are constantly being optimized and, in France, an initial experimental phase of copper decommissioning is due to start, with implementation planned between 2023 and 2030.

Very high-speed broadband fiber optic access

FTTH (Fiber To The Home) network access can extend the available broadband ADSL/vDSL service offer to include upstream and downstream very high-speed broadband (of 100 Mbits/s and more), with improved performance, in particular in terms of response time.

In France, Orange has been deploying FTTH access for over ten years using GPON technology, which can pool several very high-speed broadband accesses on a single fiber without impairing the capacity of each access point's capacity to increase speed. The deployment of the FTTH network started in 2007 in a few major French cities and was then expanded to all large cities. During the years 2011 and 2012, Orange entered into sharing arrangements with other telecoms operators to speed fiber optic rollout. At end-2019, Orange was the leading fiber optic network in France with 16.3 million households eligible for Orange Fiber (see Section 1.3 Significant events).

In Spain, Orange is also deploying fiber and its FTTH network reached 14.9 million connectable households at end-2019. An FTTH network was also deployed in Poland, with connectivity offered to some 4.2 million households, as well as in Slovakia with 500,000 connectable households. The deployment of FTTH networks has also started in Jordan, Côte d'Ivoire, Morocco and Senegal.

Radio and satellite access

In various African countries and in Eastern Europe, fixed services are provided through 4G/LTE in addition to copper and fiber optic networks.

In addition to copper, fiber and radio access, fixed residential access and satellite television services are also marketed via space capacity rental.

Mobile access networks

The GSM (2G), UMTS (3G) and LTE (4G) access networks support voice and data communication services that reach several tens of Mbits/s, at an average bit rate, and up to several hundreds when conditions are optimal, which makes it easier to send and receive voluminous content (audio, photo and video). The Group operates a mobile network (2G/3G/4G) in each of the countries where it offers retail consumer telecommunications services.

To reduce its environmental impact and operating costs, Orange shares more than half of its radio sites with a competitor. Sharing can be either "passive" (limited to the masts only), or "active" (masts and active equipment). Sharing, which in the past has involved 2G/3G/4G technologies, is now moving on to 5G. In 2019, new site-sharing projects were announced or started, in particular, in Spain in towns with less than 175,000 inhabitants and in Belgium across the whole territory. In addition, in France, under the New Deal agreement between the Government, Arcep and the four mobile operators, to ensure better mobile coverage in rural areas, the latter signed a mobile site-sharing agreement in July 2019 to roll out 4G across sites nominated to be pooled under an active sharing policy (see Section 1.7.1 Regulation of telecommunication activities).

2019 was marked by:

- continued growth of uses and traffic, across the Group's networks.
 To anticipate this growth, which will continue over the coming years, the Group invested in its networks to increase their capabilities and performance;
- preparation for 5G, in particular, with the preparation of fiber optic radio site connectivity, anticipating the requirements associated with 5G very high-speed broadband and its initial deployment, especially for the Orange Romania network, which launched its commercial 5G service in November 2019 in three cities;

Orange's networks

- continued rollout of 4G/4G+ networks in European countries to increase the coverage of the population and speeds;
- continued 4G deployments in the Africa and Middle East (MEA) region with a 4G service covering 15 countries in the region at end-2019;
- for the Internet of Things (IoT), continued deployment of LTE-M technology on the 4G network in European countries.

1.5.2 Transmission and IP transport networks

National networks

In each country where there are retail customers, Orange has a national IP transport network relying on a transmission network. This infrastructure is primarily made up of fiber optics, but also radio links, especially for alternative or purely mobile networks in MEA countries. These networks support voice and data traffic, for fixed, mobile, enterprise and wholesale services.

In France, a dedicated Enterprise IP network is also in service. The main purpose of this network is to connect a company's French sites for internal data exchange on a Virtual Private Network (VPN) and provide it with Internet connectivity. It also provides Voice over IP transport for companies.

Optical links offer a bandwidth of up to 200 Gbits/s per wavelength, and Dense Wavelength Division Multiplexing technology (DWDM) makes it possible to have 80 wavelengths per fiber. Orange is one of the world leaders in the use of advanced optical functions in order to have a more flexible transmission network. For example, in a first of its kind worldwide, Orange deployed a 400 Gbits/s per wavelength optical link between Paris and Lyon in 2013.

Furthermore, Orange offers direct connections by fiber optic to business customers, providing them with very high-speed broadband services.

In the MEA region, Orange is the leading telecommunications operator in terms of kilometers of terrestrial transmission networks deployed (national and multi-country) with over 20,000 km.

International network

The international network relies on three networks:

Network) network, a long-distance network in France, whose deployment started in April 2012, and which was extended to serve Frankfurt, London, Barcelona, Madrid, and submarine cable stations. It is expected to be extended to other areas neighboring France as needed in the future;

- the European WELDON (WidE Long distance Domestic Optical

- the North-American backbone served by the two arms of the TAT-14 transatlantic cable system;
- and the Asian backbone in Singapore served by the SEA-ME-WE3 and SEA-ME-WE4 submarine cables.

In 2019, Orange also announced the construction of a new international backbone network in West Africa. This infrastructure relies on a terrestrial fiber optic network and submarine cables to link eight West African countries.

Satellites

Orange uses satellite communications to provide VSAT services (Very Small Aperture Terminal) to Orange Business Services' terrestrial or maritime customers and to ensure connection with isolated mobile sites in Africa and IP or voice connectivity to other operators. To provide those services, Orange uses rented space capacity from satellite operators (such as Eutelsat, Intelsat, SES and Arabsat).

Submarine cables

To address the strong growth in international telecommunications traffic and in a highly competitive market, Orange is maintaining its level of investment in submarine cables and is continuing to develop its network in order to meet the needs of its customers. Due to the high cost of investments required in the construction of cables, such investments are carried out with the different players involved (operators, private companies, GAFAM) and in various forms (consortiums, purchase of user rights, transmission-capacity rental, etc.)

Orange is part of some 50 consortiums covering various routes: North Atlantic, Caribbean, Europe-Asia, Europe-Africa. In 2019, the PEACE project was confirmed with the signing of an agreement to lay a new cable linking France with East Africa and Pakistan and to bring it into service in 2021.

1.5.3 Service control networks

National networks

Control network

In all countries where it has access and transmission/IP transport networks, Orange operates a control network (also called signaling network). This network manages calls or data connection, updates of location data for mobiles, roaming and SMS. These networks are upgrading to new standards, for example to manage 4G roaming.

Fixed-line voice network

In the countries in which it has fixed-line operations, Orange operates a switched telephone network (STN) to deliver analog voice and ISDN digital services. These networks are continually being optimized because of declining usage. In France, Orange stopped marketing its analog voice services at the end of 2018, and announced the first

zones where voice services will only be available using IP technology from the end of 2023.

Orange also rolled out fixed-line VoIP networks using IMS technology (IP Multimedia Subsystem) in many countries for retail and business uses.

Mobile voice network

Until 2015, all mobile voice traffic was managed in switch mode by the mobile network in each country. In 2015, Orange rolled out mobile IMS infrastructure in Europe to offer VoLTE services (VoIP over LTE) and VoWifi (mobile *Voice over WiFi*). The first commercial application of this technology was in Romania, with the launch of VoLTE in September 2015. At end-2019, VoLTE and VoWifi were rolled out in all the Group's European networks and used by millions of customers.

International networks

Voice network

Orange has international switching nodes (CTI 4G) to manage voice traffic to and from France in the fixed-line and mobile markets for retail customers, businesses and operators, and to centralize the transfer of international traffic for its subsidiaries. These switches, initially in circuit technology (TDM), have developed into hybrid NGN nodes to carry Voice over IP (VoIP) traffic.

Orange also operates a network for the supply of voice services for international businesses which is based on the international IP MPLS network.

Signaling network

Orange operates an international signaling network to manage the signaling associated with the voice traffic, roaming and text messaging of its mobile networks and those of its operator customers. This network is developing so that it can handle, in addition to SS7 standards, new standards such as IP SIGTRAN and DIAMETER.

In addition, several centralized platforms were rolled out on the international transit points to provide value-added services to mobile operators.

1.6 Research and development

In the information and communication technology (ICT) sector, which is undergoing major change in its value chain with the increase in the number of players and the creation of new economic models, innovation is a major growth engine for the Orange Group. In 2019, the Group continued its research and innovation activities devoting

€672 million (i.e. 1.6% of revenue) to them including employee costs, as well as operating and investment expenditure related to research and innovation for new products and services.

1.6.1 Research and innovation

Orange is currently a leading private player involved in digital research in France. In a rapidly evolving world, where changes are happening very fast, Orange wants to be a focused operator, involved in current and future transformations: connectivity, 5G, large-scale Internet of Things, Artificial Intelligence etc. The Group is developing an open research approach that sets Orange apart from its competitors and an inclusive innovation that is at once accessible to all and focused on a positive view of progress.

Orange is convinced that using data and artificial intelligence (AI) in a responsible, useful and accessible way will open new prospects for individuals, society and the planet. Having been committed to developing AI and data analysis-related technologies and skills for a number of years, Orange is investing in the French and European research and innovation ecosystem, is joining forces with a number of start-ups and industrial partners, and is participating in the European Al agenda. Orange has also set up an Al and Data skills development scheme and has combined with Microsoft and Simplon to create the "Microsoft Al School", the first Orange intake for which came out in 2019. For Orange, Data and Al will be developed around three key areas: making its networks more intelligent, improving its operational efficiency and reinventing the customer experience. In November 2019, Orange launched the Djingo voice assistant, developed with Deutsche Telekom. As the main interface for accessing Orange services, this smart speaker also incorporates Amazon's Alexa voice assistant so that additional services available on Alexa can be accessed.

Supplying its customers with the best possible fixed and mobile connectivity is key to Orange's strategy. On the mobile market, Orange is 5G-ready. After an initial commercial launch in Romania in November 2019, 5G will start to be rolled out in 2020 in most of the European countries where the Group operates. Once it has been launched, 5G will allow for much faster broadband speeds than 4G and will provide greater capacity. From 2023, when the core networks will move to 5G, Orange will be in a position to offer lower latency and to implement network slicing by prioritizing certain network slices to cover critical usage or specific needs. 5G will, in addition, gradually become more energy efficient than other mobile networks and will be nearly ten times as efficient by 2025, absorbing the growth in customers' data consumption without increasing energy consumption.

This efficiency is, in particular, the result of the deep-sleep mode for base station equipment which Orange promoted (through the NGMN alliance) with 3GPP, the standards organization for 4G and 5G. 5G technical performance will support lots of new uses for the retail market (immersive videos, online games), and for business customers (optimization of production times, machine remote control, predictive maintenance, etc.). Orange has launched a number of initiatives to stimulate innovation and enable start-ups and its partners to test their current and future solutions under 5G coverage. The Group has also announced lots of co-innovation projects with companies in Europe to develop future uses of 5G.

Orange is continuing to roll out dedicated IoT networks in Europe (LoRaWAN® and LTE-M). In June 2019, AT&T, KPN, Orange and Swisscom activated data roaming between their LTE-M networks to benefit from continuity of service on several North American and European networks. On the Enterprise market, Orange launched Smart Operations in France, a solution aimed at businesses and local authorities that includes the supply of sensors, secure connectivity to the LoRaWAN® network and the business management interface. On the French retail market, *Maison Protégée*, a telemonitoring offer, and *Maison Connectée*, a service to connect devices directly to the *Livebox*, operate them remotely, monitor their use and analyze their consumption, were marketed in February 2019. In September 2019, in Spain, Orange launched Smart Home, a home automation and security system for retail customers.

Orange is also focusing its connectivity innovation on the virtualization of networks (which allows the emergence of new services and offers greater flexibility) as well as their automation. So-called Self-Organizing Network (SON) features are integrated in mobile networks.

In terms of the environment, Orange is a pioneer in its sector and in 2017, 2018 and 2019 attained its objective of reducing CO_2 emissions per customer by 50% compared to 2006. The *Green ITN 2020* program, which already allowed to limit the Group energy consumption linked to the operation of networks and IS (see Section 4.4.2.1 *Network energy consumption*), will continue with the new Engage 2025 strategic plan and will, in particular, rely on 5G energy efficiency as well as on the use of data and AI, to further reduce energy consumption from network components.

In terms of sustainable innovation and green networks, Orange's commitment is reflected in its eco-design and circular economy approach, illustrated by the more compact *Livebox 4*, which is manufactured without any soldered parts to make it easier to disassemble and recycle. This approach is also illustrated by virtuous business partnerships such as the distribution of Fairphone2 and then Fairphone 3, a terminal designed using recycled materials from conflict-free zones.

With Livebox 5, launched in 2019, dedicated to fiber and bringing in boosted download speeds, Orange took one step further in its initiative to reduce its equipment's carbon footprint: with a case made from 100% recycled plastic, a lighter and more compact construction, fewer electronic components (making it easier to repair and recycle) and a new design allowing for passive ventilation, without a fan.

In Africa, Orange is marketing a 4G version of the Sanza Phone, the "Sanza XL." Available in seven countries in Africa and the Middle East from December 2019, it will also be made available in other group countries in 2020. Orange, a key player in terms of digital inclusion in Africa and the Middle East, thus reaffirmed its commitment to support its customers and offer Internet access for all.

Orange research and innovation activities are developed within the framework of an open innovation strategy to capture trends, find original solutions and benefit from partners' skills and contributions.

This happens in a number of ways:

- Orange signed 90 research contracts between 2017 and 2019 with the finest University laboratories in the world and furthermore set up two joint laboratories: with Inria, on the virtualization of network functions, and with the University of Nice on antennae. Orange is also greatly involved in the b<>com Institut de Recherche Technologique and contributes to over 60 domestic and European cooperative projects, including through its involvement in eight competitiveness clusters (including being the chair of the Images & Réseaux cluster) as part of a network of more than 3,000 industrial and academic players. Orange also funds six research chairs, including one with the Institut Mines-Télécom on the Values and Policies of Personal Data;
- in 2019, Orange supported more than 1,000 start-ups via its initiatives, which included the *Orange Fab* program which, in late 2019, helped to boost the growth of more than 450 start-ups in 18 countries on 4 continents. Orange also has a presence in various global networks and events, notably in the French Tech network and at the Viva Technology conference;
- the API program distributes Orange Application Programming Interfaces in the areas of identification, payment, communications, IoT and data. It has generated exponential growth in APIs over the last five years, supporting the opening of more than 1,250 APIs at end-2019 across all the Group's regions;
- lastly, Orange has an active policy of forming strategic partnerships with leading industrial players worldwide, which allows it to enhance its portfolio of products and services and open itself to new ecosystems.

1.6.2 Intellectual Property and Licensing

Intellectual Property and Licensing protects, manages and adds value to Orange's patent portfolio, which are among the Group's intangible assets. It also adds value to software. It is an asset that sets Orange apart from its academic and industry partners. Its role is also to defend the Group's interests in the event of disputes relating to intellectual property.

On December 31, 2019, the Orange Group had a portfolio of 7,906 patents or patent applications in France and abroad protecting its innovations. In order to maximize their value, some of these patents are licensed through patent pools for patents relating to industry standards (e.g. NFC, MPEG Audio, WiFi, HEVC). Value maximization

also concerns software such as engineering tools for the mobile network.

In 2019, 230 new inventions were protected by patents, including major technical contributions to standardization (5G, coding, video, etc.). The Orange Labs network in France and abroad accounts for the bulk of the Group's inventions. In 2018, Orange ranked among the top three telecoms operators who filed patents in Europe (source: European Patents Office, Top 25 applicants per leading field of Digital Communication in 2018) and among the top 15 applicants across all industries in France (source: INPI, 2018 award for leading patent applicants).

1.6.3 Capital investment

The Orange group plays an important role in financing innovation in the IT industry, drawing on various investment vectors:

Orange Digital Ventures, which is wholly-owned by the Group and which has signed up to Orange's Open Innovation strategy, through which the Group acquires minority holdings in innovative start-ups, particularly in the areas of new types of connectivity, corporate digital services (SaaS, Big Data, artificial intelligence, security, digitization of processes, etc.), Mobile Banking and mobile payment (FinTech), Internet of Things, and digital services for the Africa and Middle East region.

This approach has two objectives: one of a financial nature (to generate capital gains on disposals) and the other to gain insight into new markets, disruptive business models and agile project management. In addition, start-ups not only obtain a source of financing, but also benefit from the Group's expertise and, where appropriate, its customer relationships (in particular B2B).

In 2019, this approach was taken in relation to investment in three new start-ups: Cycloid (DevOps, France), Raisin (FinTech, Germany) and InterCloud (new connectivities, France). A number of portfolio start-ups were also refinanced, bringing the total invested in this scheme since 2015 to nearly €80 million invested in 23 start-ups.

As part of its new Engage 2025 strategy, Orange announced its intention to strengthen its capital venture facility, by increasing the sums allocated by the Group to €350 million.

- external investment funds, managed by independent management companies in which Orange has generally invested with other investors, mostly industrial companies, but occasionally also involving purely financial firms. These include:
 - the Iris Next fund and the three Orange Publicis Ventures funds (Growth, Global and Early-Stage), created within the framework of a partnership with the Publicis Group, and managed by Iris

Capital Management in which the Group is also involved at the governance level,

- two funds that invest mainly in Africa: Partech Africa, managed by Partech Partners, and the Franco-African Fund, managed by AfricInvest,
- several other "thematic" funds, including Robolution Capital (focusing on robotics investments), which is managed by 360 Capital Partners, and Écomobilité Ventures (focusing on digital and sustainable mobility investments), managed by Idinvest Partners

In 2019, the Orange Group, which had already invested in the private equity firm, Raise Investissement, in 2014 and 2016, chose to invest in Raise Ventures, a Venture Capital structure focusing on innovative start-ups in France and Europe. In 2019, the Group also finalized a minor reinvestment in the Seedcamp4 fund focusing on investment in start-ups during the seed phase.

Overall, for its private equity business, the Group's financial investment commitments (made via direct and indirect equity investments) total more than €295 million over the last ten years.

1.7 Regulation of activities

1.7.1 Regulation of telecommunication activities

In most of the countries where it operates, the Orange Group must comply with various regulatory obligations governing the provision of its products and services, primarily relating to obtaining and renewing telecommunication licenses, as well as to oversight by authorities seeking to maintain effective competition in electronic communications markets. Orange also faces specific regulatory constraints in some countries as a result of its historically dominant position in the fixed telecommunications market. The risks linked to the regulation of the electronic communications sector are described in Section 2.1.2 Legal risks.

1.7.1.1 European Union

1.7.1.1.1 Legal and regulatory framework

The European Union has laid down a common legal framework aimed at harmonizing the regulation of electronic communications. It is binding on the member states and must be implemented by the National Regulatory Authorities.

The general legal framework of the European Union has been amended by the new European Electronic Communications Code, which came into effect on December 20, 2018. The revised code includes four main directives deriving from the 2002 Telecoms Package on:

- a common regulatory framework for electronic communications networks and services;
- the authorization of electronic communications networks and services;
- access to and interconnection of electronic communications networks and associated facilities;
- universal service and users' rights relating to electronic communications networks and services.

In addition, the Telecoms Package includes the directive on *Privacy and electronic communications* No. 2002/58/EC of July 12, 2002, concerning the processing of personal data and the protection of privacy in the electronic communications sector.

Furthermore, Regulation (EC) No. 1211-2009 of November 25, 2009, canceled and replaced by Regulation (EU) No. 2018-1971 of December 11, 2018, implemented the Body of European Regulators for Electronic Communications (BEREC).

This legal framework is supplemented by sectoral texts (international roaming, open Internet, etc.) as well as more general texts aimed at the European digital ecosystem (protection of privacy, digital taxation, etc.).

1.7.1.1.2 Significant events

	Regulation of communication services
May 2019	Caps for intra-European calls and SMS came into effect on May 15
	Regulation of platforms
June 2019	Adoption of Regulation (EU) 2019-1150 promoting fairness and transparency for businesses using online intermediation services (applicable in July 2020)
	Taxation of digital technology
July 2019	In France, promulgation of Law No. 2019/759 pertaining to digital services

1.7.1.1.3 Main community texts in force

The European Electronic Communications Code

The new European Electronic Communications Code was published in the Official Journal of the European Union on December 17, 2018 (EU Directive 2018-1972). It took effect on December 20, 2018. The Member States have 24 months to transpose it into national law.

The Code includes a regulatory objective to support the deployment and adoption of very high connectivity networks – in line with Orange's wish to see regulatory objectives redirected toward support for investment.

In addition, the rules governing the **access obligations** imposed on operators with significant market power have been adjusted in a positive way:

 access obligations must better target only relevant fixed access infrastructures in order to address competition issues in the market;

- emphasis is placed on co-investment in very high connectivity networks. If an operator in a dominant position makes a co-investment offer that complies with certain provisions, it could be exempted from remedies related to its dominant status. Only co-investors will have access to the full capacity of these networks. The other operators will be able to enjoy the same quality of wholesale access as they did before the roll-out of these networks. National regulators will need to secure approval from the European Commission for all measures taken in this context:
- in addition, the Code favors the wholesale operator model not present on the retail market - by exempting it from certain remedies in cases of market dominance.

What is more, obligations for access to fixed access infrastructures serving subscribers may be imposed symmetrically on all operators where it is not technically possible or economically reasonable to replicate such infrastructures. These obligations are subject to a joint veto by the Commission and BEREC.

Concerning the allocation of radio frequencies needed for mobile services, the Code reinforces European rules aimed at improved harmonization and cooperation between Member States, including the minimum 20-year visibility of spectrum licenses. The implementation and in particular the allocation of spectral capacity remains a national affair with only light supervision from Europe. Provisions facilitating the deployment of "small-area wireless access points" (defined in Article 2.23 of the Code) and the availability schedule of the 5G spectrum were also adopted.

With respect to the regulation of communication services, most of the obligations intended to protect end-users are for Internet access service and services using public numbering plan resources, independently of the service provider. Other services, such as interpersonal communication services independent of the numbering plan and signal transport services are only subject to a limited number of obligations.

However, regulation of the competitive markets for intra-European calls and SMS has been introduced with the Code through (EU) Regulation 2018-1971 of December 11, 2018, imposing a cap of 19 euro cents/minute and 6 euro cents/SMS, applicable since May 15, 2019.

Concerning universal service obligations, the Code abandons the principle of telephone service provision and calls on Member States to ensure the availability of affordable Internet access service, upholding the principle of potential designation should Member States consider that the market does not provide such services under said conditions, but increasing the burden of proof for Member States. The system of financing the universal service remains in the hands of the Member States, with coverage from public funds or from a fund financed by the sector. In addition, the Code opens the door to an extension of universal service obligations to include the supply of affordable mobile services.

The Code and its associated regulation on changes in BEREC's responsibilities and governance do not create a European regulator. However, the Code does adopt the principle of full standardization of the rights of end-users, subject to exceptions, and strengthens the control exercised by the European Commission over access regulation and over the spectrum.

In this framework, the ORECE must publish guidelines in order to help national regulators implement the Code.

Harmonization of analyses of relevant markets

On October 9, 2014, the European Commission adopted a new recommendation (2014/710/EC) identifying four relevant product and service markets for which National Regulatory Authorities are required to carry out market analyses potentially resulting in the implementation of ex-ante regulation, as opposed to seven in its previous recommendation of 2007:

- M 1: wholesale call termination on individual public telephone networks provided at a fixed location;
- M 2: wholesale voice call termination on individual mobile networks;
- M 3/a: wholesale local access provided at a fixed location;
- M 3/b: wholesale central access provided at a fixed location for mass-market products;
- M 4: wholesale high-quality access provided at a fixed location.

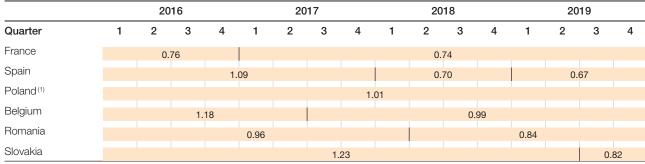
The European Commission has begun work aimed at reviewing this recommendation set out by the new Code.

Call termination rates

On May 7, 2009, the European Commission adopted a recommendation (2009/396/EC) regulating fixed and mobile voice call termination rates in the European Union. The Commission recommends that National Regulatory Authorities should apply the following principles:

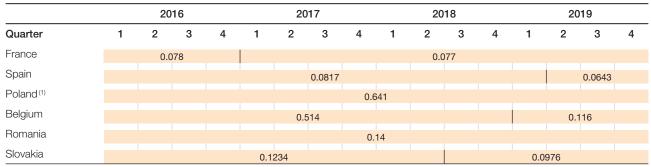
- symmetry in each Member State, first between the various operators' fixed-line voice call termination rates and second between their mobile call termination rates, with the option of allowing a four-year transitional asymmetry on fixed or mobile call termination rates for any new entrants;
- call termination rates geared towards the avoidable cost of this service for an efficient operator (i.e. about 1 euro cent per minute for voice MTRs and a lower rate for voice FTRs).

→ Change in Orange's mobile voice call termination rates in Europe (in euro cents per minute)



Source: Cullen International, December 2019.
(1) Rate set in zlotys and converted into euros using the Dec. 31, 2019 exchange rate.

→ Change in Orange's fixed voice call termination rates in Europe (in euro cents per minute)



Source: Cullen International, December 2019. Rates are set at local level.
(1) Rate set in zlotys and converted into euros using the Dec. 31, 2019 exchange rate.

Pursuant to the Code, European caps for fixed voice call termination rates and mobile voice call termination rates must be set by the Commission before the end of 2020 and will apply as from 2021 with a maximum transition period of 12 months.

International roaming

Regulation (EU) No. 2015-2120 of November 25, 2015⁽¹⁾, which aims to eliminate surcharges for international roaming within the European Union and Regulation (EU) No. 2017/920 of May 17, 2017, which lays down the rules for wholesale roaming markets: (2)

- impose, in the context of fair usage, the alignment of international roaming retail prices with national prices for intra-European communications (voice, SMS and data) from June 15, 2017;
- expands, for customers using their cellphones outside the EU, pricing transparency requirements and bill shock prevention measures for European operators;
- grant a regulated right of access to European roaming services for MVNOs and resellers, and sets new caps on wholesale markets:
 - voice: €0.032 per minute excluding VAT starting on June 15, 2017,
 - SMS: €0.01 per SMS excluding VAT from June 15, 2017,
 - data (price excluding sales tax):

04/30/16	06/15/17	01/01/18	01/01/19	01/01/20	01/01/21	01/01/22
€0.05/Mb	€7.7/Gb	€6.0/Gb	€4.5/Gb	€3.5/Gb	€3.0/Gb	€2.5/Gb

Suppliers of mobile services subject to the regulation on the pricing of intra-European roaming may apply a reasonable usage policy to their customers in terms of the consumption of these services in order to prevent abnormal or excessive use. Despite this option, in special and exceptional circumstances, when the supply of intra-European roaming at the national price threatens the viability of the supplier's national pricing model, they can ask the national regulator for authorization to bill additional charges for the use of intra-European roaming, which are limited to the caps on wholesale roaming prices.

On November 29, 2019, the European Commission published a report on the state of the roaming market in the European Union. It noted the satisfactory impact of its regulation and the compliant implementation thereof by operators, envisaging the extension of wholesale market regulation beyond 2022. The Commission also noted that there is evidence of an economic space between the wholesale caps through 2022 and the cost levels of operators. However, it considers that a further reduction in these caps, in order to have even more efficient Roaming Like at Home, needs fuller and broader analysis, in particular to ensure the efficient functioning of domestic markets. The Commission has announced that during the first half of 2020 it will be working on an impact assessment of a possible legislative proposal to amend the current wholesale pricing framework, while holding a public consultation process at the same time.

Regulation of the open Internet

The TSM Regulation has introduced rules to ensure an open Internet within the European Union. Article 3.3 of the TSM states that in the provision of Internet access services, providers shall treat traffic equally and without discrimination, restriction or interference, irrespective of sender and recipient, the content consulted or broadcast, the applications or services used or provided, and the terminal equipment used. It is up to the Member States to adapt their national law to comply with this provision.

On April 30, 2019, the European Commission published a report on the implementation of the net neutrality component of the TSM Regulation. The Commission, in the light of market developments, concluded that the principles of the Regulation are appropriate and that they effectively protect end-users by promoting the Internet as a driver of innovation. The Commission pointed out that operators have correctly applied the regulation governing net neutrality and that national regulators have imposed very few fines. It does not propose any amendments to this Regulation. On the basis of this Commission report, BEREC has started work on updating the guidelines for a harmonized application of the TSM Regulation within the Union with a view to ensuring an open Internet. This process should be wrapped up in the first half of 2020.

These rules amended Regulation No. 531/2012 of June 13, 2012 on roaming using public mobile communications networks within the Union (Roaming III). These new roaming rules go by the name of "Roaming-Like-At-Home". They are rounded out by an implementing regulation on reasonable usage rules for intra-European roaming adopted on December 15, 2016.

Protecting Personal Data

The new General Data Protection Regulation (GDPR) came into effect on May 25, 2018. The GDPR, which replaces a 1995 European directive, is a general-purpose regulation intended for both public and private entities which harmonizes the management of personal data protection in Europe.

GDPR principles include:

- single rules directly applicable immediately in each European Union country;
- application to all Internet users and service providers of the information society intended for the European market;
- a single supervisory authority responsible for the protection of data as the interlocutor for Internet companies: that of the Union country in which they have their primary office;
- unambiguous consent which explicitly covers the processing of personal data;
- definition of a pseudonymization process whose use is encouraged;
- strengthening of the obligation to provide information to consumers;
- the introduction of a "digital right to be forgotten."

National authorities for the protection of personal data now have greater powers. In particular, they may impose administrative penalties of up to 4% of total annual revenue on companies that infringe European rules. In addition, the coming into force of the GDPR has indirect effects on the implementation of sector Directive No. 2002/58/EC on *Privacy and electronic communications* of July 12, 2002, given that it changes the meaning of the concept of consent and the penalties to which this sector directive refers. The Commission wants to replace the 2002 directive with a new sector regulation, but there has been no political agreement on the new text.

The European Commission is due to submit a report on the evaluation and review of the GDPR to the European Parliament and Council of the European Union before May 25, 2020.

Regulation of platforms

Regulation (EU) 2019-1150 promoting fairness and transparency for businesses using online intermediation services was adopted on June 20, 2019 and will be applicable as of July 12, 2020. It aims to ensure rules for a fair, transparent and predictable trading environment for businesses and vendors on online platforms. The European Commission is to propose guidelines on the transparency rules applied to information given to users on platforms. It is due to evaluate the regulation at the end of 2021 and may publish new legislative proposals.

Taxation of digital technology

To a backdrop of digitization of the economy, Orange is supporting the OECD's efforts to find an agreement on the taxation of profits reported by multinationals. In the absence of an agreement on the single digital tax at a European level in May 2019, Member States have decided to support an agreement for a global solution at the OECD level. However, the President of the European Commission stated in her roadmap: "If, by the end of 2020, there is still no global solution for a fair digital tax, the European Union should act alone".

In France, Law No. 2019/759 pertaining to digital services, promulgated on July 24, 2019, applies retroactively to digital service revenues as of January 1, 2019. Digital services are taxed at 3% of gross revenues from intermediary services and advertising based on user data, on the condition that revenues exceed 750 million euros worldwide and 25 million euros in France.

1.7.1.2 France

1.7.1.2.1 Legal and regulatory framework

Legal framework

The electronic communications sector is primarily governed by the French Postal and Electronic Communications Code (CPCE) as well as legal provisions relating to e-commerce, the information society, consumer protection and personal data protection.

France transposed the European Telecoms Package, as amended in 2009, via the order of August 24, 2011 and the decree of March 12, 2012 for the implementing regulations. Transposition of the new European Code is in progress and should be implemented via decrees. A public consultation process was launched in early 2020 by the Ministry responsible for Electronic Communications.

The audiovisual communication services produced or distributed by the Orange Group come under the specific regulations governing this sector and are governed by law no. 86-1067 of September 30, 1986 on the Freedom of Communication.

Regulatory Authorities

The Postal, Electronic Communications and Media Distribution Regulatory Authority (Arcep) is an independent administrative body created by the Act of July 26, 1996 and is in charge of the nationwide regulation of the electronic communications and postal sectors. Within the electronic communications sector, Arcep's main missions are to define regulations for operators present in the markets in question. It has powers to sanction non-compliant operators and can rule on disputes between operators over technical and pricing conditions for network access and interconnection. Arcep also allocates spectrum and numbering resources. Finally, it determines the size of contributions to fund the universal service obligation and oversees the mechanisms for delivering this funding.

The French Competition Authority is an independent government authority responsible for ensuring open market competition and compliance with public economic policy. It has jurisdiction over all business segments, including the electronic communications sector. It has sanction powers for anti-competitive practices, as well as consultative powers. It is also responsible for overseeing mergers and acquisitions.

The ANFr (Agence nationale des fréquences – French national agency for frequencies) is responsible for planning, managing and controlling the usage of radio frequencies and for coordinating the establishment of certain radio transmission facilities. The frequency spectrum is covered by 11 controlling authorities: government departments, Arcep and the French Broadcasting Authority (CSA). Arcep and the CSA are in turn responsible for allotting to users the frequencies they control.

The CSA (Conseil Supérieur de l'Audiovisuel) is an independent administrative body created by the law of January 17, 1989. It is tasked with protecting the freedom of audiovisual communication in accordance with the law of September 30, 1986.

The draft bill on audiovisual communication and cultural sovereignty in the digital age, presented to the Council of Ministers on December 5, 2019, proposes to merge the CSA and the Higher Authority for the Distribution of Works and the Protection of Rights on the Internet (Hadopi) into a new entity to be called the Regulatory Authority for Audiovisual and Digital Communication (ARCOM). Both chambers will examine this bill as from the first half of 2020. This text should also contain the powers that will enable the Government to transpose by decree the new European Electronic Communications Code.

1.7.1.2.2 Significant events

	Spectrum
May 2019	The government forwarded its guidelines to Arcep for the preparation of the future 5G frequency allocations
July 2019	Launch of the public consultation process on the draft decision proposing the terms and conditions for allocating frequency authorizations in the 3.4-3.8 GHz band in mainland France
October 2019	Presentation of the winners for the creation of 5G experimentation platforms in the 26 GHz band, including 2 projects concerning Orange
November 2019	Publication by Arcep of Decision No. 2019-1386 relating to the specifications for the allocation of 3.4 to 3.8 GHz band frequencies Publication by Arcep of Decision No. 2019-1753 extending the authorizations for the use of frequencies by Orange in the 900 MHz band in Mayotte and in the 900 MHz and 1,800 MHz bands in Reunion through April 30, 2025
December 2019	Publication of the order setting the terms and conditions of the 5G auction procedure on December 30 Publication of Decree No. 2019-1592 pertaining to fees for the use of radio frequencies payable by holders of authorizations to use frequencies in the 3.4-3.8 GHz band. This publication formalized the launch by Arcep of the frequency allocation procedure for the 3.4-3.8 GHz band on December 31, 2019
	Analysis of the broadband and very high-speed broadband markets
February 2020	Publication by Arcep of a public consultation with a view to revising the fixed high-speed and very high-speed-broadband markets regulation
	Other
June 2019	Judgment of the Paris Court of Appeal in the settlement of the Orange – Free dispute over IP interconnection
July 2019	Signing of the mobile site sharing contract between the 4 network operators for the deployment of 4G on sites due to be actively shared

1.7.1.2.3 Regulation of mobile telephony

Spectrum

Main Orange frequency allocations in mainland France

700 MHz	Authorization granted in December 2015 for 10 MHz duplex for 20 years
800 MHz	Authorization granted in January 2012 for 10 MHz duplex for 20 years for the deployment of very high-speed mobile broadband (4G)
900 MHz	Renewal in March 2006 of the 2G authorizations granted for 10 MHz duplex for 15 years. The 8.7 MHz duplex was reallocated for a period of 10 years through March 2031 under the "New Deal"
1,800 MHz	Renewal in March 2006 of the 20 MHz duplex authorizations for 15 years. Under the "New Deal", the authorization linked to these frequencies was amended, then the same quantity was reallocated for 10 years through 2031
2.1 GHz	3G authorization granted in August 2001 for 20 years for 14.8 MHz duplex 3G authorization granted in June 2010 for 20 years for 4.8 MHz duplex With respect to 14.8 MHz duplex, which expires in August 2021, 10 MHz duplex was reallocated until August 2031 as part of the New Deal
2.6 GHz	Authorization granted in October 2011 for 4G services for 20 MHz duplex for 20 years for the deployment of very high-speed mobile broadband (4G)

NB: these frequencies are technologically neutral for those granted since May 2011, or since May 2016 for those granted earlier, and Arcep may not oppose any request for neutralization.

The New Deal

The agreement signed on January 14, 2018, between the Government, Arcep and the four mobile operators (Orange, SFR, Bouygues Telecom and Free Mobile) to ensure improved mobile coverage of the country and in particular rural areas led to the amendment of the 900 MHz, 1,800 MHz and 2.1 GHz frequency authorizations and their renewal for 10 years, including enhanced coverage commitments from 2018

(see below) in exchange for there being no auctions and for stability of current fees.

By decision of Arcep of July 3, 2018, the coverage commitments under the "New Deal" (see below) for the period before 2021 apply with immediate effect under the amended authorizations (Decision No. 2018-0682). The obligations and commitments made by the operators beyond 2021 were included into the new authorizations granted in

December 2018 (Decision No. 2018-1392) for 10 years as from the expiry of the previous authorizations.

The Government's 5G Strategy (3.4-3.8 GHz, 26 GHz and 1.4 GHz)

The Government and Arcep provided information about the road map for 5G in France on July 16, 2018.

Three bands were targeted: the 3.4-3.8 GHz band, the 26 GHz band and the 1.4 GHz band. A first consultation was launched on October 26, 2018 on the allocation of new frequencies for 5G in these three bands.

3.4-3.8 GHz band

On November 21, 2019, Arcep presented to the French government and published proposed specifications relating to the allocation of 5G frequencies (3.4-3.8 GHz band). These aimed to respond to the Government's request, firstly to ensure continued digital development across the country, and secondly to support the growth in uses and the emergence of new services.

The Directorate General for Enterprise then put out the two texts for public consultation through December 12, 2019, enabling the official launch of the allocation procedure:

- the text approving the proposed Arcep specifications, and setting the reserve prices (350 million euros for each of the 50 MHz blocks allocated in stage 1 and 70 million euros per 10 MHz block allocated in stage 2);
- and the text setting out the terms and conditions of payment.

On December 17, 2019, Arcep published its opinion on these two texts, highlighting the Government's plan to spread the payment of the sums relating to stage 1 over 15 years. On this basis, the authority issued a favorable opinion on the Government's draft texts.

A new stage was reached on December 31, 2019 with the publication in the official journal of the decree and order reiterating these Government decisions (for the 3.4 – 3.8 GHz "core band"). This publication officially launched the allocation procedure, conducted by Arcep on the basis of the specifications published November 21, 2019. Candidates had until February 25, 2020 to prepare and submit their applications.

The allocation concerns 310 MHz, i.e. the 3,490-3,800 MHz band. The procedure involves three stages and should ultimately lead to the issue of a frequency authorization for Orange around mid-May 2020. Over both stages, qualified applicants must acquire a quantity of spectrum between a minimum of 40 MHz and a maximum of 100 MHz.

Stage 1:

- all candidates submit an application file accompanied by a bank guarantee – and subscribe to all the obligations (see below).
 Qualification will be based on these application files;
- those who wish to subscribe to optional commitments: these candidates will then be allocated a quantity of 50 MHz at the reserve price of 350 million euros, payment of which will be spread over 15 years;
- applicants who have not subscribed to the optional commitments do not obtain spectrum at this stage.

Stage 2:

- the rest of the spectrum is allocated by way of a purely financial multi-round auction;
- all qualified candidates may take part in this stage;
- those who have not subscribed to the optional commitments in Stage 1 must participate in this Stage 2 to acquire the minimum spectrum provided for in the procedure: they will therefore need to acquire all their spectrum in Stage 2, at the final auction price.

Stage 3:

 the purpose of this stage is to position the frequencies obtained by each of the applicants within the frequency band concerned, according to new price offers that they submit all in one go.

Dateline:

Stage 1 proceeded normally with application files submitted on or before February 25.

With respect to stages 2 and 3, however, due to the health crisis, Arcep announced on April 2, 2020, the postponement of the auction for an indefinite period which will depend on the development of the situation. Arcep has nevertheless confirmed that candidates who have subscribed to the commitments will be allocated a 50 MHz block at the end of the allocation procedure for an amont of 350 million euros.

The period of authorization is 15 years with the possibility of a 5-year extension under as yet unknown conditions. Arcep has introduced a condition for secondary use of frequencies by third parties, the conditions of which will be defined after consultation with operators.

Obligations and commitments in detail:

Candidates qualified at the end of Stage 1 will need to comply with a number of obligations:

- 1. Commercial opening of at least 2 cities with at least 150,000 inhabitants before the end of 2020.
- 2. Roll-out of sites in the 3.5 GHz band:
 - 3,000 sites end 2022,
 - 8,000 sites end 2024,
 - 10,500 sites end 2025,
 - 25% of the sites deployed with 3.5 GHz end 2024 and end 2025 must be located in rural areas or industrial zones outside of very densely populated areas,
 - widespread availability of a 5G service at all sites by end 2030, an obligation that may be met either with the 3.5 GHz band or with another band.
- 3. Increase in speed (at least 240 Mbit/s, meaning, for example, deploying 4G in 800 MHz band and in 1,800 MHz band at each site):
 - 75% of sites end 2022,
 - 85% of sites end 2024,
 - 90% of sites end 2025,
 - 100% of sites end 2030.
- 4. Coverage of highways:
 - coverage of all expressways/motorways (16,642 km) by end 2025 with a speed of 100 Mbits/second,
 - coverage of major highways or ARIs (54,913 km):
 - all ARIs at 50 Mbits/sec. "in car" by end 2025,
 - all ARIs at 100 Mbits/sec. "out of car" by end 2027.
- 5. Other obligations: provide differentiated services (slicing), activate IPv6.

The commitments to be made to compete in Stage 1 for the $50\,\mathrm{MHz}$ lots at the reserve price are as follows:

- 1. From the end of 2023, provision of a fixed offering from sites using the 3.5 GHz band and provision of a fixed offering to cover premises that benefit from "radio local loop" service.
- 2. Respond to reasonable requests from "verticals".
- 3. Indoor coverage.
- 4. MVNO hosting.
- Plus commitments to transparency concerning network outages and transparency with planned deployments.

26 GHz band

The government and Arcep called for the creation of experimentation platforms by way of an open window in January 2019. Named in October 2019, the ten or so winners of authorizations will be able to experiment with 5G in this frequency band for a period of 3 years. Orange has obtained two authorizations, one for the Chatillon campus and the other for a project with the SNCF (French Rail) at Rennes station.

Extension of frequency authorizations for Reunion and Mayotte

In its Decision No. 2019-1753, Arcep extended authorizations to use frequencies allocated to Orange in the 900 MHz band in Mayotte and in the 900 MHz and 1,800 MHz bands in Reunion. This extension brought the expiry dates of these two authorizations into line with those of other operators in these two territories.

Mobile coverage

The New Deal agreement

Under the New Deal, operators are committed to:

- expanding the coverage of metropolitan France by way of the "targeted coverage" scheme, making it possible for each operator to cover 5,000 new areas (most of which are shared between operators), replacing the three existing programs (town center dead zones, 800 strategic sites and the France Mobile program), which will now be fully paid for by the operators;

- generalizing access to very high-speed broadband by introducing 4G with a power rating in excess of 5W to all their own mobile sites by the end of 2020, and to 75% of the sites in the town center dead zone program by the end of 2020, upping this to 100% by the end of 2022:
- accelerating the coverage of transport routes, ensuring that main highway and rail routes have 4G coverage. The agreement also includes provisions for the coverage of regional train networks;
- improving coverage inside buildings, in two components: the gradual availability of voice and SMS services via Wi-Fi with the goal of enabling 80% of our customers who own a compatible handset to benefit from these services by the end of 2019; and the marketing of an offering allowing public companies and individuals who so request to obtain improved *indoor* multi-operator coverage of their buildings at a reasonable rate;
- improving reception quality throughout the country, and particularly in rural areas. The new performance standard applied to operator obligations will be that of "good coverage" defined as the "ability to be able to call and text SMS outside of buildings in most cases and within buildings in some cases".

These obligations have been written into their current authorizations and in the newly allocated 900 MHz, 1,800 MHz and 2.1 GHz band authorizations for 10 years.

Obligations to deploy and provide 4G coverage in metropolitan areas including that resulting from the New Deal

(as a % of the population)	Jan-17	Oct-19	Dec-20	Jan-22	Dec-22	Oct-23	Jan-24	Dec-25	Jan-27	End-2030
Regional rail network (coverage inside trains in each region as a % of track)									60%	80%
Regional rail network (national coverage inside trains as a % of track)				60%					80%	90%
Regional rail network (national coverage alongside tracks as a % of track)								90%		
Priority highways (as a % of highways out of car)			100%							
Priority highways (as a % of highways from inside vehicles)				100%	-	-				
Town centers of the <i>Dead Zone</i> program ⁽¹⁾			75%		100%					
In the priority deployment zone (2) with very high-speed broadband (3)	40 % (800 MHz)			90 % (800 MHz) 50% (700 MHz)					92% (700 MHz)	97.70% (700 MHz)
In each French department							90%		95%	
Over the whole of mainland France		60%				75%			98%	99.60%

^{(1) 1%} of the population and 3,300 town centers

 ^{(2) 18%} of the population, 63% of the country.
 (3) An operator has met its obligation to provide VHSB service (very high-speed broadband) when the equipment deployed enables a theoretical peak speed of 60 Mbps.

Regulation of activities

Additionally, operators are obliged to provide a mobile radiotelephone service under the "good coverage" conditions set out by Arcep to 99.6% of the population by March 2024 at the latest, and to 99.8% by March 2028.

In June 2019, Arcep launched a penalty procedure against the four network operators concerning the deployment of the first sites under the "New Deal". The first deadline for the deployment of mobile sites is the end of June 2020.

At end-December 2019, Orange's 4G coverage was 99% of the population and 88% of the country.

Infrastructure sharing

The New Deal agreement contains clauses relating to the pooling of networks, including active sharing where all four operators are present on a site as part of the targeted coverage arrangements. A mobile site sharing contract was signed in July 2019 between the four network operators for the deployment of 4G on sites destined to be actively shared. This agreement is gradually being implemented for the sites of the Town Center Dead Zones program and the new sites to be deployed as part of the New Deal's targeted coverage scheme.

Orange's obligations regarding cost accounting and accounting separation for the mobile business

On June 19, 2018, Arcep published Decision No. 2018-0685 specifying obligations for accounting for and the reporting of costs imposed on mobile operators. The decision supersedes Decision No. 2013-0520. As was the case for the previous decision, it applies to Orange, SFR, Bouygues Telecom, Free Mobile, SRR and Orange Caraïbes. The new decision primarily simplifies operator obligations.

Analysis of the wholesale mobile call termination markets

The fixed and mobile termination markets are regulated by Arcep Decision No. 2017-1453 for the 2017-2020 cycle. The decision confirms the cost-orientation obligation for call termination rates. The cap levels for call termination were eliminated in the final decision. Mobile operators, including Orange, have left their rates unchanged since 2017.

1.7.1.2.4

Regulation of fixed-line telephony, broadband and very high-speed broadband Internet

Regulation of fiber optic networks

Regulatory framework governing very high-speed broadband wholesale offers

The current regulatory framework for the deployment of very high-speed broadband in France confirms the principle of symmetric regulation for the terminating segment of networks, and encourages sharing by operators, with potential co-financing following prior consultation with the municipality:

- principle of sharing the terminating segment of networks between operators;
- symmetric regulation for access to the terminating segment of networks, including outside of very densely populated areas: same obligation to provide passive access to the terminating segment of FTTH networks under reasonable and non-discriminatory conditions, applicable to all operators equipping buildings with fiber optic in the entire French territory. Access must be from a reasonably located shared access point (Arcep Decision No. 2009-1106 supplemented by Arcep Decision No. 2010-1312 for less densely populated areas). Tariffs must be reasonable and respect the principles of efficiency, relevance, objectivity and non-discrimination;

- no ex-ante regulation of retail prices;
- asymmetric regulation of access to civil engineering infrastructure which allows alternative operators to deploy their horizontal networks on Orange's infrastructure: non-discriminatory access at a rate that reflects costs:
- no obligation for asymmetric access (unbundling or bitstream) for fiber, confirmed by the 3a and 3b market analysis decisions published by Arcep on December 14, 2017.

Arcep is of the opinion that the FTTH regulatory framework it decided on complies with the principles defined by the European Commission in its NGA⁽¹⁾ recommendation, applicable to broadband and very high-speed networks, published on September 20, 2010. It recommends asymmetric regulation requiring that operators in a dominant position provide access to the terminating segment of very high-speed lines and access from OCNs (2) while conceding a risk premium to operators who invest and an adaptation principle for national circumstances. The European Commission approved Arcep's position.

Deployment commitments known as "L. 33-13" by Orange in the AMII zone

In early 2018, Orange formalized its commitment proposals for FTTH deployment in nearly 3,000 municipalities under Article L. 33-13 of the Postal and Electronic Communications Code, confirming its prior commitments taken under the AMII $^{(3)}$ in 2011, then in 2013 and 2015.

Orange proposed that it commit to ensuring that, within its FTTH deployment scope in the AMII area: (i) by the end of 2020, 100% of homes and professional premises would have access to FTTH sales offers (including a maximum 8% of premises connectable on demand, excluding refusals by third parties), and (ii) by the end of 2022, 100% of homes and professional premises would be made connectable (excluding refusals by third parties).

These commitment proposals took into account the agreement reached at the end of May 2018 by Orange and SFR which led to Orange withdrawing from 236 municipalities to SFR's benefit.

Following the Arcep opinion of June 12, 2018, Orange's commitment proposals (and those of SFR) were accepted by the French government on July 26, 2018⁽⁴⁾.

AMEL and equity funded deployments

In December 2017, the Government announced the launch of a procedure calling for shows of local commitments (AMEL) through which to identify operators wishing to deploy privately-funded FTTH beyond the current AMII zone.

Orange proposed to make commitments with respect to Article L. 33-13 under AMEL for the French departments of Lot-et-Garonne, Vienne, Deux-Sèvres and Haute-Vienne. Arcep issued a favorable opinion in April 2019 on Orange's proposed commitments in Lot-et-Garonne, and these commitments were accepted by the government in May 2019. Arcep issued a favorable opinion in January 2020 on Orange's proposed commitments in Haute Vienne.

In addition, Orange proposed to the Government commitments under Article L. 33-13 in the context of deployment projects using its own funds. These commitments are currently being examined by the authorities.

Completeness of FTTH networks

Arcep officially notified Orange that it must comply with the obligation for completeness of a list of 460 shared access points first commissioned more than 5 years ago (as listed in the appendix of its Decision No. 2018-1597 – RDPI), at the latest by December 31, 2019.

- (1) Next Generation Access network.
- Optical Connection Node.
- AMII areas are areas located outside very densely populated areas, were private operators expressed an interest to deploy a network.
- (4) Decrees published in the Official Journal of July 31, 2018.

Orange is required to prove its compliance with the obligation for completeness of the 460 shared access points by January 31, 2020, at the latest, or to explain the difficulties encountered. Arcep stated in this respect that, "if Orange were to report exceptional difficulties which prevent it from making certain premises connectable, Orange should submit all appropriate supporting evidence demonstrating that it had implemented the resources required to resolve the issues, but that they persisted."

Regulatory framework for unbundling the local copper loop

Rates framework

On December 21, 2017, Arcep passed a decision on the rates framework for the full unbundling of the local copper loop for 2018 to 2020, excluding any specific taxation. This decision set a cap for the monthly recurring tariff for fully unbundled access (\in 9.31 in 2018, \in 9.41 in 2019 and \in 9.51 in 2020), as well as for the monthly recurring tariff for naked Bitstream access (\in 13.19 in 2018, \in 13.30 in 2019 and \in 13.41 in 2020).

In accordance with Arcep decision, the changes planned for the full unbundling rates and for naked ADSL for 2019 and 2020 were adjusted to take into account the changes to the *Imposition Forfaitaire sur les Entreprises de Réseau* (IFER) (flat-rate tax on certain network assets). The tax, which was only for copper lines, was broadened to include cabled networks and FTTH. Lines built less than five years ago are exempted. In accordance with the principle of non-discrimination, part of the decrease in the tax paid by Orange is passed on to the alternative operators via a reduction in wholesale rates.

Based on the new *IFER* value, the tariffs for the year 2019 were €9.27/month for full unbundling and €13.16/month for naked DSL access for 2019. For 2020, they are €9.46/month and €13.36/month respectively for full unbundling and naked DSL access.

Analysis of the relevant markets

Broadband and very high-speed broadband markets

On December 14, 2017, Arcep published the following decisions resulting from the fifth analysis cycle of the fixed broadband and very high-speed broadband markets for the period from December 2017 to December 2020:

- Decision No. 2017-1347 for market 3a (wholesale local access provided at a fixed location): unbundling on the copper local loop, access to civil engineering infrastructure, passive access to the local FTTH loop or bitstream with delivery to the optical connection node, passive FTTH offer with quality of service;
- Decision No. 2017-1348 for market 3b (market for wholesale central access provided at a fixed location for mass-market products): regional copper bitstream or FTTH;
- Decision No. 2017-1349 for market 4 (high-quality wholesale access): LPT, SDSL, FTTO and FTTE wholesale offers;
- Arcep Decision No. 2017-1488 of December 14, 2017 setting the financial conditions for access to the civil engineering infrastructure of the Orange local loop which confirmed most of the rules previously decided in 2010.

These decisions extend virtually all of the obligations previously imposed on Orange, which remains the only dominant player in the various markets.

In the mass market, Arcep only preserved the symmetrical framework for FTTH, and does not impose an obligation of equivalence of inputs on Orange. Orange committed to (i) upgrading information systems by September 1, 2018 for the eligibility processes and by December 31, 2018 for order processes, (ii) providing Arcep with commercial contracts for optical connection nodes/shared points in very densely populated areas, and (iii) reducing cases of proven difficulty in connecting third party operators to Orange's shared access points in buildings by mid-2019.

In the Enterprise market, Orange saw its obligations in the wholesale market increased by the introduction of new remedies:

- the obligation to provide an enhanced quality of service option on its FTTH infrastructure;
- the obligation to provide a wholesale offer for passive access to the local shared optical loop suited to new infrastructure players dedicated to the intermediary market for activated access offers for companies;
- the obligation to provide a resale offer for its retail offers for the enterprise market (FTTH Pro).

On February 6, 2020, Arcep published a public consultation with a view to revising the regulation of the fixed high-speed and very high-speed broadband markets, following the "bilan & perspectives" (review & outlook) consultation in July 2019, to which Orange responded at the end of September.

Arcep is providing for consultation:

- 4 draft decisions for the analysis of the fixed high-speed and very high-speed markets:
 - market "4" activated offers in the enterprise market,
 - market "3b" activated offers in the mass market,
 - market "3a", passive offers,
 - a new separate civil engineering market;
- a document to complement the symmetrical FTTH regulation, applicable to all operators.

In particular, Arcep addresses the following topics, which are the main issues for Orange in the next round of market analysis:

- support for the migration of access from copper to fiber with a view to the eventual closure of the local copper loop network;
- the strengthening of the symmetrical framework for fiber regulation, in particular with a view to rendering symmetrical the obligations that are currently imposed only on Orange (in particular as regards access to enhanced quality of service for business customers);
- tightening the monitoring of the quality of service of wholesale offers, and the setting of relevant target levels;
- the profound changes in the Enterprise market, characterized by the development of offers on shared local optic loop and by increased competition, which should lead Arcep to change its regulatory framework.

Fixed-line telephony

As part of its fifth round of analysis of the relevant fixed-line markets for non-residential customers for the 2018-2020 period, on December 21, 2017, Arcep adopted Decision No. 2017-1568, which restricts the obligation to formalize a wholesale offer for access to telephone service to the non-residential market only.

Wholesale non-residential line rental rates are now governed by Decision No. 2018-1523 of December 5, 2018. Contract caps are stable for 2020 compared to previous caps (12.32 euro cents/month for analog and 18.57 euro cents/month for digital). The cap for call origination collected at the Operator Connection Point associated with the contracts is €0.6584/minute in 2019 and will be €0.6958/minute in 2020.

Fixed-line voice call termination

Following its Decision No. 2017-1453 of December 2017, Arcep removed the rate caps for the 2018-2020 period. Rates must be based on costs. Operators have left their tariffs unchanged since 2017.

Orange interconnection with Free and Free Mobile

The dispute between Orange and Free around IP interconnection was settled on April 12, 2018 with Orange winning five of the seven primarily technical points related to VoIP interconnection to the Free networks. The ruling was confirmed by the Paris Court of Appeal on June 6, 2019.

Universal telephony service

The order published on November 27, 2017 designates Orange as the provider of the universal service fixed telephony component for the "connection" and "telephone service" services for a period of three years, during which time the end of PSTN accesses will be effective. This designation incorporates new quality of service monitoring indicators.

Additionally, by its Decision No. 2019-0634 of April 23, 2019, Arcep set the definitive assessment of the net cost of universal service and operators' contributions for the year 2017.

Following the opening of a penalty procedure (L. 36.11 of the French Postal and Electronic Communications Code) by Arcep in June 2018, Orange was given notice in October 2018 regarding its compliance with universal service quality of service obligations. Arcep set intermediate obligations for the months of November and December 2018 and for each quarter of 2019.

Quality of service of wholesale offers for consumer and enterprise markets

Following the opening of a penalty procedure (Article L. 36.11 of the French Postal and Electronic Communications Code) by Arcep in September 2018, Orange was given notice in December 2018 by which Arcep required Orange to comply, starting in the first quarter of 2019, with indicators relating to production and after-sales service processes for all of the following offers:

- mass market: unbundling, offers activated without a guarantee for reinstatement time (DSL access);
- enterprise market: LPT, copper access (DSLE, C2E, CELAN), Optical access (CE2O, C2E, CELAN).

1.7.1.3 Spain

1.7.1.3.1 Legal and regulatory framework

The 2009 *Telecom Package* was implemented into Spanish law by Royal Decree No. 726/2011 on universal service provision in May 2011 and Royal Decree No. 13/2012 of March 31, 2012.

The telecommunications sector is also covered by Law No. 15/2007 of July 3, 2007 relating to the implementation of competition rules.

The National Commission for Markets and Competition (CNMC), established by Law No. 3/2013 of June 4, 2013, brings together

regulatory authorities from different economic sectors, including telecommunications, and the antitrust authority.

The Ministry of Economy and Enterprises (1) is in charge of the management of authorizations, frequency allocation, numbering, approval of the cost of universal service, quality of service, as well as the settlement of disputes between consumers and operators that do not hold a dominant position.

1.7.1.3.2 Regulation of mobile telephony

Spectrum

ightarrow Summary of national frequencies allocated to Orange and their expiration year

800 MHz	900 MHz	1,800 MHz	2.1 GHz	2.6 GHz	3.5 GHz
10 MHz duplex	10 MHz duplex	20 MHz duplex	15 MHz duplex	20 MHz duplex	20 MHz duplex
(2031)	(2030)	(2030)	+5 MHz	(2020)	(2030)
			(2030)		60 MHz (2038)

Internal source

5G

700 MHz band: the Ministry for the Economy approved the road map for the "second dividend" on July 2, 2018. Following the deregulation of the 700 MHz band for electronic communications, the migration of digital terrestrial television (DTT) from the 700 MHz band will be

completed by June 30, 2020 at the latest $^{(2)}$. On June 27, 2019, the Spanish government approved funding of 150 million euros to support the migration process planned for DTT.

⁽¹⁾ Ministerio de Economia y Empresa (MINECO), which replaced the MINETAD in June 2018.

^[2] Following the political agreement between the Council and the European Parliament reached in the presence of the Commission in 2016, the 700 MHz spectrum band should be dedicated to mobile networks in all member states from June 30, 2020 at the latest.

The date for the auction of the 700 MHz bands has not yet been published.

Mobile coverage

All operators holding 4G frequencies in the 800 MHz band must, by Ministerial Order ECE/1166-2018 of October 29, 2018, offer speeds of at least 30 Mbit/s in 2020. This obligation will benefit 90% of the population in municipalities with fewer than 5,000 inhabitants.

Fourth round of market analysis of the mobile call termination market (market 2/2014)

The CNMC, by its Decision 002/17/m2-2014 dated January 18, 2018, set caps for traffic from the European Economic Area corresponding to its long-run incremental cost model for an efficient generic operator in line with the European recommendation. The caps adopted show a gradual reduction in mobile termination rates from 1.09 euro cents/min to 0.64 euro cents/min by January 2020. These prices apply only to traffic coming from the European Economic Area.

(in euro cents/minute)	through 01/30/2018	01/31/2018- 12/31/2018	01/01/2019- 12/31/2019	As of 01/01/2020
MNO, Full MVNO	1.09	0.70	0.67	0.64

The decision has also introduced new transparency rules: the notification to the CNMC of all interconnection agreements concluded by Spanish operators, including for companies within the same group, as well as the notification of agreements for the termination of mobile calls from outside the European Economic Area whenever tariffs are different from those applied in Spain.

1.7.1.3.3 Regulation of fixed-line telephony, broadband and very high-speed broadband Internet

Wholesale broadband access market: third round of 3a and 3b/2014 and 4/2014 market analysis

The CNMC adopted its third round of the analysis of markets 3a and 3b/2014 and 4/2014 on February 25, 2016, by which it decided:

- for market 3a:
 - to retain the copper network unbundling obligations introduced in the previous 2009 market analysis and to retain access to Telefónica civil engineering infrastructure,
 - to not impose ex ante asymmetrical obligations on Telefónica for the fiber network in 66 cities considered effectively competitive, representing 35% of the Spanish population, given that a Virtual Unbundled Local Access (VULA) offer must be made available for the rest of Spain;
- for market 3b:
 - to progressively lift the ex ante regulatory obligations in that part of Spain deemed competitive, and covering 58% of the existing

broadband lines; and in the rest of Spain deemed non-competitive, to maintain an access obligation to Telefónica's network, with the NEBA-copper offer, without limitation on bandwidth, and charged on a cost basis,

- in the area declared competitive for new-generation networks (NGA), corresponding to 66 municipalities (approximately one-third of the population), to lift the obligation to provide a fiber bitstream offer (known as the NEBA offer) from September 2016,
- in the zone declared non-competitive for NGAs, but deemed competitive for copper (approximately one-third of the population), to impose NEBA Fiber offer at rates meeting the economic replicability test until March 2018,
- in the remaining area declared non-competitive, including for copper, to impose a NEBA Fiber offer at rates that satisfy the economic replicability test with no time limit;
- and for market 4, to maintain, throughout Spain, the NEBA-business offer obligation, concerning costs for copper and the economic replicability test for fiber.

Fixed-line call termination rates

As part of its fourth round of mobile termination market analysis (Market 1/2014), on July 25, 2019 the CNMC adopted Decision ANME/DTSA/003/18/m1-2014, which gradually reduces mobile call termination rates from 0.0817 euro cent/minute to 0.0545 euro cent/minute in January 2021. These prices apply only to traffic coming from the European Economic Area.

The caps decided on are:

(in euro cents/minute)	through 08/31/2019	08/01/2019- 12/31/2019	01/01/2020- 12/31/2020	As of 01/01/2021
	0.0817	0.0643	0.0593	0.0545

Revision of the NEBA reference offers (bitstream)

On March 19, 2018, the CNMC approved the "replicability test" (ERT) for Telefónica's offers, which enables the setting of the wholesale price of fiber. The monthly fee for the local NEBA offering (local activated offer) and for access to NEBA fiber (activated offer) were set at 17.57 euros by Telefónica. On April 3, 2019, the regulator confirmed

with the ERT test that the wholesale prices for Telefónica's NEBA-local and NEBA-fiber fiber optic offerings allow alternative operators to reproduce the main fiber optic products offered by the incumbent operator.

1.7.1.4 Poland

1.7.1.4.1 Legal and regulatory framework

Orange's businesses are governed by the law of July 16, 2004 on telecommunications, transposing the 2002 European *Telecom Package* concerning electronic communications into Polish law, and by the law of February 16, 2007 concerning competition and consumer protection. The law of December 2012, transposing EU directives issued in 2009, came into force on January 21, 2013. The law of May 7, 2010, on developing telecommunication networks and services, provides access to telecommunications and other technical infrastructures funded by public funds. This law was revised and amended on August 30, 2019 by transposing Directive 2014/61/EU on broadband cost reduction.

The Ministry of Digitization, created in November 2015, is responsible for telecommunications.

The Office of Electronic Communications (UKE) is responsible, in particular, for telecommunications regulation and frequency management, as well as certain functions related to broadcasting services.

The Office of Competition and Consumer Protection (UOKiK) is responsible for the application of competition law, merger control and consumer protection.

Digital Poland

The government's action plan to implement its digital strategy objectives in Poland was adopted in January 2014. The plan intended to ensure that all households had access to a communication service of at least 30 Mbit/s by the year 2020. In September 2018, the Ministry of Digital Affairs launched a public consultation process on an updated plan with more ambitious objectives. The results of this consultation have not yet been published.

1.7.1.4.2 Regulation of mobile telephony

Spectrum

→ Summary of frequencies allocated to Orange and their expiration year

800 MHz	900 MHz	1,800 MHz	2.1 GHz	2.6 GHz
10 MHz duplex	7 MHz duplex	10 MHz duplex	15 MHz duplex	15 MHz duplex
(2030)	(2029)	(2027)	+5 MHz (2022)	(2030)

Internal source.

5G

700 MHz band: as part of the deregulation of 700 MHz frequencies for mobile networks, UKE has initiated a coordination process with neighboring countries. However, on January 11, 2019, Poland asked the European Commission to extend the deadline to June 2022 on account of coordination problems at spectrum borders.

3.4-3.8 GHz frequency band: On March 15, 2019, Parliament adopted, then on April 5, 2019, published, amendments to the Telecommunications Act allowing operators to use the 3.4-3.8 GHz frequency bands free of charge for the testing of new technologies or for the reallocation of frequencies. Tests with 5G have been made in twenty Polish cities. Furthermore, on December 9, 2019, UKE launched the consultation process on the conditions for auctioning the 3.4 – 3.8 GHz band. UKE wishes to allocate 4 blocks of 80 MHz. Licenses will be valid through the end of May 2035.

Mobile voice call termination rates

As from July 1, 2013, the symmetric mobile voice call terminations of all operators cost 0.0429 zloty/minute, (1.01 euro cent/minute as of December 31, 2019). In compliance with the recommendations of the European Commission, this tariff is based solely on the long-term incremental costs of an efficient generic operator. It can only be changed based on the evolution of the differential costs of an efficient operator.

Infrastructure sharing

The network sharing agreement between Orange and T-Mobile Polska, which dates from 2011, was extended to 4G in December 2016. On May 22, 2018, Orange and T-Mobile decided to put an end to spectrum sharing in the 900 MHz and 1,800 MHz bands.

Application of Roaming Like at Home regulation

In order to handle a massive increase in the volume of traffic in certain customer categories, Orange submitted an exemption request to the regulator UKE at the end of 2017, as authorized by the regulation (1), to bill its roaming customers a surcharge. In a decision dated April 12, 2019, the regulator renewed the exemption authorization that had been granted in April 2018 for a period of one year. Orange implements the application of these surcharges on voice and data only within the framework of its prepaid offers. The authorized surcharges are:

- outgoing call: 0.0407 zloty/minute;
- incoming call: 0.0163 zloty/minute;
- SMS: 0.0081 zloty;
- MMS/1 MB: 0.0015 zloty.

1.7.1.4.3 Regulation of fixed-line telephony, broadband and very high-speed broadband Internet

The ex-ante regulation of Orange's fixed services, for the areas defined as non-competitive, relates solely to wholesale offers.

Deregulation of markets 1 and 3/2003

On June 26, 2018, the European Commission approved the decisions to deregulate markets 1 & 3/2003 (access to the public telephone network at a fixed location for residential and non-residential customers). The deregulation decision provides for a transition period of two years corresponding to the maximum duration of the contracts agreed by the operators and their private customers.

⁽¹⁾ See above 1.7.1.1 European Union.

Analysis of the wholesale broadband market (markets 3a and 3b/2014)

On October 22, 2019, UKE published the decisions relating to markets 3a and 3b/2014.

According to the regulator, market development and increasing competition justify further market deregulation. As a result, UKE decided to increase the number of deregulated zones:

- in the 3a/2014 market, to 51 municipalities;
- in the 3b/2014 market, from 76 to 151 municipalities.

Under these new decisions, out of a total of approximately 14.6 million households, around 6 million households are deregulated on bitstream access, and around 2.3 million households are deregulated on bitstream access and unbundling.

Reference offer for fixed-line markets

The benchmark offer relates to all wholesale fixed services: call origination and termination, wholesale subscription sales, partial and full unbundling, and bitstream access.

On September 4, 2018, the European Commission accepted, without comment, the changes made to the Orange reference offer intended to lower subscription fees for the fixed-access wholesale service and eliminate number portability fees.

Fixed-line call termination rates

On March 28, 2019, UKE notified its draft decision fixing the tariff for fixed call terminations on the basis of costs incurred at 0.0273 zloty/minute. The European Commission, after having expressed "serious doubts" as to the compatibility of this draft decision with the European Commission's 2009 recommendation on incremental cost orientation (1), finally issued a recommendation to UKE on August 26, 2019, asking it to adopt a price level based on the incremental cost model. However, UKE did not apply this recommendation in view of the future European call termination rate and adopted its decision with unchanged tariff levels; this decision was notified to operators at the end of December.

1.7.1.5 Other EU countries where the Orange Group operates

1.7.1.5.1 Belgium

Spectrum

→ Summary of frequencies allocated to Orange and their expiration year

800 MHz	900 MHz	1,800 MHz	2.1 GHz	2.6 GHz
10 MHz duplex	12 MHz duplex		15 MHz duplex	20 MHz duplex
(2033)	(2021)		+5 MHz (2021)	(2027)

Internal source

5G

On October 25, 2018, the Belgian Institute for Postal Services and Telecommunications (IBPT)) published the "national roadmap" for the 700 MHz band in application of the European regulation on the use of the 470-790 MHz frequency band in the European Union.

The timeline for future allocations has not been announced, but a proposal for (i) the possible extension of the current non-5G licenses and (ii) the ability to grant transitional rights to operators to open commercial 5G services was submitted for public consultation on December 24, 2019.

Mobile voice call terminations

In its decision dated May 26, 2017, the IBPT set the level of Orange's mobile call termination at 0.99 euro cents/min, based on the long-term incremental cost model of an efficient generic operator.

Cable wholesale broadband markets

A consultation on the review of the markets was initiated by the Conference of Regulators of the electronic communications sector in July 2017 $^{(2)}$. The review concluded that there were different wholesale

markets for central access (copper/fiber *versus* cable) and for television (IP-TV *versus* cable). On May 25, 2018, the European Commission commented on the draft decisions for the wholesale broadband markets (markets 3a and 3b/2014) and on the wholesale television distribution market. The European Commission did not block the proposal to define two central access wholesale markets for the copper and fiber optic networks and for coaxial cable, despite its comments on the measure. On this basis, the CRC's final decision was adopted on June 29, 2018.

In the meantime, Telenet appealed to the European Court of Justice (ECJ) against the European Commission's letter of observations on this market analysis, then subsequently annulled this appeal. At the same time, all cable operators (Telenet, Brutélé, Nethys) appealed against these decisions to the Court of Justice for markets. These appeals were dismissed by a ruling of September 4, 2019.

A decision from the IBPT on the new monthly rates for wholesale access to the cable networks should be forthcoming in early 2020. Regarding wholesale fiber prices, based on "cost plus", as well as one-time rates such as activation and installation rates (for both fiber and cable), public consultations are planned for 2020.

⁽¹⁾ European Commission Recommendation 2009/396/EC of May 7, 2009 on the regulatory treatment of fixed and mobile termination rates in the European Union.

⁽²⁾ The Conference of Electronic Communications Regulators (CRC) brings together the IBPT, CSA, Mediensat and VRM.

1.7.1.5.2 Romania

Spectrum

→ Summary of frequencies allocated to Orange and their expiration year

800 MHz	900 MHz	1,800 MHz	2.1 GHz	2.6 GHz	3.4 GHz- 3.8 GHz
10 MHz duplex (2029)	10 MHz duplex (2029)		15 MHz duplex +5 MHz (2020)		25 MHz duplex +10 MHz duplex +45 MHz (2025)

Internal source.

Orange won additional frequencies on August 14, 2018 at a private auction organized by 2K Telecom for the allocation of 2x10 MHz blocks in the $3.5~\mathrm{GHz}$ band, valid until 2025, for $3.35~\mathrm{million}$ euros.

On July 29, 2019, ANCOM launched a public consultation on the terms and conditions of the auctioning of licenses in the 700 MHz, 800 MHz, 1,500 MHz, 2,600 MHz and 3,400 MHz – 3,800 MHz frequency bands. The consultation ended on September 2, 2019. The allocation of the 5G spectrum, originally planned for end 2019, was deferred until 2020.

Mobile voice call termination rates

On October 11, 2019, ANCOM announced that mobile termination rates would be reduced from 0.84 euro cents/min to 0.76 euro cents/min

as of January 1, 2020, until a single European tariff is introduced as of the beginning of 2021 in accordance with the Code⁽¹⁾. The tariff set by ANCOM will apply to national calls and calls originating from within the European Economic Area (EEA), but also to calls outside the EEA.

Wholesale broadband markets

In the context of its second round of analysis of the 3a and 3b markets, completed in November 2015, ANCOM considered the retail broadband market to be effectively competitive and that, as a consequence, no obligation should be imposed on the two wholesale markets.

1.7.1.5.3 Slovakia

Spectrum

→ Summary of frequencies allocated to Orange and their expiration year

800 MHz	900 MHz	1,800 MHz	2.1 GHz	2.6 GHz	3.4 GHz- 3.8 GHz
10 MHz duplex (2028)	10 MHz duplex (2021)	15 MHz duplex (2021) +5 MHz duplex (2026)	+5 MHz		40 MHz duplex (2025)

Internal source

3.4-3.6 GHz

In August 2019, Orange acquired a total of 40 MHz from Slovanet in two 20 MHz coupled-spectrum blocks (3,470 MHz - 3,490 MHz/3,570 MHz - 3,590 MHz), with licenses valid until 2025.

5G

The 5G auction sale is scheduled for the first quarter 2020. The regulator will propose a frequency allocation in the 700 MHz, 900 MHz and 1,800 MHz bands. However, this should not affect the 3.4-3.8 GHz band frequencies available from 2025 onwards.

Mobile voice call termination rates

As part of its fourth round of analysis of the mobile termination market, on July 9, 2019 the RU regulator published Decision 19/OER/2019-3888 setting symmetrical tariffs for all operators at 0.818 euro cent/minute from August 1, 2019 onward. This call termination rate had been 1.226 euro cents/minute since July 2013.

Wholesale broadband and very high-speed fixed broadband markets

The Slovakian regulator completed its third round of analysis of the 3a, 3b and 4/2014 markets and published its decisions on markets 3a and 3b on January 19, 2018, and on market 4 on November 7, 2016. The regulator eased regulation:

- in market 3a, by excluding unbundling of the local sub-loop, while maintaining unbundling in the local copper loop, and by limiting the regulatory obligations of NGA offers to the economic replicability test and to a technical equivalence of inputs;
- in market 3b, by imposing a replicability test of 2P offers and multicast IPTV wholesale access offers, instead of regulated prices;
- in market 4, by eliminating the sector-based regulatory obligations, because of the competitive nature of the market.

The RU published rate caps for access to fixed physical infrastructure (civil engineering) on October 17, 2018. Maximum monthly fees are as follows: access to ducts (0.257 euro/month/meter), HDPE tube (0.128 euro/month/meter) and micro-tube (0.116 euro/month/meter). This is a significant decrease in the access rates for the infrastructure.

⁽¹⁾ See above 1.7.1.1.

1.7.1.6 Non-EU countries where the Orange Group operates

The table below shows the type of licenses held by Orange and their expiration dates as of December 31, 2019 in each country of the Africa and Middle East Region in which it is present:

Renewal of licenses in the MEA Region

	Expiration of current license	Type of license
Botswana	September 2033	Network, including
		2G-3G spectrum
Botswana	September 2033	Services and
	4	applications
Botswana	August 2025	4G spectrum
Burkina Faso	April 2020	2G
Burkina Faso	September 2022	3G
Burkina Faso ⁽¹⁾	May 2035	Global ⁽²⁾
0	la a co 0000	(2G – 3G – 4G)
Cameroon	January 2030	2G – 3G – 4G
Côte d'Ivoire	April 2032	Global (2G – 3G – 4G)
Egypt	October 2031	2G – 3G – 4G,
Outros Dissert	A :: 1 000 F	virtual fixed license 2G – 3G – 4G
Guinea-Bissau Guinea	April 2025 March 2029	2G - 3G - 4G 2G - 3G - 4G
Jordan	March 2029 May 2024	2G - 3G - 4G 2G - 3G
Jordan	September 2030	2G – 3G 4G
Jordan	May 2024	Fixed
Liberia	July 2030	Global (2G – 3G – 4G)
Madagascar	April 2025	2G – 3G – 4G)
Mali	July 2032	Global (2G – 3G – 4G)
Morocco	August 2024	2G
Morocco	December 2031	3G
Morocco	April 2035	4G
Morocco	April 2036	Fixed
Mauritius	November 2021	2G – 3G – 4G
Mauritius	November 2025	Fixed
Central African Republic	May 2027	Global (2G – 3G)
Democratic Republic of the Congo	October 2031	2G – 3G
Democratic Republic of the Congo	May 2038	4G
Senegal Senegal	August 2034	Global (2G – 3G – 4G)
Sierra Leone	July 2031	2G – 3G
Sierra Leone	March 2034	4G
Tunisia	July 2024	Global (2G - 3G)
Tunisia	March 2031	` 4G

Source: data from national regulators.

(1) Replacing the 2 previous licenses, due to take effect in May 2020.

(2) Global: refers to the type of license that allows an operator to offer both fixed-line and mobile services through all of the available technologies (depending on the country, the Global license does not include 4G technology).

1.7.2 Regulation of banking activities

In 2020, there were no major changes to the regulatory environment applicable to the activities of Orange Bank. However, the following reforms have been introduced:

- Regulation (EU) 2019/834 (known as "EMIR Refit") of May 28, 2019 amended EU Regulation No. 648/2012 on OTC derivatives, central counterparties and trade repositories; it came into effect on June 17, 2019:
- on April 16, 2019, the European Parliament adopted a series of legislative measures called the "banking package", aimed at reducing risks in the EU banking sector to make it even more resilient to hits in times of crisis by amending four major banking industry texts: Regulation (EU) 2019/876 (known as "CRR II"), Directive (EU) 2019/878 (known as "CRD IV"), Directive (EU) 2019/879 (known as "BRRD II"), and Regulation (EU) 806/2014 (known as "SRMR");

these changes affect a large number of areas such as capital and liquidity, market and interest rate risk, credit risk, counterparty risk and "major exposures", and they also toughen communication requirements. They also introduce a principle of proportionality, making it easier for small banks to comply with regulatory standards (especially for reporting). The new regulations will take effect over a period ranging from 18 to 24 months:

 following the European Commission Implementing Regulation (EU) 2018/33 of September 28, 2017, the format and content of the annual statement of bank charges will be tightly regulated and standardized as of January 1, 2020 (statement covering transactions in 2019);

- implementing Regulation (EU) 2018/34 of the European Commission of September 28, 2017 concerns the standardized layout rules for the Tariff Information Document (TID). In accordance with the Order of September 5, 2018, this new pricing document, coming in addition to pricing conditions, was made available to customers on July 31, 2019;
- adopted definitively on April 11, 2019, the PACTE Act (Action Plan for Business Growth and Transformation) transposed into French law the provisions of European Directive 2017-2399, which defines the rank of seniority of unsecured debt instruments in the event of insolvency. This seniority already existed in France since Law 2016-1691, but its scope has now been extended to investment firms, financial institutions and financial holding companies;
- more generally, the PACTE Act introduced a series of measures in banking and financial law, including changes to the operating rules for share savings plans (PEAs), a broadening of the AMF's remit, and the repeal of the rules on the domiciliation of income in a context of real-estate loans;
- finally, the PACTE Act established a clear legislative framework for the cryptocurrency market and the development of the blockchain.
 It also introduced a status for cryptocurrency market intermediaries.

Pisk factors and activity management framework

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2.1 Risk factors

In addition to the information contained in this Universal Registration Document, investors should also carefully consider the risks outlined below before deciding whether to invest. Orange's view as of the date of this Universal Registration Document is that these risks could have a material negative effect (i) on its business, financial position, profits, reputation or outlook or (ii) on its stakeholders. In addition, other risks and uncertainties, as yet unidentified or, as of the date of this Universal Registration Document, not currently considered to be material by Orange, could have similar negative effects. Investors could lose all or part of their investment if these risks materialize.

In assessing the significance of these risks, the results of mitigation policies implemented by Orange are taken into account. Only the risks still deemed significant at Group level despite these policies are set out below.

The risks are presented in this section under four categories:

- for Orange:
 - operational risks relating to Orange's business activities (see Section 2.1.1),
 - risks of a legal nature (see Section 2.1.2),
 - financial risks (see Section 2.1.3);
- and for Orange and its stakeholders: the main "non-financial" risks relating to the corporate, social and environmental consequences of Orange's activities, and to the effects of these activities in terms of respect for human rights, anti-corruption measures and tax avoidance (see Section 2.1.4).

These categories are not presented in order of importance. However, within each category, risk factors are presented in descending order of importance, as determined by Orange at the date of filing this Universal Registration Document. Orange may change its view of their relative importance at any time, particularly if new external or internal facts come to light.

Several other sections of this Universal Registration Document also discuss risks in some detail:

- for risks relating to global risks in the telecommunications services sector, Orange's overall strategy and its business model, see Section 1.2;
- for risks relating to regulations and regulatory pressure, see Section 1.7 Regulation of activities and Note 17 Litigation to the consolidated financial statements (Section 3.3);
- for risks relating to litigation involving the Group, see also Note 10 Taxes and Note 17 Litigation to the consolidated financial statements, as well as Section 3.2.1 Recent events, where applicable:
- for risks relating to the Group's corporate, social and environmental responsibility, see Section 4;
- for financial risks, see:
 - note 7 to the consolidated annual statements for the key assumptions used to determine the recoverable amount of the main activities and specific risk factors that might affect this amount,
 - notes 8 and 11 to the consolidated financial statements for asset impairments,
 - note 12.8 to the consolidated financial statements for derivatives,
 - note 13 for the management of interest rate risk, currency risk, liquidity risk, covenants, credit risk and counterparty risk, and equity market risk. The policies for managing interest rate, foreign exchange and liquidity risks are set by the Treasury and Financing Committee. See Section 5.2.2.3 Executive Committee and Group governance committees;
- for the insurance plan, see Section 2.2.3.3 *Insurance*;
- more generally, risk management policies throughout the Orange Group are discussed in Section 2.2 Activity and risk management framework, which is an integral part of the Management Report.

In addition, the risks related to the COVID-19 pandemic, as assessed at the date of publication of this document, are mentioned in section 3.2.1 *Recent events*. The consequences of the outbreak are uncertain; it could have an impact on the Group's business and financial situation and may exacerbate the risks described below.

2.1.1 Operational risks

Operational risks mainly include risks related to the telecommunications sector, and risks related to Orange's strategy and business. Risks with potentially substantial employee, environmental and social consequences are presented in Section 2.1.4.

A significant portion of Orange's revenues is generated in highly competitive markets where pricing pressure is strong and regulatory decisions are a determining factor.



In France and Spain particularly, Orange is still experiencing extremely strong competition which mainly affects prices. In parallel, the operation of markets is subject to the decisions of industry regulators and competition authorities. In this context, Orange is continuing to implement a policy of moving towards a multi-services operator model by offering convergent offers (very high-speed fixed and mobile broadband) with a more generous data allowance while improving the quality of its services. Should Orange fail to implement its strategy it may lose a portion of its market share and see its margins reduced.

For further information about competition, see Section 1.4 Operating activities.

High concentration among Orange's critical suppliers creates a risk for the Group's business.

High ●●●

Orange's critical suppliers, in particular in the network infrastructure, IT systems and mobile handset sectors, operate in highly concentrated markets. Despite secure supply policies implemented by Orange, this concentration poses a risk to the Group's current or future business (for example the supply of hardware for 5G networks) in the event that one of these suppliers defaults or decides to change its business practices, regardless of the causes, including the introduction of international economic sanctions against these critical suppliers or their country of origin. In addition, any significant change in critical suppliers may affect the terms of their partnership with Orange. If any of these situations were to arise, they could have a lasting effect on Orange's business, profits and corporate image.

Orange's large geographic footprint and the scope of its activities exposes it to geopolitical, macroeconomic and regulatory risks.

High ●●●

In emerging countries where the Group is present, its contribution to the local economy is often significant while its corporate image is sometimes connected to that of the French state. In this context, political instability or changes in the economic, regulatory, fiscal or social situation in these regions exposes Orange to the decisions of governmental or legal authorities that are contrary to its interests, such as new taxes or fines which, if contested, may lead the authorities to decide to suspend services. International economic sanctions imposed on certain countries could also affect the value or permanence of the investments made in those countries. Such situations could call into question profit forecasts made at the time of investment decisions and affect the Group's financial position and earnings.

Orange is faced with increasing demand for connectivity and must therefore accelerate the deployment of networks while improving the quality of service, but such investments are constrained by the availability of resources.



Orange must accelerate the deployment of its fixed and mobile broadband and very high-speed broadband networks in the regions and improve their quality of service, to meet the needs for increased connectivity and anticipating the arrival of 5G. Orange has also made service-level and geographical coverage commitments to public and local authorities in France. However, Orange's investment capacity is constrained by its human, industrial and financial resources, as well as those of its subcontractors. Failing to meet these expectations in a balanced way could have an effect on Orange's earnings and reputation.

The development of mobile financial services exposes Orange to risks inherent to this sector.

Medium ●●O

Mobile financial services, including banking services expose Orange to risks inherent to this sector, such as money laundering, the financing of terrorism and non-compliance with economic sanction programs, as well as particularly sensitive and common risks in the financial services sectors such as fraud, cyber-attacks or service interruptions. If these risks materialized, they could have a material effect on the Group's financial position, the success of its strategy and its reputation.

Orange is exposed to risks of disclosure or inappropriate modification of stakeholder data in its possession, in particular as a result of cyber-attacks.

Medium ••O

Orange's activities expose it to risks of losses, disclosure, unauthorized communication to third parties or inappropriate modification of data stored on its infrastructure or carried by its networks, belonging to business customers or government authorities, suppliers or partners, or any other stakeholders other than individuals (see Section 2.1.4 for personal data).

These risks may materialize (i) from the implementation of new services or applications, (ii) from the development of new activities in the field of connected devices, (iii) from malicious acts (such as cyber-attacks) particularly aimed at data in Orange's possession, or (iv) possible negligence or errors within Orange or the Group's outsourcing partners.

The Group could be held liable if these risks were to materialize. Moreover, while the Group's stakeholders have high expectations in terms of security, given Orange's position as a trusted operator, its reputation may be strongly affected, which would materially affect its future earnings.

Orange is exposed to the risk of an interruption of its services.

Medium ●●O

Telecommunications network operators are particularly exposed to deliberate, sometimes criminal acts, owing to the essential nature of telecommunications. Services supplied to customers could thus be interrupted as a result of cyber-attacks, malicious activities (such as sabotage of critical software) or requests issued by governments or legal authorities.

Interruptions may also be involuntary. They may occur as a result of extreme climate events, human error such as outages during work on shared infrastructure by sub-contractors, failure of a critical supplier, or insufficient network capacity to meet the growing usage needs, or during the commissioning of new applications or software.

Despite business continuity and crisis management measures taken by Orange to protect its networks, the high frequency of cyber-attacks, the streamlining of the network through the use of all-IP technologies, the increasing size of service platforms and the relocation of equipment into fewer buildings mean that, in the future, service interruptions may affect a greater number of customers and more than one country simultaneously. Such events could seriously damage Orange's reputation, trigger its liability and result in a reduction of traffic and its revenue, affecting its earnings and outlook. If they were to occur on a nationwide or multinational scale, they might also create a crisis potentially affecting the security of the countries concerned.

Orange's strategy for developing its new sources of growth may not give the expected results.

Medium ●●O

Orange's strategy is to accelerate its business in growth areas with a particular focus on mobile financial services (including *Mobile Banking*), B2B IT services and cyber security. Although building on the Group's strengths (digital expertise, distribution strength, capacity for innovation, brand image and a strong presence in the MEA Region), the development of these new businesses requires substantial resources, without any guarantee that the corresponding services will gain sufficient traction to generate a return on these investments. Should Orange fail to implement its strategy it may lose a portion of its market share and see its margins reduced.

The shift of Orange's ecosystem towards a more open and fragmented model enables global players to have a greater stake in the value chain of services and networks.

Medium ●●○

Competition with Over-The-Top (OTT) service providers and Internet giants in the provision of value-added services using the networks is spreading to individual access services made possible by technological changes and the growing number of connected objects. This development could accelerate with the launch of 5G and the position of operators such as Orange, for which the direct relationship with customers adds value, may be weakened.

Moreover, the opening up and fragmentation of the network ecosystems enables existing players (infrastructure managers, non-telecoms networked businesses such as railways, local authorities or Cloud service providers) to offer network services and new players (SD-WAN etc.) to position themselves as aggregators of such services, a role traditionally filled by integrated operators such as Orange.

These two developments could affect Orange's revenues and outlook.

The Group's brand policy, combined with a strategy of geographic expansion and diversification into new businesses, represents an image risk for the Orange brand.



The strategy implemented by Orange to accelerate its activities in growth areas implies operational implementation risks inherent to the new business lines (particularly mobile banking and cyber defense) and the countries into which the Group is expanding. Although the Group pays close attention to preserving the value of the Orange brand, which constitutes a major asset, if these risks were to materialize, they could adversely affect the company's reputation, in particular in the mature mobile telephony sector. In the event of material damage to the Orange brand, the Group's profits and outlook may be affected.

The scope of Orange's business and the interconnection of the networks mean that Orange is exposed to a variety of acts of technical fraud, specific to the telecommunications and mobile financial services sectors.



Orange faces risks of different types of fraud relating to its telecommunications or mobile financial services, which may affect it directly, or affect its customers. In a context of increasingly complex

technologies, network virtualization and faster implementation of new services or applications, types of fraud that are more difficult to detect or control may also appear, encouraged by the development of mass data processing, which increases the scope for possible attacks, particularly cyber-attacks. Should a serious case of fraud occur, Orange's revenues, margins, quality of service and reputation could be affected.

Orange's technical infrastructure is vulnerable to damage caused by intentional or accidental damage, or natural disasters whose increasing frequency is caused by climate change.

Low •00

A natural disaster, intentional damage in the course of wars, terrorist acts, social unrest, or other accidental events such as fires or civil engineering on infrastructure, may cause significant damage to Orange's installations, potentially giving rise to service interruptions and generating high repair costs. The frequency and intensity of weather events related to climate change (floods, storms, heat waves) are increasing, which could aggravate accidents and increase related damage. In the medium term, rising sea levels could affect sites and facilities near the coast more often. Whilst insurance cover for claims could fall further, damage caused by major disasters may result in significant costs to Orange and could thus seriously affect its financial position and outlook.

2.1.2 Legal risks

Orange operates in highly regulated markets and its business activities and results could be materially affected by legislative or regulatory changes, including those with extraterritorial scope, or by changes in government policy.



In most countries in which it operates, Orange has little flexibility to manage its business activities as it must comply with various increasingly restrictive regulatory obligations governing the provision of its products and services, primarily relating to obtaining and renewing licenses to operate its activities. Orange must also comply with regulatory obligations and the oversight by authorities seeking to maintain effective market competition, as well as, in some countries, additional constraints owing to its historically dominant position in the fixed telecommunications market.

Orange's business activities and profits may be materially adversely affected by legislative or regulatory changes, sometimes of an extraterritorial nature, or by changes to government policy, and in particular by decisions taken by regulatory or competition authorities in connection with:

- the amendment or renewal under unfavorable conditions, or even withdrawal, of fixed-line or mobile operator licenses;
- conditions governing network access (primarily those in connection with roaming or infrastructure sharing);
- service rates;
- the introduction of new taxes or increases in existing taxes on telecommunications companies, including the introduction of taxes aimed at facilitating the achievement of countries' carbon neutrality targets (such as taxes on use or handset purchases);

- regulation of banking and financial activities and any similar regulations requiring compliance such as laws and rules on economic sanctions;
- regulations governing data security;
- merger policy;
- regulations affecting operators of competing sectors, such as cable;
- consumerism legislation.

Such decisions could materially affect the Group's revenue and results.

For further information on risks related to regulations, see Section 1.7 Regulation of activities.

Orange is continually involved in litigation, the outcome of which could have a material adverse effect on its profits, financial position or reputation.



Orange believes that, on a general basis and in all countries in which it is present, it complies with all the specific regulations in force, as well as the conditions governing its operator licenses. However, the company is not able to predict the decisions of oversight and legal authorities who are regularly asked to rule on such issues. Should Orange be ordered by the relevant authorities in a country in which it operates, to pay damages or a fine or suspend some of its activities due to non-compliance with an applicable regulation, the Group's financial position and results could be adversely affected.

In addition, Orange – particularly in France and Poland – is frequently involved in legal proceedings with its competitors and with the regulatory authorities due to its dominant position in certain markets, and the claims made against Orange may be substantial. In the past, the Group has been fined several tens of millions of euros and even

Risk factors

several hundreds of millions of euros for concerted practices or for abuse of a dominant position. The Group is also involved in substantial litigations with potentially very significant penalties. The outcome of lawsuits is inherently unpredictable.

In the case of proceedings involving European Competition Authorities, the maximum fine provided for by law is 10% of the consolidated revenue of the company at fault (or the Group to which it belongs, as the case may be).

Finally, owing in particular to its use of a large number of sub-contractors, and the presence of rare minerals in the products it distributes, Orange is exposed to a growing risk of legal action by various civil society stakeholders who may accuse it of various environmental, employee-related or social breaches. Such actions could cause significant harm to Orange's reputation.

The main proceedings involving Orange are detailed in Note 10 *Taxes* and Note 17 *Litigation* to the consolidated financial statements. Developments in or the results of some or all of the ongoing proceedings could have a material adverse effect on Orange's results or financial position.

2.1.3 Financial risks

Liquidity risk

Orange's results and outlook could be affected if the terms of access to the capital markets become difficult.

Medium ●●O

Orange finances itself mainly through the bond markets. An unfavorable development in the macroeconomic context could restrict or make significantly more expensive Orange's access to its usual sources of financing through an increase in market rates and/or the margins applied to its borrowings.

Any inability to access the financial markets for a lasting period and / or obtain financing on reasonable terms might have a material adverse effect on Orange. The Group could, in particular, be required to allocate a significant portion of its available cash to service or pay off debt, to the detriment of investment or shareholders' remuneration. In all cases, Orange's results, cash flows and, more generally, financial position and flexibility may be adversely affected.

See Note 13.3 Liquidity risk management to the consolidated financial statements, which sets out different financing sources available to Orange, the maturity of its debt and changes to its credit rating, as well as Note 13.4 Financial ratios, which contains information on the limited commitments of the Orange Group in relation to financial ratios and in the event of default or material adverse change.

Risk of asset impairment

Changes affecting the economic, political or regulatory environment may result in asset impairment, particularly of goodwill.

Medium ●●○

At December 31, 2019, the gross value of goodwill recognized by Orange following completed acquisitions and disposals was €33.6 billion, not including the goodwill of associates and joint ventures.

The book values of long-term assets, including goodwill and fixed assets, are sensitive to any change in the business environment that is different from the assumptions used. Orange recognizes assets as

impaired if events or circumstances occur that involve material adverse changes of a permanent nature affecting the economic environment or the assumptions and targets used at the time of the acquisition.

Over the past five years, Orange recognized significant impairment losses in respect of its interests in Poland, Congo (DRC), Cameroon, Egypt and Jordan. At December 31, 2019, the cumulative amount of goodwill impairment was €5.9 billion, not including the goodwill impairment of associates and joint ventures.

New events or adverse circumstances could conduct Orange to review the present value of its assets and to recognize further substantial impairment that could have an adverse effect on its results.

In addition, in the case of disposals or listings on a stock exchange, the value of certain subsidiaries could be affected by changes in the stock and debt markets.

For further information on goodwill and recoverable amounts (particularly key assumptions and sensitivity), see Note 7 *Impairment losses and goodwill* and Note 8.2 *Impairment of fixed assets* to the consolidated financial statements and Section 3.1.2.2 *Group operating income*.

Credit-rating risks

A change in the outlook for Orange's credit rating could increase its borrowing costs and, in certain circumstances, Orange's access to the capital it needs could be limited.

Medium ●●O

Orange's credit rating from rating agencies is partly based on factors over which it has no control, namely conditions affecting the telecommunications industry in general or conditions affecting certain countries or regions in which it operates. It may be changed at any time by the rating agencies, in particular as a result of changing economic conditions, a downturn in the Group's results or performance or changes to its investor base. A prolonged multi-notch downgrade in Orange's rating would have a material adverse effect on its financing terms.

2.1.4 Non-financial risks

The various non-financial risks, included in the scope of Orange's Statement of Non-Financial Performance (SNFP) have been identified and assessed, and are managed using the same methodology used for operational risks related to its business, legal risks and financial risks.

As part of its SNFP, Orange presents the material employee-related, environmental and social risks to which its business may give rise, whether to itself or its stakeholders, as well as corruption risks and matters relating to combating tax avoidance and to business ethics. These were assessed in line with the salience matrix related to non-financial issues (see Section 2.2.4).

Combating tax avoidance, food waste and food insecurity, respect for animal well-being and responsible food practices, were all taken into account as part of Orange's non-financial risk assessment. However, they were not considered likely to give rise to risks to the Group's operations or reputation.

In particular in the event of a cyber-attack, Orange is exposed to risks of disclosure or inappropriate modification of personal data, in particular customer data. These risks have increased due to the Group's diversification into mobile financial services.

High ●●●

With regard to the risk of breaching human rights and fundamental freedoms, Orange's business activities expose it to risks of loss, disclosure, unauthorized communication to third parties or inappropriate modification of the personal data of its customers, employees or the general public which are stored on its infrastructures or carried by its networks. This includes their bank details in particular, which are, moreover, the basis of Orange's mobile financial services business.

These risks may notably materialize from (i) the implementation of new services or applications, (ii) the development of new activities in the field of connected devices or mobile services, (iii) malicious acts (such as cyber-attacks) particularly targeting personal data (iv) possible negligence or errors within Orange or the Group's outsourcing partners or (v) government requests without any respect for legal or regulatory formalities (see below for more information on this last point).

Orange may be held liable in various countries under laws that are being increasingly tightened (such as the General Data Protection Regulation (EU) 2016/679 of April 27, 2016, or GDPR) and that strengthen individual rights and obligations on data processors such as operators and providers of financial services.

Should these risks materialize, owners of the disclosed or modified data may incur considerable losses, the Group's liability may be invoked and its reputation and image substantially affected.

Orange is exposed to risks of corruption, behavior by individuals or groups that does not comply with its business ethics, or fraudulent behavior.

Medium ●●O

Through its activities, as well as those of its suppliers, subcontractors and partners, throughout the world, and despite its efforts to reinforce its anti-corruption policy in compliance with current laws, Orange may be exposed to or implicated in matters relating to corrupt practices, or may fall victim to behavior that is fraudulent or does not comply with international conventions, its Code of Ethics, or its Supplier Code of Conduct, by persons or businesses with which direct or indirect ties may be established. These behaviors may target Orange directly, its customers, its business relations or its employees.

In any event, the Group's liability may be invoked, and Orange's revenues, margins, quality of service and reputation could be affected.

Orange faces a variety of internal and external risks relating to human health and safety.

Medium ●●O

Owing to the specific nature of its operator business and its geographical location, and in a context where tensions and social unrest is increasing, employees of Orange and its subcontractors are exposed to risks to their safety. In addition, the strategic plan, Engage 2025, aims to establish the conditions for a lasting, responsible transformation to ensure the social and human coherence of the Group's projects worldwide. Nevertheless, this could cause psychosocial risks which may be a source of physical or psychological incapacity for individuals. These risks could also slow the roll-out of the Group's strategy and have a material impact on the Group's image and operations.

The scope of Orange's business activities, its numerous locations around the world, and its business dealings with a variety of partners may expose the Group to a risk of breaching human rights and fundamental freedoms.

Medium ●●O

Through its activities, as well as those of its suppliers and subcontractors throughout the world, Orange may be exposed to breaches of human rights and fundamental freedoms (such as forced labor, infringement of the rights of children, indecent, discriminatory or dangerous working conditions, obstruction of freedoms of association or expression, or invasion of privacy), involving third parties with whom a direct or indirect link may be established. This is the case in certain regions where minerals are mined, processed and traded in conflict zones or areas where human rights are not respected.

Should these risks materialize, they may have a significant effect on the image and reputation of Orange or the suppliers and subcontractors in question, and may result in their liability being invoked.

Moreover, Orange may be required, in the countries where it operates, to comply with injunctions from local authorities that do not comply with formal legal or regulatory requirements. These injunctions, the frequency of which is increasing with the growing role played by digital technologies in society, may involve a suspension (in full, in part, or in a given region) of certain networks for which Orange is responsible, or the interception of communications, or the disclosure of personal data to third parties. Complying with such injunctions may therefore undermine freedom of expression or fundamental freedoms.

Should Orange fail to ensure compliance with applicable legislation or regulations, these injunctions may significantly impact the image or reputation of Orange or of the countries concerned. For civil society or the targets of these requests, they may also involve breaching freedom of expression and respect for privacy.

Orange and some of its stakeholders are exposed to physical and transitional risks related to climate change.

Medium ●●O

Other than the effects on Orange infrastructure (see Section 2.1.1 Orange's infrastructure is vulnerable to damage caused by intentional or accidental damage or by natural disasters the increasing frequency of which is caused by climate change), climate change may have negative effects on its activities and those of its suppliers or subcontractors. It is also creating expectations among Orange customers, particularly in respect of its capacity to set up emergency services in the case of an extreme climate event. Climate change could also result in an increase in inequalities and health crises among populations and in significant displacement of populations within the MEA Region on which the Group's prospects for growth in part depend. Should such events materialize, Orange may experience greater difficulties in fulfilling its purpose.

In the future, Orange may find it difficult to obtain and retain the skills needed for its business due to numerous employee departures and ever faster changes in its activities.

Medium ●●O

The high number of retirements and employees working part-time at the end of their careers in France as well as the new skills required in relation to the development of new technologies and the Group's development priorities in high-demand segments of the employment market, may affect Orange's capacity to continue its business activities efficiently and successfully implement its strategy. Should Orange's efforts to attract staff or its ambitious training policy prove insufficient, its profits and outlook may be affected and some of the human risks described below may increase. Moreover, the success of Orange's digital support for some of its stakeholders may be compromised.

Exposure to electromagnetic fields of telecommunications equipment, as well as the excessive or inappropriate use of telecommunication services and equipment may be potentially harmful to people's health.

Low •OO

Following concerns raised in many countries regarding the possible health risks linked to exposure to electromagnetic fields from telecommunications equipment, public authorities have in general approved binding regulations and health authorities have issued various usage precautions.

The perception by the public of a risk for human health or biodiversity could lead to a decrease in the number of customers and in their usage, an increase in lawsuits, particularly against the installation of mobile antennas, difficulties in opening new sites, thus jeopardizing among others the deployment of 5G networks, and the tightening of regulations, with, as a consequence, a reduction in coverage, deterioration of service quality and an increase in network roll-out costs.

Consensus exists among health experts and health authorities, including the World Health Organization (WHO), that, so far, no health risks from exposure to electromagnetic fields below the limits recommended by the specialist international commission (ICNIRP) have been identified. Nevertheless, further scientific studies must be conducted on certain frequencies used for 5G (millimeter waves).

Orange cannot predict the findings of future scientific research or future studies by international organization and scientific committees called upon to examine these issues. If an adverse health effect should one day be scientifically established, this would have a significant effect on Orange's business, its brand image and the income and financial position of the Group. Beyond potential effects on Orange, this could significantly curb the development of the digital society.

Similarly, the widespread availability of connected digital devices may give rise to excessive use, which could have negative physical and psychological consequences for users, particularly young adults and children. It also increases the risk of exposure to inappropriate content, cyber bullying and misinformation, as well as the risk of information overload.

Should this widespread availability be perceived as a risk for the most vulnerable populations, it may also result for Orange in a decrease in the use of its services and damage to its reputation. Socially, the perception of this risk may result in mistrust of digital tools and may curb innovation.

In any event, the Group's liability may be invoked, and Orange's revenues, margins, quality of service and reputation could be affected.

The rapid development of new uses and technologies may jeopardize the commitments made by Orange with regard to reducing its effect on the environment.

Low •00

Due to the nature of its services and its social reach, Orange must offer new solutions to reduce the environmental impact of its customers, while limiting its own sources of environmental pollution. Orange has committed to being Net Zero carbon by 2040 and has set the interim target of a 30% reduction in its $\rm CO_2$ emissions by 2025 compared with 2015. Under its strategic plan, Engage 2025, Orange plans to improve the management of its energy consumption, implementation of the principles of the circular economy, use of renewable energy and investments in carbon sinks. Should its environmental action plans prove insufficient or depend on resources that are unavailable, particularly during the technological transition period for the fixed network and the introduction of mobile 5G, Orange may not be in a position to uphold its commitments, which would materially adversely affect its image.

The risk management and internal control system consists of an organizational structure, procedures and control systems implemented by Senior Management and all employees under the responsibility of the Board of Directors. It is designed to provide reasonable assurance that operating targets are met, that current laws and regulations are complied with, and that the financial and non-financial information is reliable.

The measures introduced are a response in particular to Orange's obligations under certain laws such as the American Sarbanes-Oxley Act, the Financial Security Law of France of July 17, 2003, Order 2008-1278 of December 8, 2008, transposing Directive 2006/43/EC of May 17, 2006, on statutory audits, Order of March 17, 2016, transposing Directive 2014/56/EU, and Law No. 2016-1691 of December 9, 2016, on transparency, combating corruption and the modernization of the economy, the so-called "Sapin II" Law No. 2017-399 of March 27, 2017, on the duty of care of parent companies and main contractor companies, which requires the implementation of a vigilance plan, and Directive No. 2014/95/EU of October 22, 2014, known as the Barnier Directive, which was transposed into French law by Decree No. 2017-1265 of August 9, 2017.

These measures are being rolled out across all Group entities as part of a process of continuous improvement. Within the framework of the

Group's policies, it mobilizes the stakeholders of the second line of defense. It is led by both the Group's Audit, Control and Risk Management Department, and the Group's Corporate Social Responsibility Department. The Group's departments in charge of security, data protection, compliance, human resources, procurement, insurance and legal are also involved in this system and support the operational departments. The risk management and internal control system is supported by the Executive Committee, as well as the Risks Committee and other governance committees (see Section 5.2.2.3 Executive Committee and Group governance committees).

Furthermore, the Group's General Inspection Department investigates any Group entity, exclusively at the request of the Chairman, to whom it reports directly. It is informed about the work of General Control and Internal Audit and may request their input. The Group's Inspector General sits on the Risks Committee, the Ethics Committee and the Investment Committee.

Finally, in accordance with the provisions of Directives 2006/43/EC and 2014/56/EU, the Audit Committee of the Board of Directors is tasked with ensuring efficiency of the internal control and financial risk management systems particularly, in addition to reviewing exposure to social and environmental risks, in accordance with the latest amendments to the revised Afep-Medef Code of June 2018.

2.2.1 Group Audit, Control and Risk Management

The Group Audit, Control and Risk Management Department (DACRG) reports to the Deputy Chief Executive Officer in charge of Finance, Performance and Europe. It gathers within a single body the following functions: Internal Audit, Risk Management, General Control, Credit Management, Internal Control, Fraud, and Revenue Assurance.

Its role is to define, deploy, manage and assess the Group's risk management and activities' control system on behalf of Senior Management with a view to providing integrated assurance offering the best balance between risks and opportunities, working closely with operational departments and addressing their concerns, capitalizing on a team of experts and co-designing innovative approaches, in cooperation with the other teams responsible for Group risk management, while preserving audit independence.

At the heart of the Group's challenges and strategy, through this integrated assurance the DACRG supports changes in the Group's activities. To this end, its role is to preserve revenue (revenue assurance and customer risk management), manage fraud, (prevention, detection and management) support the second line of defense departments as well as to strengthen governance, while offering solutions to improve risk management and create value.

Internal Control and Risk Management's continuous improvement process can, for example, materialize in:

- updates of the fraud prevention processes, the modules of which are distributed and evaluated on a regular basis;
- risk management training for Directors and Chief Executive Officers of subsidiaries;
- the focus of audit work on the Group's major risks;
- and by publishing the policies and practices defined and identified in the Orange Internal Control Book (see section on *Internal Control* below), which cover the main activities and may be supported by

a self-assessment process, in order to enable entities to compare themselves against the levels of control and practices expected by the Group.

The DACRG coordinates internal control reviews with the Executive Committee members, in collaboration with the internal control functions of the organization's divisions. They are designed to provide assurance that the internal control system is effective, namely that the main risks have been identified and the appropriate steps taken to limit their potential effect. Internal control reviews are part of the integrated assurance approach between operational functions and functions in charge of risk management.

Within the context of the Essentials2020 strategic plan, the DACRG and the ACR (Audit, Control and Risks) community, which brings together those within the Group working on these functions, have grown stronger so as to drive international business growth as well as diversification, particularly into mobile financial services.

Indeed, a charter has been signed by the Chairman and Chief Executive Officer. This sets out the remit of the ACR Community, which reports to the DACRG, and the integrated assurance process (synergies among the local and central Audit, Control, and Risk functions, and with operational departments) is thus strengthened to meet the company's targets.

Finally, the DACRG's activities are in line with best practices promoted by the Institut français de l'Audit et du Contrôle Interne (IFACI) and the Association pour le Management des Risques et des Assurances de l'Entreprise (AMRAE).

ISO 9001 Quality Certification for DACRG

In July 2019, the AFAQ/AFNOR follow-up audit confirmed the DACRG ISO 9001 certification (renewed in July 2018). This quality approach which supports DACRG's aim of "becoming a trusted business partner"

contributes to the improvement and simplification of all processes in order to adopt best practices that meet the requirements of Orange's stakeholders.

This Certification covers activities related to the "definition, deployment, management and evaluation of the Group's policy, implemented by DACRG, on internal control and risk management as well as those related to the management of the Group Audit, Control and Risk community".

Group Internal Audit

Group Internal Audit has around 70 qualified auditors working as a shared service for all Group entities. They are for the most part located in France. Group Internal Audit comprises teams dedicated to the IT system, the networks and financial services. It cooperates with the local audit teams, in accordance with their governance rules: sharing of audit plans, follow-up of recommendations, joint audits, methodological exchanges. This mainly involves operator subsidiaries that are not 100% controlled (in Europe in particular Orange Polska and Orange Belgium, and in Africa in particular the Sonatel Group). Group Internal Audit and Orange Polska's Internal Audit are certified on an annual basis by IFACI Certification, based on the professional guidelines for internal audits (RPAI in French). In turn, in 2019, the Sonatel Group's internal audit function was certified by IFACI.

Issues may be referred directly to Group Internal Audit by the Chairman of the Audit Committee or by the Chairman and CEO. The Director of Group Audit is authorized to directly inform the Executive Committee and the Audit Committee.

Each year, the audit plan is endorsed by the Risk Committee and approved by the Audit Committee. An annual report, with the main results and findings, is also presented to the Risk Committee and then the Audit Committee.

The joint operation with Deutsche Telekom (Buyln) is subject to audits conducted jointly by the Orange Group's and Deutsche Telekom's Internal Audit Departments.

By means of its audit assignments, Internal Audit helps the Group to maintain an appropriate management control system by assessing its effectiveness and efficiency and by formulating remarks and recommendations for its ongoing improvement. The recommendations arising from internal audit assignments are systematically monitored and lead in particular to action plans that are drawn up and implemented by the Group's divisions and subsidiaries. These assignments include, among others, checks performed at the request of the Group's Internal Control Department as part of the systematic assessment of internal financial control, particularly tests of the operating effectiveness of the internal control system and cyclical audits performed on the internal control system of smaller subsidiaries. Internal Audit also contributes to the approach of risk identification, assessment and processing through the results of its audit assignments and its recommendations.

Risk Management

The Group's Risk Management Department defines the strategy and deploys the Group's risk management approach, within the framework of the integrated approach promoted by the ACR charter. To this end:

- it leads the risk identification and assessment processes on behalf of the Risk Committee (see Section 5.2.2.3 Executive Committee and Group governance committees);
- it ensures the relevant action plans are monitored, with support from Group internal control and networks of risk managers and internal controllers of the entities and subsidiaries;
- it supports all Group entities in carrying out risk maps of all kinds, including the Group's Corporate Social Responsibility Department for non-financial risks;

 it anticipates the risks linked with the strategic plan, including those relating to new growth activities, in cooperation with the Group's Strategy Department.

Each risk is defined as a potential event, the consequences of which, should these risks materialize, would prevent Orange or one of its entities from carrying out its assignments, fulfilling its commitments or achieving its objectives, or could affect Orange's employees, assets, profits and financial position, the environment, or the Group or entity's reputation. The various sources of risk identification are a combination of the views of Corporate Officers of the operating entities. The analysis of causes and consequences complements and refines the description of the event and influences the risk probability level or risk impact level. The context analysis makes it possible to characterize the risk in each particular situation, to fine- tune its causes and consequences, and to assess the probability and impacts of the risk in a way that is suited to the area of the organization where the risk is identified. Their inclusion in risk mapping reflects the principle of the prevalence in impact analysis (consequence-related) on the probability analysis (cause-related).

The Group's management teams identify and assess, at least once a year, the risks falling within their remit. This mapping forms the cornerstone on which the control systems are built. It also contains a description of additional action plans aimed at stepping up the internal control required to address these risks.

The list of significant events, the changes to risk mapping and the monitoring of action plans are scrutinized during internal control reviews of each department.

At Group level, risks are monitored by the Risk Committee. The overall Risk Management Report is reviewed at least once a year by this Risk Committee and presented to the directors at a joint meeting of the Board of Directors' committees, during which major risks are discussed in the presence of the directors concerned. This approach includes a review of all of the risks described in Section 2.1 *Risk factors* in this document.

General Control

General Control involves, at the request of Executive Committee members or their respective management committees, or following a report from the ethics whistleblowing mechanism, investigations on matters involving employees that may run counter to the Group's interests. These matters may involve instances of fraud, conflicts of interest, damage to Group assets, behavioral problems and in general any acts by employees that conflict with Group rules. In this respect, General Control works in a complementary manner to the various departments within the DACRG as well as to Group General Inspection. General Control is represented in France by investigation units and at Group level for international cases by general controllers. Some countries such as Poland, Spain, Romania and Senegal have dedicated internal structures and operate in a network with General Control.

Credit Management

The remit of Group *Credit Management* is to minimize financial risks related to the credit given to customers. Its purpose is to have a consolidated vision of the credit risks with our clients and partners (quarterly credit committee) and to implement tools that allow these risks to be managed. In order to do this, it depends on local teams or contacts and on the processes in place in each operational entity.

It disseminates the culture of Credit Management within the Group and oversees customer risk management within the Group.

Internal control

Group Internal Control draws up and implements the Internal Control strategy within the Group. To this end, it defines a methodology, a

process and the necessary tools for its application. It rolls them out annually, particularly as regards:

- the updating and distribution of a set of policies and practices defined by the Group in collaboration with the relevant Group functions and domains, the *Orange IC Book*;
- the internal control self-assessment program, on the basis of risk analysis and the *Orange IC Book*; the aim being to identify the main improvements to be made in terms of risk coverage and therefore the internal control and to implement corrective actions as needed. In addition, if necessary, internal audits can be used to confirm self-assessment results and ensure the effectiveness of the action plans implemented. Sarbanes-Oxley certification process for financial internal control.

Group Internal Control coordinates the local internal control functions and the persons in charge of the control environment domains, giving them support and advice to ensure the quality and the control of their system. The role of the local internal control function is to assist the operating managers of their entities, in order to help them structure and maintain an efficient internal control system, which meets both their own and the Group's requirements. To do this, they apply the risk and activity management directives issued by the Group, and ensure the smooth running of the system at their own level.

Group Internal Control agrees to an annual action and evaluation program for each scope (domains, divisions, and entities), which is then rolled out locally. It supports the departments with internal control assignments designed to provide reasonable assurance that activities are properly controlled in a number of areas (e.g. compliance with laws and regulations, governance, operational or decision-making processes, integration of new entities, etc.).

Among its recurring actions, it provides monitoring for governance committee heads (see Section 5.2.2.3 *Group Executive Committee and governance committees*) and coordinates the organization of internal control reviews for Executive Committee members, with the support of the DACRG, the Group Security Department, and Group Compliance.

Working with the Mobile Finance Division, the internal control departments at the other divisions and entities, Internal Audit and the Compliance Department, the Group Internal Control Department has ensured that the Internal Control system is appropriate for controlling activities and meeting Group regulatory obligations (against money laundering and the financing of terrorism, and banking obligations).

The internal control evaluation is presented to the Group Risk Committee and then to the Audit Committee.

Fraud and Revenue Assurance

Revenue recognition in the telecommunications industry is based on data capture, involving various components of network access – managing and collecting uses – recovery via the IT systems – supporting the customer bases and recovery of individual items – and recording via the accounting and financial systems – supporting the production of financial statements. The complexity of this technical and commercial architecture has led Orange, through its Fraud and Revenue Assurance Department, to develop its own revenue protection

strategy; this is underpinned by a methodology ensuring the correct measurement, substance, comprehensiveness and valuation of the individual elements underpinning customer invoicing, through a risk-oriented overview of the entire process chain.

Group Fraud and Revenue Assurance (GFRA) also defines the Group's strategy and approach to fraud prevention and detection. To support the deployment of this strategy, GFRA works very closely with their Internal Control and Risk Management colleagues, along with other corporate and local entity teams.

Orange has adopted an approach based on anticipation and risk analysis to manage fraud. GFRA constantly monitors existing and emerging risks of fraud, as well as any new fraud-related legislation. This enables Orange to adapt its anti-fraud strategy accordingly. GFRA maintains the Group's fraud risk map, which covers all anticipated risks in this domain (including, for example, fraud in the financial statements, technical (cyber) fraud, identity theft and social engineering fraud, missing trader VAT carousels, and combating the financing of terrorism and money laundering).

Orange has preventative controls in place to reduce the probability of frauds which may constitute a major risk.

Since prevention cannot be 100% effective, the Group has also defined a control framework designed to detect instances of fraud. Any cases or suspicions identified through these controls are investigated and are processed in compliance with the law and Orange's ethical standards.

Orange believes that in order to manage fraud risk and to assure revenue, the cost of fraud and revenue leakage must be managed at a local level and consolidated at Group level, allowing major incidents to be analyzed and treated, and any emerging trends identified. With regard to the production of Group financial information, the approach defined by GFRA includes such applicable risks as frauds committed by management or fraud within the financial statements.

Detecting fraud is the responsibility of management, which is assisted by GFRA and local fraud detection specialists in the Group entities.

A Group whistleblowing mechanism is in place, as provided for under the Sarbanes-Oxley Act, the so-called "Sapin II" Law of December 9, 2016, and the French Law of March 27, 2017, relating to the duty of care of parent companies and contracting companies. This system is presented in Section 2.2.4.1.2.

When internal fraud is strongly suspected, investigations are generally entrusted to specialized services, in particular to General Control. Investigation services are responsible for establishing the existence of facts. In the event of internal fraud, company management determines the penalties. For all cases detected (internal or external fraud), the civil, criminal, or legal consequences are considered after the recommendations of the company's Legal Department.

Fraud cases are analyzed by GFRA in order to assess control measures and therefore better prevent and detect similar fraud cases, in an effort to ensure continuous improvement.

A summary report on fraud prevention and detection is reviewed at least once a year by the Group Risk Committee and presented at a joint meeting to the Board of Directors' committees.

2.2.2 Group Corporate Social Responsibility

The Orange Group's Corporate Social Responsibility (CSR) activities are coordinated by a dedicated team, reporting to the Senior Executive Vice-President, Corporate Social Responsibility, Diversity, Partnerships and Inclusiveness. She regularly reports to Orange's Executive Committee, through the work of the Ethics Committee, the remit of which has been extended to include the management of the Group's sustainable performance and to Orange's Board of Directors through the work of the Social and Environmental Responsibility Committee (GCSER). As such, Orange's Executive Committee and Board of Directors thus familiarize themselves with and take a position on the main options chosen in relation to the Vigilance Plan, its implementation report and the relevant aspects of the Statement of Non-Financial Performance. It also oversees the Group's actions and priorities on social, societal and environmental matters (including those related to climate change). The Group CSR Department collaborates with the Group Audit, Control and Risk Management Department. In particular, it draws on the work on non-financial risks presented by other divisions to Orange's Risk Committee and uses the Group's risk assessment and management methodology. It also uses the Group's methodology for rolling out its risk management approach to the entities and takes part in internal control reviews.

The CSR Department is itself organized by business area (Responsible Marketing, Corporate & Social Issues, Environment) and cross-functional departments (Communication, Transformation & Operations). It relies on networks of CSR managers and vigilance plan implementation managers, coordinated by the Group CSR team, who contribute to the operational deployment of this approach. For a number of years, Orange has been using its stakeholder dialog tool to develop the materiality matrix for issues arising from its activities. In 2019, Orange has opted to make a formal response to the issues identified in the commitments made as part of its strategic plan, Engage 2025, and to set out the Group's societal mission. The mission, jointly developed with stakeholders is to ensure that digital technology is made available and used in a more human, inclusive and sustainable way in all areas of its activity. To this end, Orange has adopted a Purpose as part of its Bylaws (see Section 4 Non-financial performance, section Orange's Purpose). The new strategic plan, Engage 2025, embodies this Purpose and is itself based on the idea that economic performance is achieved by leading by example on social and environmental issues.

The Group's commitment is embodied in the Sustainable Development Goals (SDGs) set by the United Nations member states which are:

- investment in infrastructure which is crucial to achieving sustainable development and the empowerment of communities in many countries. Orange's core business is to offer its customers connectivity with ever faster speed and new related services;
- inclusion to reduce inequality. In addition to its ambitions for digital regional coverage, Orange leads the way on social issues through its commitment to inclusion by training those affected by digital exclusion, supporting its customers, promoting access to responsible service provision to as many people as possible and supporting digital entrepreneurship. Orange is also striving to use digital technology to promote equal opportunities;
- combating climate change and its repercussions. For Orange, leading by example on the environment takes the form of a target of being Net Zero carbon by 2040, despite a continuous and steady increase in use across its networks. This involves an unprecedented effort to achieve energy efficiency for its own emissions as well as those of its customers and increased use of renewable energy. In addition to these measures, and without seeking compensation, the Group will invest in carbon sinks for its residual greenhouse gas emissions.

Orange implements the principles of inclusion, materiality and responsiveness as defined in the AA1000 APS (2008), the international reference for Corporate Social Responsibility that focuses on taking stakeholders' requirements into account. The Group also takes into account the principles defined by the ISO 26000 standard on Corporate Social Responsibility, as well as the guidelines set out by the Global Reporting Initiative (GRI) standard, and aligns its publications with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures).

To ensure the reliability of indicators and manage the proper implementation of the Group's commitments in its various business units, Orange has carried out an external verification of its CSR policy and achievements by one of its Statutory Auditors for several years, in order to obtain a reasonable assurance report on selected CSR information (see Section 4.7 Report by one of the Statutory Auditors).

2.2.3 Specific financial internal control procedures

The specific internal financial control procedures relate to the preparation and treatment of accounting and financial information, and the work on internal control carried out pursuant to Section 404 of the Sarbanes-Oxley Act. In addition, an insurance policy translates certain operational risks into financial commitments.

2.2.3.1 Specific internal control procedures pertaining to the preparation and processing of accounting and financial information

The Group Accounting Department and Group Management Control Department, which both report to the Chief Executive Officer Finance, Performance and Europe, play a decisive role in the internal control system.

The Group Accounting and Group Controlling Departments have the following key duties:

- producing the Group's consolidated financial statements and the statutory financial statements for Orange SA and certain French subsidiaries within time frames that meet financial market requirements and legal obligations while guaranteeing that the statements provide a true and fair view of the company in compliance with the accounting policies adopted by the Group;
- preparing the management reports on the statutory and consolidated financial statements and producing the necessary documentation for financial communication of results and the summary of management reporting for the Executive Committee;
- managing the monthly and quarterly reporting cycle allowing management to measure the Group's performance on a regular basis;
- designing and implementing Group methods, procedures and standards frames for Accounting and Management Controlling;
- identifying and carrying out the necessary changes to the Group's accounting and financial information systems.

Within these departments, the internal control of accounting and financial information is organized around the following elements:

- the Disclosure Committee (see Section 5.2.2.3);
- the Group Accounting and Controlling function;
- unified accounting and management reporting; and
- Group-wide accounting standards and methods.

Unified accounting and management reporting

All of the Group's entities participate in the Group's management and monitoring cycle, which is composed of three basic components:

- the forecasting process (plan, budget, and periodic internal provisions);
- the process for producing statutory accounts and the Group's consolidated financial statements; and
- the management reporting process.

Forecast process (plan, budget, and periodic internal forecasts)

The Group budgeting process requires regular updates of internal projections and management's involvement. It is worked out by country and division, business unit, and Group subsidiary.

The budget must reflect the Group's ambitions at each level of the organization. It includes a yearly goal based on year one of the multi-year plan and forecasts that are updated in May, including an updated second-half goal, and in October-November to better evaluate target figures for year-end.

The budget dossier is composed of:

- packages of financial data, along with comments summarizing, in particular, major actions;
- capital expenditure by nature;
- an analysis of risks and opportunities.

As part of the budget process, the divisions establish and analyze the performance indicators. The budget is established on a monthly basis so to be used as a reference for the Group's monthly reporting.

Moreover, the Group draws up a multi-year plan for all countries and divisions, setting out the medium-term financial trajectories for the Group.

Process of preparing the companies' statutory financial statements and the Group's consolidated financial statements

The financial statements of Orange are prepared in accordance with the following principles:

- performing a pre-closing of accounts at the end of May and the end of November;
- anticipating the use of estimates and the treatment of complex accounting operations;
- and formalizing closing processes and schedules.

As such, documenting the processes leading to the production of financial information up to the filling of consolidation packages constitutes a common framework for all contributors, thus strengthening internal control within the accounting and management controlling function.

Instructions from the Consolidation Department specifying the process and agreed timeline for each closing are circulated within the Group, and then broken down by subsidiary.

Consolidation packages are created monthly by each entity of the Group, according to IFRS accounting policies, and entered in the Group's consolidation and reporting tool.

The Group's principles, when they are compatible with the local rules applicable to the statutory financial statements, prevail, in order to limit subsequent restatements. However, in the event that principles inconsistent with those of the Group are applied in an entity's statutory financial statements and have a significant effect on measuring earnings and assets, the entity restates those items for consistency.

Identification, regular measurement, and reconciliation of accounting methods between statutory financial statements and Group standards are the responsibility of each entity.

The identification and assessment of unrecognized contractual commitments are covered by a specific report drawn up annually by the Legal and Finance Departments, working in close collaboration. The main contractual and regulatory commitments made by the Group, likely to have a material impact on its financial position, are made known to the Claims and Commitments Committee (see Section 5.2.2.3 Executive Committee and Group governance committees).

Management reporting process

The reporting process is a major element in the control and financial information process. It is a major tool for monitoring, controlling, and for the Group's General Management. The reconciliation of accounting and forecast data, along with the monthly review at each level of the Group contributes to the quality and accuracy of the information produced. This method, established by the Controlling and Accounting Departments, is repeated in all entities of the Group and at each level of the organization (business unit, division and Group).

The definition of Group report contents and media that are used to track the achievement of Group objectives is established on a regular and consistent basis. The financial data in reporting come primarily from the Group consolidation and reporting tool, and the reporting formats are standardized. The reports are validated by the country financial controllers.

This reporting allows tracking the Group's management and performance indicators, and is articulated around the following:

- monthly reports broken down by published segment, line of business, and country; these include financial and operating indicators.
- a quaterly performance chart aiming to provide the Chairman and CEO and the Executive Committee with the key operating indicators for the Group and the major events and alerts;

Business reviews at the Executive Committee level are organized by country under the authority of the Deputy CEO in charge of Finance, Performance and Europe. Their purpose is to pilot the activity. These monthly reviews are attended by the Group Finance Department with the country's Manager and finance function. The Chairman and CEO participates in the quarterly reviews. These reviews are based on a formalized report structure. Gathering of information for these reports is organized for each country according to the Group's reporting instructions.

Group-wide accounting standards and methods

In order to draw up projected and actual consolidated statements, the Group has opted for the unification principle which implies:

- homogeneity of the reference system, the accounting methods and consolidation rules;
- the standardization of reporting formats;
- and the use of a common consolidation and reporting application within the Group.

Within the Group's Accounting Department, the Department of Accounting Principles is responsible for defining and disseminating the Group's accounting policies under IFRS standards. It also keeps an eye on norms evolution and formalizes on a systematic and structured basis the IFRS Group accounting policies through the Group's accounting manual, closing instructions, and information or training meetings.

This system is completed by the existence of accounting principles correspondents in the countries and divisions. It identifies accounting problems encountered locally, disseminates the Group's accounting policies in divisions, countries, entities and accounts departments and ensures that the training needs of personnel with responsibility for the efficient application of the Group's accounting policies are met.

ISO 9001 Quality Certification for the Accounting Department

Since 2001, Orange SA has obtained the ISO 9001 v2000 standard certification in the area of ISO Management for accounting services in France, issued by AFAQ/AFNOR. Since 2007, all of the departments in the Group Accounting Department based in France have received ISO 9001 v2000 certification. It was decided that, starting from 2019, the process for the ISO 9001 standard v2008 and v2015 awarded by AFNOR would not be renewed for a new three-year certification cycle.

The management of the Accounting Department is considering adopting a new approach to monitoring performance and the achievement of objectives.

2.2.3.2 Summary of works on Internal Control implemented under Section 404 of the Sarbanes-Oxley Act

Because it is listed on the New York Stock Exchange, Orange is subject to the US Sarbanes-Oxley Act.

In accordance with the provisions of Article 404 of this Act, the Chairman and CEO and the Deputy CEO in charge of Finance, Performance and Europe must prepare a report in which they make a statement about the effectiveness of internal controls in the production of the Group's financial statements, prepared in accordance with IFRS and presented in the Annual Report (Form 20-F) that is filed with the Securities and Exchange Commission (SEC) in the United States. The Statutory Auditors make their own internal control evaluation. The reports of the management and the Statutory Auditors are included every year in Form 20-F.

To better meet the requirements of Section 404 of the Act, Orange, under the Group's Internal Control Department, implements a permanent program to reinforce the internal control culture across the entire Group.

By applying standards issued by the SEC, Orange is targeting its internal financial control system on significant risk areas, enabling it to be more relevant and more effective and to limit the Group's assessments to the controls covering these risk areas.

Regarding the reliability of financial information, Orange relies on the internationally recognized framework of the 2013 Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Orange classifies the five component parts of the COSO under two headings:

- control environment (governance committees, overall policies and procedures); and
- operational control (flows and processes).

The annual work program, which covers the control environment and the operational control, is made up of the following main actions, based on the risks that have been identified:

- perimeter identification: Group Governance Committees, as well as control environment domains and consolidated entities, whose scope is in line with the audit of the financial statements;
- scoping: identification per entity of the relevant control environment domains and flows and information systems supporting these flows;
- documentation on the internal control system implemented and the assessment of its effectiveness.

The Group has excluded from its internal control scope of evaluation as regards Section 404 of the Sarbanes-Oxley Act the activities and the assets of the entities acquired in 2019, in Spain the companies Republica de Communicaciones Moviles, S.L.U. and Suma Operador de Telecommunicaciones SL.U., in Belgium the companies Upsize and BKM, in Poland the companies BlueSoft and Essembli, as well as the groups Secure Data and Secure Link. These entities are included in the 2019 consolidated financial statements of the Group and constitute 0.6% of the total revenue and 0.4% of the total assets.

Financial internal control's assessment work takes into account the internal audit work and risk management analyses, as well as work on fraud (prevention, detection, and investigations).

Furthermore, the Statutory Auditors carry out an independent evaluation of the financial internal control system.

The evaluation for the 2019 fiscal year did not reveal any material weakness. The Chairman and Chief Executive Officer and the *Delegate* Chief Executive Officer in charge of Finance, Performance and Europe therefore concluded to the operational effectiveness of the internal control system relating to the preparation of the financial statements.

2.2.3.3 Insurance

As part of its insurance policy, Orange has negotiated an insurance plan with the insurance and reinsurance market to cover its main risks. It is based on programs that are regularly reviewed as part of calls for tenders organized to select brokers and insurers.

This insurance plan is designed to optimize the terms of transfer, based on the quality of coverage offered and its cost. In addition to this objective, there is also a security objective, which takes the form of a contractual, required level of solvency for participants, which is essential to their continued participation in the subscribed insurance program.

This insurance plan reflects the nature of the Orange Group's risks, and is adapted to the capacities offered by the markets to international companies of comparable size operating in similar business sectors. The suitability of the Group's existing programs in meeting its needs is confirmed by the publication of regular studies and benchmarks.

The insurance and reinsurance markets began a rate adjustment in late 2018, which expanded during fiscal year 2019 and continues with the program renewals for 2020 in most of the lines of insurance (property damages and business interruption, financial lines...). On a selective basis, this includes an erosion of the available market capacities, and/or a significant increase in franchises and self-retentions left to the policy-holders, especially for any risks involving damage or that include exposure to natural disasters, etc. This market trend could last for another 24 months.

Despite this context, the Group has been able to renew its major programs without altering its essential capacities and guarantees.

This policy has also made it possible to expand the scope of insurance coverage to nearly all of the Group's subsidiaries (>90% of revenues.

Subsidiaries have been gradually integrated into the insurance umbrella taking into account the regulatory changes affecting the regional locations of our assets and activities.

In addition, the insurance policy in place includes a risk management strategy designed to identify any Group vulnerabilities and implement preventive actions in line with the development of the Group's business, sites and environment. It organizes regular visits to Orange's main sites in France and abroad, in partnership with the engineering of our insurers and brokers, which reinforces this strategy.

The transformation of a primarily telecoms business into a multi-services operator generates new risks, requiring it to constantly adapt financing in line with the nature of the business activities, as well as constant revaluation. Our insurers and service providers are informed of these developments through periodic discussions, and dedicated insurance policies are introduced.

Furthermore, the Group Insurance Division works with the relevant Group entities, providing expertise and support for contractual loss prevention techniques written into agreements with customers and suppliers.

The main insurance policies that make up the current plan are designed to protect against the following risks:

- risks of damage to property and substantial financial losses and technology risks;
- third-party and customer civil liability risks incurred during the management of the Company and the performance of its activities;

- risks associated with the Company's vehicle fleets.

The risk of damage to the telephone poles and open-wire lines of the overhead fixed-line network due to natural disasters remain self-insured. The resulting financial expenses are monitored in consultation with the Group's in-house experts and the relevant broker. Regarding these expenses, the Group does not consider the case has been made for an alternative financial structuring of these risks, and the traditional markets (insurance and reinsurance) do not offer an adequate risk transfer solution.

Specific policies are negotiated and set up, including:

- assistance for employees on business trips or who are expatriated;
- work site insurance (real-estate or construction projects);
- new activities (financial activities, banking).

The total cost of insurance cover provided by the Orange Group program in 2018 amounted to approximately 0.042% of revenue for the fiscal year.

Moreover, through its inhouse brokerage insurance firm, the Group contributes to the design of affinity programs to enrich the products and services offered to customers.

The Group Insurance Division's management process, which involves various outside parties (consultants and brokers) at different stages, encompasses internal controls including the control environment, governance and ethics. Employees are briefed in the areas of ethics and anti-corruption.

2.2.4 Framework for controlling non-financial risks

The specific internal control procedures presented below, together with the policies and measures in place, help reduce the risks identified by the Group in the Statement of Non-Financial Performance (SNFP) and the Vigilance Plan. They are presented as they relate to five challenges:

- the effect of our activities in terms of respect of human rights and fundamental freedoms;
- the employment-related consequences of our activities;
- the social consequences of our activities;
- the environmental impacts of our activities;
- the management framework for suppliers and subcontractors.

These challenges were studied in an initial salient analysis in 2019, consistent with the risk factors presented in Section 2.1.4. *Non-financial risks*

Orange is attempting to develop a methodology to analyze the effects of its activities on its stakeholders in order to adapt its Corporate Social Responsibility policy to foster ongoing improvements. To that end, Orange's policies are derived from the definition and criteria chosen in the Reporting Framework based on the United Nations Guiding Principles (UNGP) launched in February 2015 on salient issues (related to human rights) (1). This methodology is based on:

 an assessment of the severity of the risks in terms of their effects on people, independently of any policies or action plans implemented by Orange to mitigate the consequences thereof;

- on the likelihood of occurrence, given the scope of the Group, independently of any policies or action plans implemented by Orange to mitigate the occurrence thereof;
- on Orange's ability to propose a remedy, i.e. for the effects resulting from any policies or action plans developed by Orange.

Since 2017, Orange has produced several studies on its socio-economic footprint and in 2019 started to look closely at the notion of impact analysis.

2.2.4.1 Effects of our activities in terms of respect of human rights and fundamental freedoms

The framework for controlling breaches of human rights and fundamental freedoms aims to prevent non-financial risks relating to:

- the inappropriate disclosure or modification, by Orange or its business contacts, of the personal data of customers or other third parties, notably during cyber-attacks;
- exposure to risks of corruption, or behavior by individuals or groups that does not comply with its business ethics, or even fraudulent behavior;
- the violation of human rights and fundamental freedoms by Orange or its business relations.

⁽¹⁾ https://www.ungpreporting.org/resources/salient-human-rights-issues/

2.2.4.1.1 Protecting Personal Data

Group policy in terms of protecting personal data

Personal data protection is included under the general framework of data security implemented by Orange, which covers both corporate and personal data. It is one of the major areas Orange plans to develop to accompany its strategic plan Engage 2025 and is covered by a Security Policy aimed at the continuous improvement of security based on risk management and assessment (particularly cyber-security). It is updated regularly to mitigate the effect of incidents, even crises, depending on the threat level and changes in the environment.

The Group is backed by international standards such as ISO 27001 for data security and ISO 27005 for risk analysis in order to guide any measures taken. The Group holds several certifications, attesting to the quality of the resources devoted to enhancing the protection of Orange's assets and those of its customers. These certifications cover scopes as varied as Orange Money, for African subsidiaries, *Plazza*, the Group's employee network, the design, engineering and support of corporate services for OBS and European subsidiaries, etc.

These standards help to enhance security management within the Company by providing a common framework at the Group level; security staff can then decide more effectively which measures to take to prevent threats, and even detect them more quickly, contain them and eradicate any that do occur. The technical and organizational mechanisms derived from the Global Security Policy are formalized in the Group Security Standard, which focuses on the essential security requirements designed to be applied throughout the Group.

The following are available for security staff:

- the Group Security Standard, which defines 80 minimum rules to be implemented in three areas: data security, physical security and personal security in the face of country risks. Each of these rules receives a score of 0% to 100%, and then the 80 rules are averaged, which gives the overall score of the country. Every year the companies are evaluated in order to verify compliance with the security standard. The aim is to reach or maintain a score above 90% for the European countries and MEA;
- a framework covering the Group's Crisis Management Policy;
- seminars for sharing best practices updated regularly in the areas of physical security, data security, crisis management and business continuity, held annually with the countries of Europe and Africa;
- a set of provisions enabling the implementation of the Group Security Policy specifically for personal data that takes into account changes in the European regulatory framework.

Orange has thus developed a procedure to respond to any security-related event or incident involving personal data, a Personal Data Security Guide, a security guide for sensitive Orange data which presents elementary security rules and actions to follow in order to identify sensitive information and secure it from end-to-end throughout its life.

Several security monitoring centers also constantly monitor the differences between security policies and alerts that may be triggered in the event of suspect activities. These alerts are analyzed and remediation procedures are monitored according to the level of criticality.

Aside from personal data security, Orange strives to master all the requirements set for the responsible use of personal data. Accordingly, ad hoc processes are put in place to assist entities in analyzing the compliance of the data processing necessary for the Group's activities. To allow for suitable coverage, the Group is backed by the creation of a wide network of correspondents who have developed skills in terms of personal data protection; sharing these skills can lead to improvements throughout the network including when new entities are added to the Group. These networks comprising hundreds of people with multidisciplinary profiles are helping to develop a consistent approach for the implementation of the framework of protection and interpretation of legal regulations in this area within the Group. This framework applies in intra-group relations and with all the Group's partners and service providers.

Furthermore, this will require the involvement of all Group employees. This will involve offering general in-house training sessions. By means of these different approaches, a very large number of teams have learned about the principles of data protection. The aim is to focus more and more on specific training for jobs in project management and HR, among others, and on providing more information on career paths for new hires within the Group.

Governance and implementation framework

Governance of security regarding the protection of corporate data of the Group is the responsibility of the Executive Director of the Strategy and Cyber-security Division. It is implemented by the Group Security Department under his authority. All the documents and processes comprising the security policy are communicated by the Director of Group Security to the community of security officers in the companies and to the Group's executive directors. On a daily basis, multidisciplinary committees monitor the projects from an operational standpoint.

The security policy, like the policy relating to personal data protection, is presented every year to the Group's Risk Committee and during various internal control reviews. Enforcement is verified as part of the annual evaluation of the companies under the authority of the Group's Security Department, and deviations are covered by action plans managed locally or even monitored by the Group on certain subjects such as managing identities and access, encryption of messaging and workstations. The findings of the assessments focus on proposed areas of improvement and help inform management and members of the Executive Committee. These assessments are completed by penetration tests to verify resistance to cyberattacks. A report is made, including an action plan, and sent to the CEO of the entity.

To deal with personal data protection risks, a specific Group-level structure and governance have been put in place in the entities. European regulations have made the function of Data Protection Officer key in organizations, based on existing practices such as the role of Correspondant Informatique et Libertés (CIL) (data protection correspondent) in France. In this respect, in 2006 Orange appointed a CIL. When the European regulation was published in 2016, the Group's Executive Committee appointed a Group Data Protection Officer (DPO) before it became a legal requirement. The entry into force of the GDPR from May 25, 2018, enabled the deployment of an appropriate compliance approach specifically in the Group's European entities that takes into account a risk-based approach as promoted by this new regulatory framework. This approach includes components for organization, governance, documentation, raising awareness and training and verification. Alongside the Group's Security Policy, this approach contributes to creating the conditions to mitigate risks in relation to personal data processed by Orange.

A network of Data Protection Delegates was formed in the entities so as to provide guidance on the significant changes in the new European regulations, which affect numerous Group entities in Europe, and in certain cases outside of the European Union. This also helps to monitor the status of regulations in the countries where Orange is present.

These delegates contribute, including from the time that new offerings are being designed, to the implementation or adaptation of the framework for processing personal data, notably in terms of transparency and systems for managing risk assessments, or even impact analysis. The selected approach calls for continuous, operational and educational improvement, in order to disseminate the data protection culture among employees. A set of documents to strengthen governance. Governance also involves legal monitoring.

2.2.4.1.2 Breach of ethical rules (fraud, corruption, tax avoidance, breaches of business ethics)

Risk of breach of ethical rules

Orange relies on a comprehensive approach to mastering the risks of non-ethical behavior (fraud, corruption, influence peddling, tax evasion and unethical business behavior), aimed at continuous improvement and built around six steps: Management involvement, Governance, Risk Analysis, Policies and procedures, Raising awareness, Verification.

Step	Description
#1 Setting the tone	The tone communicated by senior executives and managers at all levels in the Group.
#2 Governance	Organization and resources to implement risk measurement actions
#3 Risk analysis	A risk analysis to define a proportionate approach
#4 Policies and procedures	Policies and local adaptations for appropriate actions
#5 Raising awareness and Training	Raising the awareness of all employees through suitable communications and targeted training projects
#6 Verification	Controls to measure the effectiveness of the program

The main components of this approach, led by the Group's Chairman and Chief Executive Officer and the entire Group Executive Committee, aim to identify and analyze risks, roll out action plans to limit their effect on operations, make available a set of relevant and effective controls, and inform, train and share best practices.

This approach stems from the desire by Orange to place ethics at the heart of its activities and its relations with stakeholders, going beyond strict adherence to the law.

The slogan "Tone from the Top" recommended by senior executives and managers is clear: enshrined in the Group's Code of Ethics and its Anti-corruption policy, this commitment of responsibility and integrity is reaffirmed regularly and publicly.

Governance established at several levels of the Company goes hand-in-hand with mastering risks of breaches of ethics:

- at the level of the Orange Board of Directors: the specialized committees of the Group's Board of Directors (Audit Committee and GCSER committee);
- at the level of the Orange Executive Committee, these are the Group Investment Committee, in which the Group's Director of Compliance participates, and the Risk Committee (including an annual Risk Committee meeting devoted to compliance in the presence of the Lead Director);
- at the level of the Group Ethics Committee whose members are appointed by the Chairman of Orange, in charge of dealing with issues relating to ethics within the Group;
- since July 2019, the Ethics Committee has also played the role of Strategic Committee for "managing non-financial performance" and validates the Orange Group's SNFP and the Vigilance plan.

In terms of operational management, risk control is handled at several levels:

 within the Group's Compliance Department created by decision of the Chairman and CEO in 2012. This department acts under the authority of the Chief Compliance Officer, who reports to the Orange General Secretary. This team is in charge of designing, rolling out, coordinating and controlling Group-wide compliance programs. It is made up of 9 people;

- within the "Compliance network" made up of the Chief Compliance Officers (CCO) and the Compliance Officers (CO), in the subsidiaries, divisions and departments. The CCO are appointed by the members of the Executive Committee, and the COs are appointed by the head of the entity or division. They are responsible for coordinating and supervising the roll-out of compliance risk control programs;
- within the network of Ethics Advisers, appointed by the members of the Executive Committee and the CEOs of the subsidiaries and responsible for seeing to it that the ethics policy is transmitted to the teams.

NB: The assignments carried out by these networks are backed by the expertise and resources of the Group Audit Control and Risk Management Department (DACRG) and the Group Legal Department.

Control:

This compliance approach is controlled under the Group internal control policy as well as by audits by the Group (IFACI certified).

It is also reviewed and audited by the Statutory Auditors as part of the audits on the control environment and the certification of the financial statements.

Outside commitments by Orange:

Orange participates in various sector-based or theme-based collective initiatives, devoted to the development and sharing of best practices of integrity, namely in the International Ethics Committee of MEDEF, the Forum of committed Enterprises of Transparency International, as well as the Business Ethics Circle.

Orange's ethics policy

The Group's ethics approach is enshrined in the Code of Ethics and is based on four strong commitments of respect, integrity, quality and team spirit.

Orange's Code of Ethics describes the policy principles with respect to stakeholders and the principles of individual behavior guiding the conduct of employees in their professional activities.

These policy and behavioral principles reflect the same principles set forth in the Universal Declaration of Human Rights and by organizations such as the International Labor Organization (ILO) and the OECD as well as the commitments upheld by Orange in terms of social responsibility.

This ethics policy is implemented by the network of Ethics Advisers. It consists of the following:

- an analysis of the risks of a breach of ethics;
- a breakdown of the various components of the Group Code of Ethics, such as the supplier code of conduct;
- a Group whistleblowing system with additional local systems;
- principles for preventing and managing conflicts of interest;
- programs for ethics training and raising awareness through videos and "e-learning";
- an annual "Ethics and Compliance Day".

The anti-corruption compliance policy is implemented by the CCOs and the COs.

It is based on the principle of zero tolerance with respect to corruption and influence peddling, formalized in a letter of commitment signed by the members of the Executive Committee. It includes:

- analyses of corruption risks as applied to the Group, subsidiaries and relevant entities in order to identify the major risks and target controls to be put in place according to the Group Risk Management methodology, using a "risk clusters" approach;
- the Group anti-corruption policy (updated in November 2017) with local applications where necessary, as well as its Guiding Principles updated in October 2018;
- of the Group procedures adapted to local situations:
 - a "fraud and compliance" evaluation procedure (due diligence), based on risks and applied to B2B customers, partners and intermediaries,
 - a "Compliance Clause" included in contracts or invoices, updated in 2018,
 - a "Gifts and Entertainment" policy that includes any benefits received or offered; dedicated applications are gradually being rolled out in order to trace managerial declarations and validations of any crossing of defined thresholds;
- the whistleblowing system (described above as it relates to the ethics policy) dedicated to gathering reports of violations or fraud in the areas of accounting, internal control and auditing, in terms of corruption and influence peddling or conduct or situations that could constitute a serious violation of human rights and fundamental freedoms, affecting the health and safety of persons or the environment:
- principals for preventing and managing conflicts of interest;
- training and awareness raising tools for preventing corruption: "e-learning" and teaching materials for classroom training sessions

are provided to the Compliance Officers and Ethics Advisers so they can organize training and awareness raising programs as close as possible to the needs of the entities and the risks identified.

Adherence to economic sanction programs

Being a global group in a constantly changing environment requires keeping up to date with economic sanction programs and numerous and changing embargoes. Therefore, since 2013, the Group has strengthened its knowledge and its risk management in this field and has issued a Group policy and a legal and compliance guide on international economic sanctions, and implemented a due diligence procedure involving its customers, partners and intermediaries in order to safeguard its business and international development as much as possible.

The economic sanctions committee analyses changes in international regulations as applied to the Group, adjusts the internal system in place accordingly and supervises the reviews assessing the Group's exposure to that risk.

Tax policy

Owing to its business activities, Orange has assets and personnel in a number of countries. Orange pays fees and taxes in the countries in which it operates, complying with the laws in each of those countries. Orange publishes information relating to operating fees and taxes in Note 10 *Taxes* of the notes to the consolidated financial statements, including information on the breakdown of taxes payable by geographical area or by tax consolidation group over 3 fiscal years (see Section 3.3.1), and in its annual report of Tax Transparency, available on the website orange.com/Group/Non-financial Reporting.

The Group's approach on tax is based on three fundamental principles:

- compliance with the law in each country;
- respect for the principles of the OECD: "Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations";
- regular assessment of practices and comparison with existing solutions on the market to ensure their relevance.

Orange in no way seeks to evade paying taxes and duties, notably through complex and opaque structures. Orange publishes the list of countries in which the Group has interests in its Universal Registration Document.

The Group Tax Director, directly reporting to the Deputy Chief Executive Officer, Finance, Performance and Europe, has a specialist team. The Group has put in place a code of tax ethics that applies to all the Group's tax advisers and that concerns all tax operations. The Code specifies that "the Orange Group's tax advisers may propose the tax options most favorable to the Orange Group, knowing that their suggestions must be made based on an analysis that is professional, honest, objective and respectful of the law".

Every year, the tax process is subject to a review under the Sarbanes-Oxley Act (see Section 2.2.3.2 Summary of works on Internal Control implemented under Section 404 of the Sarbanes-Oxley Act). This control process covers Orange SA and its main subsidiaries. Both the work conducted by Orange and the independent assessment by the Statutory Auditors have reached a satisfactory conclusion for the 2019 fiscal year.

Thanks to its tax policy described above, Orange has not identified any risk of tax evasion as liable to create risks for the Group's operations or reputation.

2.2.4.1.3 Breaches of human rights and fundamental freedoms

Any potential or actual breaches of human rights and fundamental freedoms that Orange may have caused are taken into account as part of Orange's 2019 vigilance plan.

Commitments by Orange to the protection of human rights and fundamental freedoms

Orange's policy of compliance and promotion of human rights is shown by a number of commitments:

- Orange was one of the first companies to sign up to the United Nations Global Compact in 2000. Respecting the fundamental principles set out in the Universal Declaration of Human Rights and by the International Labor Organization explicitly features in the Group's Code of Ethics. Orange thus asserts its commitment to respecting and promoting fundamental human rights in its activities and sphere of influence, in particular in supporting and promoting freedom of expression and respect for privacy worldwide. The Group also confirms its commitment to ensuring that these rights are respected by each of its employees and managers, both internally (employee relations) and in its relationships with its customers, suppliers and subcontractors;
- in 2006, Orange signed a global agreement on fundamental social rights with the Global Union Alliance (UNI). Orange's management, the UNI global union and its French trade union members, and Orange's representative in the Global Union meet twice per year to review current international operations and major development and acquisition projects;
- Orange published its first report on respect for human rights, prepared according to a reporting framework in line with the United Nations' Guiding Principles on corporations and human rights in 2017, as well as its third declaration on the non-use of modern slavery (orange.com/Group/Non-financial Reporting).

Impact study on human rights and fundamental liberties

Since 2012, as part of its annual impact assessment of human rights or EIDH (measurement of the difference between the commitments made by States (human rights in principle) and the possibility of these rights being enjoyed in practice in the countries (human rights in practice)), Orange has asked Verisk Maplecroft, a specialist external firm using a methodology based on the UN and OECD standards, to carry out a customized assessment of the risks incurred in terms of compliance with human rights in each country where Orange operates, in to assess and target its actions. This multi-criteria analysis notably includes the risks of corruption, breaches of democracy and freedom of expression, the degree of digital inclusion, human security, discrimination, etc.

Member of the GNI for the promotion of human rights and fundamental liberties

Orange is strongly committed to promoting freedom of expression and respect for privacy in the ICT sector, in particular within the Global Network Initiative (GNI), a multi-stakeholder platform, including Internet operators, NGOs, universities and socially responsible investors. Orange and its peers meet regularly as part of this body to exchange best practices relating to government requests in the telecommunications sector. More specifically, they deal with potential conflicts between the commitment and duty of sovereign governments and the responsibility of telecommunications companies with respect to human

rights (network interruptions, illegal Internet content, etc.). By pooling the resources of every operator, it makes it possible to perform a complete analysis of the legal and regulatory framework country by country and to establish a dialog with governments and international institutions (United Nations, European Commission, the Council of Europe). It is aimed at making recommendations on local policies or laws in the interest of respecting freedom of expression and respect for privacy throughout the world.

The GNI principles updated in 2017 provide a common framework at Group level for the preparation of policies and procedures relating to freedom of expression and respect of privacy in the ICT sector. Each year on its website, Orange reports on the ways in which the Group applies these principles (see *orange.com/Group/Non-financial Reporting*).

Any demands by governments that could violate freedom of expression or fundamental liberties are treated locally by Orange, but under the authority of the Group's General Secretary and the Group Corporate Social Responsibility Department in order to ensure that every demand respects the required formal legal or regulatory requirements as analyzed by the GNI. Thus, Orange ensures that an official request in writing has been received by the manager of the relevant entities, and that it has been subject to an internal report to the Group. A synthesis of these elements as well as the guidelines set forth by the Group CSR Committee are presented to the Ethics Committee.

Backed by its membership in the EDH (Entreprises pour les droits de l'homme) association, an organization grouping together 16 of the largest French companies, Orange has deployed e-learning training which is available in 90% of the countries in which the Group operates to disseminate its main principles among its employees.

2.2.4.2 Employment-related consequences of our activities

The framework for controlling non-financial risks related to the employment-related consequences of the business concerns:

- the difficulty for Orange to obtain and retain the skills needed for its business:
- the prevention of internal and external human risks relating to health and safety;
- the preservation and protection of human rights and fundamental freedoms in relation to its employees or those of its supply chain.

2.2.4.2.1 Ensuring the necessary skills for business activities

To support the growth ambitions identified by the strategic plan Engage 2025 and adapt to a constantly changing world, the Group places in particular artificial intelligence and data at the heart of its transformation. An ambitious plan for upskilling and professional reconversion will go into effect in the next five years in order to give Orange employees an opportunity to master the new technologies.

Employment and key skills

Signed in February 2017 with the labor unions, the agreement on recognizing skills and qualifications has led to a profound change in the Orange Employment and Skills policy, with the identification of expertise in the areas of security – cyber-security, data management and AI, development, Cloud virtualization and key skills (such as "using and securing data", the "entrepreneurial spirit" and "working together"). A new "jobs and skills" standard has been introduced, in France initially. There are plans to roll it out internationally during 2020.

For Orange SA, thanks to the performance reviews conducted in 2019, every employee has been placed in a job under the new standard, his or her level of expertise and every relevant skill have been specified and skills mapping has been conducted. A comparison with a forecast of necessary skills then makes it possible to identify any gaps, and depending on their nature, to determine the best solution for filling them: transformation of existing skills through Orange Academy, outside recruitment, mobility, subcontracting, etc.

Skills development

Orange offers all of its employees a tailored learning experience that is flexible and adapted to the person's context and needs, notably thanks to Orange Learning. This tool, currently being deployed within the Group, is a tailored learning space which enables every individual to access their development plan easily, as well as training via a single catalog: continuously accessible digital content, multi-modal training combining digital and classroom learning, learning and sharing communities, etc.

Compensation

Compensation policy is a fundamental component of management, designed to meet the Orange Group's strategic objectives and is consistent with other HR policies (recruitment, career development, training and working conditions). Its particular aim is to recognize the individual and group contributions to customer satisfaction and to sharing value in all of the countries. It encourages the balance between economic performance and social quality. It aims to attract the new skills that the Group needs.

The cost of the compensation policy must be funded by each business unit taking into account anticipated growth in revenue, and the policy's foreseeable consequences on reported EBITDAaL.

2.2.4.2.2 Occupational health and safety

Any real or potential negative effects on health and safety that Orange may have caused have been taken into account in the 2019 Vigilance Plan.

Group occupational health and safety policy

Orange's commitment on occupational health and safety is led by its Chairman and Chief Executive Officer: on January 21, 2017, in a third policy communication on health, safety and quality of life at work, Orange reaffirmed its enduring commitment in these areas. Protecting its employees' occupational health and safety and improving their quality of life at work contributes fully to Orange's aim to be a leading employer in its sector.

This policy is based on the global health and safety agreement, signed in November 2014, and the laws and regulations in force in each country. This agreement commits our partners and subcontractors. In line with these actions, the Group deployed a Vigilance Plan in 2019, pursuant to the Law of March 27, 2017 (see Section 4.6 *Duty of vigilance*).

Orange group's global health and safety agreement (2014)

In line with the Group's health and safety agreement, and as part of the vigilance plan, different measures have been deployed to continuously improve the quality of life at work for the Group's employees:

- the definition of a common Group platform in terms of occupational health and safety, based on a policy of participation by all the players including a dialog with employees in the area of occupational health and safety, the promotion of any initiative to participate in health protection programs adapted to the context and local practices, as well as non-discrimination in terms of health for employees and special vigilance regarding vulnerable groups in terms of heath;

- the implementation of an occupational health and safety management system in all Group companies as part of a continuous improvement approach;
- specific discussion of healthcare costs coverage in the African region;
- the need for specific vigilance to ensure that Orange's service providers have their own health and safety policy. Subcontractor accident rates are closely monitored, in particular by the health and safety officers and OH&S experts, with follow-up assessments and the preparation of action plans.

These actions are supported and monitored by the Risk Prevention and Occupational Quality of Life Department and presented annually to the Worldwide Works Council and UNI global union. This presentation is based on the Group's annual health and safety report.

Social dialogue on occupational health and safety

Social dialogue on occupational health and safety takes place within the legal or employee representative bodies and takes the form of agreements signed with social partners.

In France, there are 250 Health and Safety and Working Conditions Committees (CHSCT) that regularly hold discussions with employee representative bodies such as the CNSHSCT (National Health and Safety and Working Conditions Committee) and the CNPS (National Stress Prevention Committee). Numerous agreements promote the deployment of the Group's quality of life at work policy and the active prevention of risks to employee health and safety:

- the teleworking agreement, amended in 2017, makes teleworking part of an overall economic, social and environmental approach, with expected benefits in terms of well-being at work and travel time savings;
- the agreement on the assessment and adaptation of workloads (2016) sets a methodological framework and common references for specifically understanding the problems of workloads related to changes in the workforce and skills;
- the digital transformation support agreement (2016) notably enables the implementation of individual digital use reports;
- the agreement on the assessment and prevention of psychosocial risks (2010) notably endorsed the creation of a National Stress Prevention Committee;
- the agreement on workplace gender equality and work-life balance (2018) offers a framework to facilitate the best balance between professional and private life for each employee, whilst enabling them to overcome major life events.

Since December 4, 2019 in France, the Works Councils, CHSCTs and employee representatives have disappeared pursuant to the Macron orders modifying the labor code in terms of employee representation within the Company. Works councils, CHSCTs and employee representatives are now grouped in a single body: The Social and Economic Committee (SEC), which is in charge of issues relating to health, safety and working conditions. It is backed by the Commission on Health, Safety and Working Conditions (CHSWC)

Internationally, each subsidiary now has a Health and Safety and Working Conditions Committee or a Health and Safety Committee. In the Africa and Middle East region, specific training programs for Health and Safety Committee members have been deployed since the signature of the global health and safety Agreement.

In Europe, joint work with the UNI Europe union alliance and ETNO (The European Telecom Network Organization) resulted in the publication of a guide to best practices relating to workplace safety taking into account the new labor organizations: Good Work Good Health II.

Orange group's occupational health and safety management system (OHSMS)

The OHSMS is based on either the Group's OHSMS guidelines or a recognized national or international (OHSAS 45001) standard, to be chosen by the entity or subsidiary. Its deployment enables a shift towards a real culture of managing occupational health and safety within the Group.

Training for managers and information sessions for pilot partners (member of the Management and OH&S expert) are regularly held in France.

Audits are periodically conducted throughout the Group, according to a schedule that depends on the framework selected.

People involved in prevention

The OH&S experts and officers support management by providing advice and local expertise with respect to the prevention of occupational risks.

In France, the network of over 200 OH&S officers provides the teams with methodological support and ensures skills development while continuing to progress professionally.

Internationally, the OH&S officers receive support from the Risk Prevention and Occupational Quality of Life Department via regular contacts. This network meets monthly to discuss the major topics of "Risk Prevention and Occupational Quality of Life by Orange" including workplace health, risk prevention, individual well-being, etc.

The organization of occupational health services depends on the legislation in each country.

2.2.4.2.3 Social dialogue

The Orange Group promotes a substantial structured dialog involving its employees, labor unions and associations of employee representatives. With a focus on increased transparency and collaboration, Orange has set up employee representative institutions for all scopes. Each of these institutions has its own powers which improve the social dialogue.

Orange recognizes the right for its employees to have freedom of association, representation and membership of a trade union in accordance with the principles set by the ILO convention no. 87 of 1948 on freedom of association and the right to organize. Employees are free to become members of their choice of trade union or not to do so.

Worldwide Works Council

The Worldwide Works Council is a social dialogue body created by an agreement signed in June 2010. It enables all Group employees worldwide to be represented, and to exchange information with employee representatives on transnational economic, financial and social issues.

Its tasks are as follows:

- promote the communication of Group issues to employee representatives;
- improve the Group's social dialogue on a world level;
- be part of the Corporate Social Responsibility (CSR) development strategy.

This Council does not replace existing national representation bodies nor the European Works Council. It complements the agreement signed in 2006 with the UNI global union on respect for fundamental rights. It meets at least once per year on the initiative of its Chairperson who is the Group's Chairman and CEO or his representative and each time that exceptional circumstances require it, with management agreement.

European Works Council

The European Works Council is a social dialog body at the European level for economic, financial and social issues. It was created by an agreement signed on April 14, 2004.

Its tasks are as follows:

- develop social dialogue at a European level;
- create a forum for discussion and dialog on broad economic, financial and social issues at an overall European level that go beyond the borders of any single country (industrial and innovation strategy, major investment policies, employment, etc.);
- complement the national social dialogue bodies, without aiming to replace or supervise them.

The European Works Council meets at least three times per year, and each time that exceptional circumstances require it. Its members regularly receive information on life in the Group and telephone conferences are organized when warranted by events.

Other national social dialogue bodies

The France Works Council is responsible for ensuring communication and dialog with the employee representatives from the Group's different entities in France. This Council meets at least four times a year. It receives information on the activity, the financial position, and changes in the Group's employment and structure.

There are also different national social dialogue bodies that enable employee representatives to be heard. In regions where representative bodies are not legally required, the Group promotes the creation of employee forums in order to establish formalized dialogue.

2.2.4.2.4 Promoting diversity and inclusion

In December 2012, Orange formalized its diversity policy, defining professional equality between women and men as the theme common to all Orange entities around the world, specifying that every country has responsibility for the choice at least of another dimension of diversity corresponding to its economic and societal challenges – for example providing employment to the disabled.

On July 17 2019, Orange signed a worldwide agreement with UNI global union on gender equality in the workplace, combating discrimination and violence, and the work-life balance. It can be applied and adapted in the countries where the Orange Group is present. The agreement is based on a participative approach by all the players; it is built around a structured social dialog and monitoring by the Group, based notably on dedicated local committees.

Since 2011, the Group has also committed to the effective assessment of its diversity and gender equality policy through GEEIS (Gender Equality European and International Standard) and GEEIS Diversity certification and since 2015, by listening to its stakeholders on diversity by means of a global system.

Gender equality in the workplace

The Orange policy in terms of gender equality in the workplace is managed by the Professional Equality Strategic Committee, created in 2011 and consisting of members of the Executive Committee, it has been deployed in the Group with a focus on four areas:

- equal pay between women and men: a methodology analyzing pay gaps common to all countries was rolled out by the Group in 2018;
- access by women to positions of responsibility: the Group has set itself the target of 35% of women on executive management bodies; this target is made tangible through the talent management policy, and also mentoring and development programs. It is driven inside and outside the Group by employee networks (diversity networks);
- diversity in all the Group's jobs, particularly technical jobs; this is reflected by a number of projects upstream to attract girls into technical sectors (shadowing program), by hiring and training women for professional retraining and by raising awareness among recruiters of the challenges of gender equality;
- work-life balance: this balance is driven by HR policies with numerous measures and agreements on teleworking, flextime, parenthood measures and support for employees who are carers.

In 2015, the Chairman and CEO signed on behalf of the Group the United Nations Women Empowerment Principles, confirming Orange's commitment worldwide.

For the French scope, this is also reflected in:

- the signing of the Charter of 15 commitments for work-life balance by the Chairman and CEO and the members of the Group's Executive Committee in 2013, and the signature in 2008 of the Parenthood Charter;
- the signing in January 2018 by all the labor organizations of the fifth 2018 – 2020 agreement on gender equality in the workplace and the work-life balance;
- the signing in May 2019 of the "Manifesto for the retraining of women in digital jobs";
- awareness-raising in workplace equality via an online training program leading to a "workplace equality visa".

Equal opportunity and combating discrimination

Combating discrimination and respect for diversity are constant concerns throughout an employee's career path, whether it be during recruitment or during different professional stages within the Company. Orange regularly revisits its human resources processes to ensure that in managerial decisions, assessments focus solely on skills, potential and commitment.

Orange contributes regularly to numerous analyses of inter-generational management, religion in companies, sexual orientation and the effects of stereotypes on careers. Orange strives to remain sensitive to weak signals to take into consideration the effects of various societal themes in the Company. Regarding sexual orientation, the Group has been a signatory of the Charter of Commitment to the rights of LGBT individuals in the Company since 2013 and the UN's Corporate Standards of Conduct on Tackling Discrimination against LGBTI People since 2017.

In France, several systems are in place to combat discrimination: dedicated monitoring commission with trade union organizations, availability to employees and job applicants of the service Allodiscrim (independent from Orange) to report and deal with any instance of discrimination, awareness training of employees on stereotypes through the "workplace equality visa".

Concerning the disabled, in France, Orange is implementing the sixth agreement for employment and the integration of the disabled and for combating discrimination, signed in June 2017, which covers the period 2017-2019. In addition, in October 2019, Orange signed the

Manifesto for the inclusion of the disabled in economic life in France, an initiative promoted by the Secretariat of State in charge of the disabled. Internationally, since 2015 the Group has been pursuing the commitments made in the Global "Business and Disability" Network Charter of the International Labor Organization, and in December 2019, it joined the Valuable 500, the global movement bringing together the 500 largest companies committed to promoting the inclusion of the disabled.

2.2.4.3 Social consequences of our activities

The framework for controlling non-financial risks related to the business activity's consequences for society refer to the risks identified in Section 2.1 *Risk Factors*:

- protection against the potentially harmful effect on people's health of exposure to electromagnetic fields from telecommunications equipment;
- the excessive or inappropriate use of telecommunication services and equipment.

They also cover the more comprehensive notion of responsibility in terms of products and services. The Group's commitment is backed by the "Meaningful Marketing" program and the Group's guidelines in terms of artificial intelligence.

2.2.4.3.1 Protecting customers' health and safety

One of Orange's priorities is to develop safe, responsible, and creative digital practices. For that reason, Orange carefully follows the advice of the experts and authorities on the subject of digital technology and health and promotes their recommendations, particularly those intended for parents, youth and families in general.

With regard to children, Orange's commitment is supported by the Better Internet for Kids (BIK) program which aims to give parents and educators the power to act and offer their children the best of digital.

Orange's policy is thus to assist in the development of appropriate digital uses and practices favoring creativity, the entrepreneurial spirit and education through:

- awareness training of employees regarding the challenges of responsible marketing, by defining *Guidelines* for product managers, and by assisting them in implementing projects (for example, no marketing offers to children below the age of 9, no young children in Orange advertisements, service offers responding to the concerns of families);
- initiatives focusing on raising awareness and assisting parents, educators and children on the safe use of digital technology, in cooperation with experts and children's and parents' associations;

This policy and monitoring of it are carried out by the CSR and Marketing teams of the countries in coordination with the Radio Waves and Health Committee (see Section 2.1.4.3.2 *Concerns about radio waves*).

2.2.4.3.2 Concerns about radio waves

Mobile telephony technologies may increase exposure to electromagnetic waves of the general population (via new fixed transmitters) and users (via new mobile equipment or by creating new behaviors). Emissions of electromagnetic waves are controlled by the limits recommended by the World Health Organization (WHO). To date, there has been no proven effect on health below these recommended limits. However, until we have the confirmation of

additional studies under way, specifically on children and long-term use, certain health authorities, as a precaution, are drafting recommendations to limit exposure to radio waves from mobile phones.

Orange implemented a Group policy on radio waves and health in 2007, in which it commits to:

- provide transparent and identical information to all of its stakeholders;
- ensure that the international recommendations of the ICNIRP (International Commission on Non-Ionising Radiation Protection) and the WHO for mobiles and antennas are applied, including in the countries of Orange's scope which do not have national regulations;
- provide health authorities' recommendations on the use of mobile phones to limit exposure to radio waves;
- contribute to scientific research and standardization efforts;
- raise awareness of employees working near or on antennas to the safety regulations issued by the European Directive 2013/35/UE of June 26, 2013 and its 2016-1074 Decree of August 3, 2016, even in countries not subject to the Directive.

Compliance with this policy and these commitments is ensured at Group level by the Radio Waves and Health Committee, comprising a legal expert, a public affairs expert, a doctor, a technical expert and two CSR experts, who meet each week to analyze health and regulatory monitoring, coordinate actions at the Group's operational level and draft "Group positions". These positions are communicated to the Group's Executive Committee as required.

2.2.4.3.3 Thoughts on the use of artificial intelligence

In its strategic plan Engage 2025, Orange identified the levers of Artificial Intelligence (automatic training, deep learning, etc.) as a tool of its performance, by expanding the digital transformation. Orange supports the approach described in the document of the High Level Expert Group of the European Commission "recommendations for Ethics Guidelines for trustworthy AI" and supports its major principles:

- the goal of Artificial Intelligence is to make a positive contribution to societal and environmental challenges;
- solutions based on Artificial Intelligence must always respect the needs of human beings and be operated under their supervision;
- it must respect diversity and combat any risks of bias or discrimination:
- the data underpinning Artificial Intelligence algorithms must respect privacy and be subject to careful governance;
- the robustness and safety of Al-based solutions must correspond to the specific challenges of each application;
- the functioning of IA-based solutions must be explained in a transparent and intelligible manner, and the chain of responsibility must be clear.

In connection with deliberations on responsible Artificial Intelligence, the Orange Group joined ImpactAI, a collective made up of a set of artificial intelligence players meeting around two common objectives: dealing with the ethical and societal challenges of AI and supporting innovative and positive projects around the world. The DSF has been

coordinating its Observatory since it was launched in 2018, with the publication of an initial white paper released in July 2019.

2.2.4.4 Environmental impacts of our activities

Orange adopts a proactive approach to managing risks and impacts to help protect the environment against a backdrop of strong growth in digital usage. Any potential or real damage to the environment that Orange could have caused was taken into account in its 2019 Vigilance Plan.

2.2.4.4.1 Orange's environmental commitment

Orange has been working for more than ten years to control its environmental footprint.

Under COP 21 in 2015, at the time of the Paris Agreement, the Group made two ambitious commitments:

- reduce by 50% its ${\rm CO_2}$ emissions per customer use in 2020 compared to 2006;
- gradually incorporate the circular economy into its processes and its organization.

Orange confirmed its commitment to the climate during the United Nations summit for Climate Action in New York in September 2019, by signing alongside other major corporations the pledge under the United Nations Global Compact for an increase limited to 1.5°C. This commitment is aimed at adopting climate objectives covering the Company's operations and value chain 1) limiting the temperature increase to 1.5°C by 2100 compared with pre-industrial levels and 2) reaching Net Zero Carbon no later than 2050.

As part of its strategic plan Engage 2025 announced in December 2019, Orange made the commitment to a Net Zero Carbon footprint by 2040, which is ten years before the GSMA target, and the recommendations by the IPCC for a limit of 1.5 degrees (1).

Having a Net Zero Carbon footprint by 2040 means:

- first of all, having reduced its greenhouse gases to the fullest extent – scopes 1, 2 and 3 – by 2040;
- contributing to carbon sequestration for an amount of carbon equivalent to residual emissions by 2040 - scopes 1, 2 and partially scope 3, meaning the emissions on which the Company has a direct effect. This can be done through capital investments (e.g. planting forests) or financing negative emissions (certified or verified) from carbon capture and storage using a natural approach (e.g. in forests or in agro-forestry) or using technology;
- in addition, contributing to emissions avoided outside its scope, for example with the marketing of products or services with a better carbon score than existing products or services – or financing emissions (certified or verified) avoidance.

NB: This target of Net Zero Carbon by 2040 is taken in the context of the special report by the IPCC⁽²⁾ published in October 2018, which encourages decision-makers to do their best to limit the average global warming of the planet by 2100 to 1.5° compared to pre-industrial levels. This in order to avoid the risk of serious climate disruptions. Reaching this target of 1.5° by 2100 means Net Zero Carbon worldwide no later than 2050.

⁽¹⁾ Scenario P2 of the IPCC in its special 1.5°C report of October 2018, https://www.ipcc.ch/sr15/download/#chapter

⁽²⁾ https://www.ipcc.ch/site/assets/uploads/sites/2/2019/09/IPCC-Special-Report-1.5-SPM_fr.pdf

The Net Zero Initiative⁽¹⁾, in which the Orange Group participates, has formalized a standard for Net Zero Carbon for businesses in February 2019.

For Orange, environmental exemplarity is one of the two cornerstones of its corporate responsibility. This commitment involves various stages with the intermediary target by 2025 of reaching a decline of 30% of CO_2 emissions at the Group level, scopes 1 and 2, in absolute terms compared with 2015 levels; to that end, Orange is rolling out a sweeping energy efficiency plan, is planning to achieve a usage rate of at least 50% renewable electricity by 2025 and for its residual emissions expected in 2040, is developing a carbon sequestration plan.

During the year 2020, the Group will define a target to its scope 3 emissions for 2025. This will enable the Group to commit its suppliers to further reducing their own carbon footprint.

To become a Net Zero Carbon company, in 2019 Orange developed an action plan based on a number of simultaneous approaches: pursuing energy efficiency actions in IT and the networks, developing new capacities for renewable electricity, with the use of PPAs, the creation of new solar farms and expanding ESCO programs as well as a specific policy for its buildings and vehicle fleets. As a priority, Orange is attempting a real reduction in its scope 1 and 2 emissions on which the Group has a direct influence. Orange is acting on the other part of scope 3 with its main suppliers through the International Telecommunications Union, the GSMA and the JAC (Joint Audit Cooperation).

Concerning the Networks and IT, the Group is planning to rely on the implementation of "advanced sleep modes" for 5G antennas, to pursue the eco-efficiency approaches of the data-centers (optimization of the number, capacity use and electricity consumption) and on multiplying infrastructure sharing (RAN sharing)

Concerning buildings, the aim is to reduce their consumption by 20% by 2025 compared to 2015 by installing a "360° management" system in all the main buildings. The aim is to measure, optimize and reduce energy consumption.

Concerning its vehicle fleets, Orange's action plan from now until 2025 calls for reducing them and electrifying them while seeing to it that they remain the leading corporate fleet in carsharing in Europe.

As an active member of ITU, in relation with the Science Based Targets Initiative (SBTi) GSMA and the International Energy Agency, Orange has facilitated work and contributed to the creation of a methodology document to estimate the effects of the Information Technologies and Communications sector on climate worldwide, then of an industry document explaining the emission reduction targets to be adopted by the industry to harmonize with scientific recommendations and maintain temperature increases at 1.5° by 2100 compared with pre-industrial levels (2).

Orange has also made the commitment to promote the principles of the circular economy in its organization and its processes in order to limit the effects of its activities and those of its customers on resources and raw materials by optimizing its processes. This commitment breaks down into the targets for 2025 listed below:

- 100% of the hardware product lines with the Orange brand (Box, STB, Djingo) to use an eco-design approach, leading to a reduction in usage consumption;
- more than 90% of the fixed terminals (Box, STB) distributed by Orange to be collected, as well as 30% of the mobile terminals by

- country in the Europe zone and the equivalent in WEEE volume of 20% of the mobile terminals sold in the MEA zone:
- at least 10% of the mobile sales volume made in refurbished terminals in the European countries;
- offering an attractive repair service for the mobile terminals sold by Orange in every European country;

and for its own needs, Orange aims to use 20% of its network investment budget to purchase reconditioned equipment.

2.2.4.4.2 Environmental monitoring framework

The Board of Directors monitors the risks and opportunities related to the environment, and notably climate change, via the work by the Governance and Social and Environmental Responsibility Committee and the Group Circular Economy Steering Committee.

Monitoring of Orange's environmental commitments takes place at the Group Executive Committee level based on quarterly reporting by the Executive Vice-President CSR, Diversity, Partnerships and Solidarity, for environmental policy, and by the Deputy Chief Executive Officer – Chief Technology and Global Innovation for the part of the GREEN ITN2020 energy consumption saving program related to IT & networks. Monitoring of action plans to achieve the new environmental commitments by the Group (see Section 2.2.4.4.1 Commitment by Orange in terms of the environment) will be done by the Group Executive Committee.

Group circular economy steering committee

The Group has set up this strategic internal steering committee for the Circular Economy to define and monitor the actions to be deployed within its businesses, with the appointment of project leaders and a deployment plan. Under the responsibility of the Group CSR Department, it comprises decision-makers in the Group's main business lines: Purchasing, Supply Chain, Marketing, Networks, Technocenter, etc.

The plan covers several areas, especially:

- eco-design;
- limiting the Group's consumption of critical, non-renewable resources;
- optimizing waste management;
- the possibility of giving network equipment and consumer handsets a second life.

Monitoring committee for alignment with the TCFD's recommendations

To fulfill the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) published on June 29, 2017, Orange has decided to establish a special monitoring committee managed by the CSR Department with the support of the Carbone 4 firm. The aim of this committee is to do an in-depth analysis of the risks related to climate change and to the ecological transition and to identify projects that must be implemented to better fulfill the recommendations of the TCFD.

A cross-reference table describing Orange's responses to the TCFD recommendations is available in Section 4.4.2.3 *Alignment with the TCFD's recommendations*.

⁽¹⁾ http://www.netzero-initiative.com/fr/news/publication-net-zero-initiative

⁽²⁾ https://www.itu.int/rec/T-REC-L/fr – UIT L.1450, December 2019 and L.1470.

Players involved in environmental awareness-raising and training

The Group Environment Department regularly holds discussions with a network of national and business area contacts comprising around 90 people; each year, it organizes a seminar to discuss best practice and launch new projects.

Internal communications conducts regular awareness-raising initiatives with all the Group's employees when key events such as the United Nations Climate Change Conference and environment days are taking place.

Initiatives for awareness raising and discussion thus encourage each employee to include the objectives of responsible growth in their daily activities. Dedicated training courses are delivered regularly.

Since 2018 in France, an indicator related to controlling electrical energy consumption was introduced into the calculation of the incentive bonus, which is part of the compensation of Orange SA employees, thus raising awareness of this notion; moreover, the Orange LTIP for the period 2020-2022 includes an environmental criterion.

Environmental Management System

In order to achieve its targets for reducing environmental impacts and risks the Group has been progressively rolling out ISO 14001 compliant Environmental Management Systems (EMS) in its main countries of operation. The ISO 14001 standard describes how companies should organize themselves to manage the environmental impact of their activities. The 2015 version of this standard includes new requirements, which the Group is gradually incorporating, particularly through stakeholder dialogue and by taking into account complete life cycle impacts.

2.2.4.4.3 Management of environmental compliance risks

Facilities classified for the protection of the environment

The Orange Group uses certain facilities, products and substances that may present environmental risks (even minor), some of which are subject to specific regulations. This is the case for facilities classified for the protection of the environment (ICPE) in France. The significant increase in the number of sites including ICPE classified facilities in 2019 is due to a revision of the regulations (Heading ICPE2910 – combustion facilities), which lowered the classification threshold.

These facilities are the subject of ongoing in-depth analyses by the Orange group and have led to the adoption of action plans and preventive maintenance programs, in addition to periodic inspections as required under French regulations. The rollout of the Environmental Management System and ISO 14001 certification audits also ensures compliance with related regulations and controls.

In order to prevent health-related risks (legionnaires' disease) and reduce water consumption, a program to replace cooling towers by "dry" systems (called dry coolers) has been in effect in France since 2006, even though the restructuring of technical sites now underway is leading to a slowdown in the program.

Indicators	2019	2018	2017
Number of sites including classified facilities			
(ICPE A, D, DC and E) in France	346	249	262
Number of wetcooling towers in France	31	31	29

Hazardous substances

Some facilities use regulated products or substances. These are chlorofluorocarbon (also named CFC gases) or other refrigerants (more specifically HCFCs or HFCs) contained in air-conditioning installations – see above.

Orange complies with the European REACH Regulation (Registration – Evaluation – Authorization and Restriction of Chemicals) and has undertaken to inform its customers of the presence of hazardous substances as defined by regulations.

Orange also respects the European Directive RoHS II, by which the Group must comply with the obligations of the producer or those of the distributor to limit the use of certain hazardous substances in electric and electronic equipment. As a contract provision, the Group requests that suppliers apply the European RoHS II directive to all products that are subject to it, including outside of Europe.

Provisions for environmental risk

The Orange Group believes that its activities as a telecommunications operator do not pose a serious direct threat to the environment. The Group's activities do not entail production processes with a severe impact on scarce or non-renewable resources, natural resources (water, air) or to biodiversity and, generally, do not pose lethal risks. This is why no provision for environmental risk has been made in the Group's accounts.

However, a provision is recognized to cover the Group's obligation to dismantle technical equipment and restore technical sites.

The provision is set on the basis of:

- dismantling costs (on a per-unit basis for telephone poles, terminals and public phones, and per site for cell phone antennae) borne by the Group to meet its environmental obligations;
- annual scheduled asset returns and departures from sites.

In the Group's financial statements for the year ended December 31, 2019, the provision totaled 825 million euros, of which 463 million euros for Orange SA. It consists predominantly of the cost of restoring sites of mobile telephony antennae to their former state, reprocessing of telephone poles, managing electrical and electronic waste, and dismantling public phones.

2.2.4.5 Management framework for suppliers and subcontractors

Orange's responsible purchasing principles

Orange has for several years implemented a responsible purchasing policy which embeds CSR in its supplier relationships and improves control of social, societal and environmental risks.

This policy is implemented by the Global Procurement & Supply chain, which is part of the Orange Group Finance & Performance Department and which ensures consistency among all the companies of the Group, each of which has its own procurement department. Thus, there are 1,900 permanent employees in 50 countries and territories who negotiate with 75,000 active suppliers.

Its Group-wide CSR action plan aims to promote the adoption of CSR commitments by purchasing stakeholders and their application in the related business processes, and to guarantee the Group's compliance with the law on the duty of vigilance. All of these principles have also been adopted by Buyln, the joint venture between Orange and Deutsche Telekom, which covers the Group's main purchasing domains.

This policy was updated in 2018 (available on the orange.com/Group/Non-financial Reporting) and is designed around the following themes:

- developing balanced relationships with suppliers based on trust, respect and sustainable commercial relationships;
- contributing to economic performance by creating value and ensuring the availability of products and services at the best cost, while preserving competition among strategic suppliers by establishing an industrial policy that protects the interests of the stakeholders;
- controlling CSR risks and opportunities related to procurement and the supply chain, by requiring suppliers to adhere to a code of conduct and respect for laws and regulations;
- providing the Group and its customers with the benefit of the knowhow of innovative and high-performance suppliers.

It is based on the systematic incorporation of a CSR clause in the Group's framework agreements as well as into exclusively local contracts, reinforced by the integration of the Code of Conduct into the appendices to these contracts. The Code of Conduct describes in particular the ethical, social and environmental commitments expected by the Group. Orange thus requires that its partners, suppliers and their sub-contractors i) respect all national, European and international rules with respect to ethical and responsible behavior. This includes, without limitation, standards relating to human rights, respect for the environment, sustainable development, occupational health and safety conditions for the employees, corruption and child protection; ii) adopt and apply ethical standards and the Group's commitments and to continue to progress in these areas. Orange supports its suppliers throughout the pre-contractual and contractual relationship to ensure the effective implementation of the Code of Conduct.

Orange's CSR program was developed in cooperation the CSR and Procurement teams. It covers all the subsidiaries and is based on five pillars:

- clear CSR commitments defined in Orange's "Commitments in terms of responsible procurement". They are also stated in the CSR clause of the supplier Code of Conduct and apply to all suppliers (Group and local);
- a strong CSR culture thanks to CSR training sessions for buyers;
- effective CSR risk management based on CSR evaluations and supplier audits;
- the active search for opportunities through dialog with subsidiaries and suppliers;
- transparent reporting on the CSR maturity of all the subsidiaries.

In 2019, Orange France procurement had an ISO 20400 maturity evaluation and obtained the compelling level (3rd level out of 4). It also obtained the Supplier Relations and Responsible Procurement label from the French government.

Supplier assessment

Suppliers are assessed at several levels of the contractual relationship, using several tools.

 first of all on a documentary basis thanks to the use of a recognized expert (which offers a self-assessment tool based on ISO 26000 for supplier commitment in terms of CSR). The results of the assessment are used to prioritize the actions towards the most vulnerable suppliers from a CSR standpoint; - then, through on-site audits by an expert partner company either within the framework of the JAC, or on behalf of Orange in collaboration with the subsidiaries. In fact, Orange deploys a coordinated audit program of on-site CSR audits founded on verification, evaluation, and development of a common methodology: audits to assess suppliers' compliance with social and environmental accountability standards (SA 8000, ISO 14001) and, if necessary, to implement corrective action plans.

The Group has set up a monitoring and alert system for purchasing and procurement risks related to suppliers deemed strategic to the organization and whose default could have major consequences on the Group's operations.

In response to the requirements of the Orange Vigilance Plan, the supplier assessment program was revamped and implemented in 2019 in the Group's main subsidiaries (see Section 4.5 Suppliers and subcontractors) and will be expanded in 2020.

Joint Audit Cooperation

Orange also contributes to the development of its standards through the Joint Audit Cooperation (JAC) initiative, which is an association of telecommunications operators (17 to date), grouped together to audit, evaluate and develop the implementation of CSR principles by the global suppliers of the ICT segment. Since 2018, JAC has increased the efficiency of its action thanks to an accreditation program for its suppliers (JAC Academy) and to its on-site audit methodology. JAC is also working with other institutions (ITU, BSR, CDP, RMI and GSMA) to complete its requirements for other CSR priorities, which are climate change, the circular economy, the traceability of minerals from supply sources that respect human rights and the environment. JAC welcomes other telecommunications operators so that it can expand its geographical coverage (in Asia, South America and Africa), thus indicating the global nature of its commitment.

BuyIn

Buyln is the joint venture created by Orange and Deutsche Telekom in 2011 to group together the strategic purchases of both international groups. As such, and taking advantage of its scale, Buyln can achieve more competitive positions in terms of quality, price and innovation. This company concentrates the assessments of its suppliers during calls for tenders. The CSR recommendation that informs this selection is based on the score of the renown partner used by Orange, the results of on-site audits by Joint Audit Cooperation (JAC) as well as comments by its own CSR experts.

Every year Buyln redefines its risk mapping by purchase category, then conducts an evaluation targeting every high risk category, as well as the largest markets, in accordance with its code of conduct developed by Orange and Deutsche Telekom.

In fact, Buyln ensures that every supplier under contract has a higher score than the benchmark score defined in the tool of our external partner, or puts in place a corrective action plan specific to those suppliers to allow them to reach the required level.

2 — Risk factors and activity management framework Activity and risk management framework

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This section contains forward-looking statements about Orange. These forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from the results anticipated in the forward-looking statements. The most significant risks are detailed in Section 2.1 *Risk factors*.

The following comments are based on the consolidated financial statements prepared in accordance with IFRS (International Financial Reporting Standards, see Note 2 to the consolidated financial statements). The Group applies IFRS 16 "Leases" as from January 1, 2019 using the simplified retrospective method, without restatement of historical comparative periods (see Note 2.3 to the consolidated financial statements). Therefore, data on a comparable basis for the 2019 and 2018 fiscal years is presented in line with the accounting standard IFRS 16. Data is presented on a historical basis for the 2018 and 2017 fiscal years, and on a comparable basis for the 2017 fiscal year, in line with the accounting standard IAS 17. Moreover, these changes in accounting standards led the Group to adapt its key operational performance indicators and define new ones (see Accounting policies in Note 1 to the consolidated financial statements and Section 3.1.5 Financial indicators not defined by IFRS).

EBITDA after Lease (referred to as "EBITDAAL"), Economic CAPEX (also referred to as "eCAPEX" or "Economic CAPEX"), the "EBIDTAAL - eCAPEX" indicator, net financial debt, the ratio of net

financial debt to EBITDAaL from telecom activities and data on a comparable basis (as well as, until December 31, 2018, adjusted EBITDA, reported EBITDA, CAPEX, the "Adjusted EBIDTA – CAPEX" indicator and the ratio of net financial debt to adjusted EBITDA from telecoms activities) are financial indicators not defined by IFRS. For further information on the calculation of these indicators and the reasons why the Orange Group uses them and considers them useful for readers, see Section 3.1.5 Financial indicators not defined by IFRS and Section 7.2.1 Financial glossary.

Data on a historical basis relates to data for past periods as published in the consolidated financial statements for the current period. The transition from data on a historical basis to data on a comparable basis for the 2018 and 2017 fiscal years is set out in Section 3.1.5.1 *Data on a comparable basis*.

Unless otherwise specified, segment information presented in the following sections is understood to be prior to elimination of inter-segment transactions.

Unless stated otherwise, data in the tables is presented in millions of euros, without a decimal point. This presentation may, in some cases, lead to negligible differences in the totals and sub-totals in the tables. Furthermore, the changes presented are calculated based on data in thousands of euros.

3.1.1 Overview

3.1.1.1 Financial data and workforce information

Operating data

(at December 31, in millions of euros)	2019	2018	2018	% change	% change	2017
		data on a	data on a	data on a	data on a	data on a
		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
Revenue (2)	42,238	41,986	41,381	0.6%	2.1%	40,859
EBITDAaL ⁽¹⁾	12,860	12,762	NA	0.8%	NA	NA
Telecom activities	13,019	12,907	NA	0.9%	NA	NA
EBITDAaL/Revenue						
from telecoms activities	30.8%	30.7%	NA			NA
Orange Bank activities	(160)	(147)	NA	(8.5)%	NA	NA
Operating Income	5,927		4,829		22.7%	4,778
Telecom activities	6,112		4,997		22.3%	4,870
Orange Bank activities	(186)		(169)		(9.8)%	(93)
eCAPEX ⁽¹⁾	7,293	7,248	NA	0.6%	NA	NA
Telecom activities	7,265	7,212	NA	0.7%	NA	NA
eCAPEX/Revenue						
from telecoms activities	17.2%	17.2%	NA			NA
Orange Bank activities	28	36	NA	(23.4)%	NA	NA
EBITDAaL - eCAPEX(1)	5,568	5,513	NA	1.0%	NA	NA
Telecom activities	5,754	5,695	NA	1.0%	NA	NA
Orange Bank activities	(187)	(183)	NA	(2.2)%	NA	NA
Telecommunications licenses	519	201	200	157.7%	159.2%	318
Average number of employees						
(full-time equivalents (3))	135,619	137,898	135,943	(1.7)%	(0.2)%	138,038
Number of employees				, ,	. ,	
(active employees at end of period (3))	146,768	151,472	150,711	(3.1)%	(2.6)%	151,556

⁽¹⁾ See Section 3.1.5 Financial indicators not defined by IFRS and Section 7.2.1 Financial glossary.

⁽¹⁾ See Section 3.1.3 Final India and Section 4.2.1 Final India glossary.
(2) Revenue from telecoms activities. The Net Banking Income (NBI) of Orange Bank is recognized in other operating income (see Note 4.2 to the consolidated financial statements).

⁽³⁾ See Section 7.2.1 Financial glossary.

Historical indicators (up to December 31, 2018)

(at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Adjusted EBITDA ⁽¹⁾	NA	NA	13,005	NA	NA	12,680
Telecom activities	NA	NA	13,151	NA	NA	12,741
Adjusted EBITDA/Revenue						
of telecoms activities	NA	NA	31.8%			31.2%
Orange Bank activities	NA	NA	(147)	NA	NA	(62)
Reported EBITDA ⁽¹⁾	NA	NA	11,977	NA	NA	11,863
Telecom activities	NA	NA	12,124	NA	NA	11,924
Orange Bank activities	NA	NA	(148)	NA	NA	(62)
CAPEX (1)	NA	NA	7,442	NA	NA	7,209
Telecom activities	NA	NA	7,406	NA	NA	7,148
CAPEX/Revenue of telecoms activities	NA	NA	17.9%			17.5%
Orange Bank activities	NA	NA	36	NA	NA	61
Adjusted EBITDA – CAPEX (1)	NA	NA	5,563	NA	NA	5,471
Telecom activities	NA	NA	5,745	NA	NA	5,593
Orange Bank activities	NA	NA	(183)	NA	NA	(123)

⁽¹⁾ See Section 3.1.5 Financial indicators not defined by IFRS and Section 7.2.1 Financial glossary.

Net income

(at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Operating Income	5,927	4.829	4.778
Finance costs, net ⁽¹⁾	(1,254)	(1,362)	(1,715)
Income tax	(1,447)	(1,309)	(1,052)
Consolidated net income of continuing operations	3,226	2,158	2,011
Consolidated net income of discontinued operations (EE)	-	-	29
Consolidated net income	3,226	2,158	2,040
Net income attributable to owners of the parent company	3,006	1,954	1,843
Non-controlling interests	220	204	197

⁽¹⁾ Including effects of the stake in BT (see Note 12.7 to the consolidated financial statements).

Organic cash flow (telecoms activities)

(at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Organic cash flow from telecoms activities (1)	2,345	2,490	3,142

⁽¹⁾ See Section 3.1.5 Financial indicators not defined by IFRS, Section 7.2.1 Financial glossary, and Note 1.7 to the consolidated financial statements.

Net financial debt

(at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Net financial debt ⁽¹⁾	25,466	25,441	23,843

⁽¹⁾ See Section 3.1.5 Financial indicators not defined by IFRS, Section 7.2.1 Financial glossary, and Note 12.3 to the consolidated financial statements. Compared with December 31, 2018 and 2017, net financial debt as of December 31, 2019 excludes lease liabilities falling within the scope of application of IFRS 16 (see Note 2.3 to the consolidated financial statements) and includes debts on financed assets. Net financial debt as defined and used by Orange does not include Orange Bank activities, for which this concept is not relevant.

For further information on the risks relating to the Orange group's financial debt, see Section 2.1.3 Financial risks.

3.1.1.2 Summary of 2019 results

The annual results confirm that all the targets announced by the Group for fiscal year 2019 were achieved.

Revenue totaled 42,238 million euros in 2019, up 2.1% in data on a historical basis and 0.6% in data on a comparable basis compared with 2018. In data on a comparable basis, this 6.2% growth in a year was essentially driven by countries in Africa & Middle East. The Europe and Enterprise segments also contributed to this growth, at 1.4% and 1.0% over a year respectively. All of this more than compensates for a slight 0.3% decline in France in 2019 and a 1.5% slowdown in Spain in 2019 due to the market sliding towards *low cost* offers.

Commercial activity is performing well in a very competitive environment, and customer bases have been growing. In data on a comparable basis, convergence offers (10.8 million customers as of December 31, 2019) increased 3.4% over a year, and the number of SIM cards associated with convergence offers continue to grow (up by 5.3%). Broadband offers, which had 7.8 million customers as of December 31, 2019, also increased by 22.8% over one year. The total mobile customer base also grew 3.0% over one year, with the number of customers on 4G services rising 20.1% to 67.5 million customers worldwide as of December 31, 2019. Finally, Orange Bank had over 500,000 customers from Orange stores, Groupama branches and digital channels, of which 390,000 were account holders in France.

EBITDAaL was 12,860 million euros in 2019, up 0.8% in data on a comparable basis. EBITDAaL of telecoms activities (13,019 million euros) rose 0.9% in data on a comparable basis over one year, supported by revenue growth (despite the negative effect of promotional offers on e-readers between 2018 and 2019) and by cost management efforts. The ratio of EBITDAaL of telecoms activities to revenue was 30.8% in 2019, up 0.1 points in data on a comparable basis compared with 2018.

Operating income was 5,927 million euros in 2019, compared with 4,829 million euros in 2018 in data on a historical basis. This rise is mostly due to the drop in specific labor expenses, as a result of the counter-effect of the expense recorded in 2018 related to the extension of the French part-time for seniors plans (TPS) in 2015 for an additional three years.

Consolidated net income totaled 3,226 million euros in 2019, compared with 2,158 million euros in 2018, an increase of 1,068 million euros. This increase comes essentially from the rise in operating income, and, to a lesser degree, the rise in finance costs (thanks in particular to a lower cost of gross financial debt), which was partly offset by higher total income tax.

Economic CAPEX stood at 7,293 million euros in 2019, up 0.6% in data on a comparable basis. The ratio of Economic CAPEX to revenue from telecoms activities was 17.2% in 2019, stable compared to 2018 in data on a comparable basis. In line with the outlooks announced by the Group, Economic CAPEX including the network sharing agreement with Vodafone in Spain rose by around 50 million euros compared with 2018 (+44 million euros) in data on a comparable basis, and economic CAPEX excluding the network sharing agreement with Vodafone in Spain fell slightly (-12 million euros) compared to 2018 in data on a comparable basis. This performance was achieved against the backdrop of accelerated fiber optic roll-out in France. As of December 31, 2019, the Group totaled almost 40 million very high-speed connectable households, an increase of 21.5% over a year.

Net financial debt was 25,466 million euros as of December 31, 2019, stable compared to December 31, 2018 (limited increase of 25 million euros between the two periods). The ratio of net financial debt to EBITDAaL of telecoms activities stood at 1.96 as of December 31, 2019, in line with the Group's medium-term target of around 2.

Organic cash flow from telecoms activities was 2,345 million euros as of December 31, 2019, compared with 2,490 million euros as of December 31, 2018.

3.1.1.3 Significant events

The Group's main significant events are described in Section 1.3 Significant events.

3.1.2 Analysis of the Group's results and capital expenditures

3.1.2.1 Group revenue

3.1.2.1.1 Revenue

Revenue by segment (2)	2019	2018	2018	% change	% change	2017
(at December 31, in millions of euros)		data on a	data on a	data on a	data on a	data on a
		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
France	18,154	18,204	18,211	(0.3)%	(0.3)%	18,046
Spain	5,280	5,360	5,349	(1.5)%	(1.3)%	5,231
Europe	5,783	5,701	5,687	1.4%	1.7%	5,578
Africa & Middle East	5,646	5,314	5,190	6.2%	8.8%	5,030
Enterprise	7,820	7,745	7,292	1.0%	7.2%	7,251
International Carriers & Shared Services	1,498	1,584	1,534	(5.4)%	(2.3)%	1,651
Eliminations	(1,942)	(1,922)	(1,882)	, ,	, ,	(1,928)
Group total	42,238	41,986	41,381	0.6%	2.1%	40,859

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

⁽²⁾ Revenue from telecoms activities (see Notes 1.1 and 4.1 to the consolidated financial statements). The Net Banking Income (NBI) of Orange Bank is recognized in other operating income (see Note 4.2 to the consolidated financial statements).

Revenue per offering ⁽²⁾ (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Convergence services	7,111	6,841	7,068	3.9%	0.6%	6,427
Mobile services only	10,544	10,449	10,272	0.9%	2.7%	10,202
Fixed services only	9,508	9,797	9,604	(2.9)%	(1.0)%	9,994
IT & integration services	3,004	2,804	2,349	7.1%	27.9%	2,077
Wholesale	7,933	7,945	7,931	(0.1)%	0.0%	8,065
Equipment sales	3,146	3,246	3,245	(3.1)%	(3.1)%	3,185
Other revenue	991	904	912	9.6%	8.7%	909
Group total	42,238	41,986	41,381	0.6%	2.1%	40,859

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

In 2019, the revenue of the Orange Group totaled 42,238 million euros, an increase of 2.1% in data on a historical basis and of 0.6% in data on a comparable basis compared with 2018.

In data on a historical basis, the 2.1% increase in Group revenue between 2018 and 2019, an increase of 857 million euros, is due to:

- the positive effects of changes in the consolidation scope and other changes amounting to 430 million euros, including the effects of the takeover of Business & Decision on June 5, 2018, and the acquisitions of Basefarm on August 14, 2018, SecureData on January 31, 2019 and SecureLink on July 8, 2019;
- the positive effects of exchange rate fluctuations, which amounted to 175 million euros, mainly due to the change in the US dollar (86 million euros) and the Egyptian pound (76 million euros) against the euro:
- and organic change on a comparable basis, representing a 252 million euros increase in revenue.

In data on a comparable basis, the 0.6% or 252 million euros increase in Group revenue between 2018 and 2019 was attributable primarily to:

- the 331 million euros increase in revenue in Africa & Middle East countries (a 6.2% increase), driven by growth in 15 of the 16 countries consolidated as of December 31, 2019, with strong performances from the Sonatel subgroup (mainly in Guinea, Senegal and Mali), the Côte d'Ivoire subgroup (mainly Burkina Faso), Egypt, Congo (DRC) and Morocco. This growth is mostly due to (i) the rise in mobile only services, as a result of continued growth in data services and Orange Money (see Section 1.3 Significant events), and (ii) to a lesser degree, the development of fixed only services, notably due to dynamic fiber optic offers, particularly in Morocco, Jordan and Senegal, partly offset by (iii) the decrease in wholesale, principally in response to the slump in international incoming traffic;
- the 81 million increase euros in revenue in Europe (an increase of 1.4%), mainly due to:
 - (i) strong growth in convergence services in Belgium, Poland and Romania, and, to a lesser degree, (ii) increased sales of equipment and other revenue (enhanced energy offers) in Poland, and (iii) growth in integration services and information technology in Poland and Romania,

- partly offset by (i) the slowdown in wholesale, essentially due to the drop in activity relating to mobile virtual network operators (MVNOs) in Belgium and the decrease in call termination rates in Romania, (ii) the drop-off in fixed only services, largely due to decreasing use of conventional telephones in Poland, and (iii) the decrease in mobile only services, particularly in Poland, primarily as a result of customers migrating to convergence offers;
- and the 75 million euros rise in revenue from services to Enterprise
 (a 1.0% increase), due to (i) growth in integration and information
 technology services, principally Cloud and cybersecurity services,
 and to a lesser degree, the growth in data services, (ii) partially offset
 by the downward trend in voice services and the drop in services
 and mobile equipment.

These positive items were partially offset by:

- the 85 million euros fall in revenue from services to International Carriers & Shared Services (a 5.4% reduction), due to more muted international carrier business, as a result of the downward trend in the voice market;
- the 80 million euros decrease in revenue in Spain (a 1.5% decline), against a backdrop of intense competition in entry-level mobile and fixed broadband, with numerous promotions on offer. This fall mainly reflects (i) the decrease in mobile only services, a significant decline in equipment sales and the decrease in convergence services, due to the market slide toward low-cost offers, (ii) partially offset by growth in wholesale, largely driven by increased international traffic and, to a lesser degree, very high speed broadband access;
- and the 51 million euros slump in revenue in France (a 0.3% decrease), essentially due to:
 - (i) the downward trend in fixed only narrowband services (conventional telephony), (ii) the negative effects, between the two periods, of e-reader promotions, (iii) the slowdown in mobile only services (migration of contract packages to convergence packages and structural slowdown in prepaid packages), and (iv) the drop in mobile equipment sales, in a market facing a major global slowdown,
 - largely offset (i) by the increase in services to fixed carriers, principally relative to the construction, operation and marketing of fiber optic networks, and (ii) by the growth in convergence services (driven by a larger customer base and the rise in the Convergent ARPO over 12 months, see Section 7.2.1 Financial glossary).

⁽²⁾ Revenue from telecoms activities (see Notes 1.1 and 4.1 to the consolidated financial statements). The Net Banking Income (NBI) of Orange Bank is recognized in other operating income (see Note 4.2 to the consolidated financial statements).

→ 2018 vs 2017

In 2018, the revenue of the Orange group totaled 41,381 million euros, an increase of 1.3% in data on a historical basis and of 1.3% on a comparable basis compared with 2017.

In data on a historical basis, the 1.3% increase in Group revenue between 2017 and 2018, an increase of 522 million euros, includes:

- the negative effect of foreign exchange fluctuations totaling €189 million, chiefly attributable to changes in the value of the US dollar (for 84 million euros), the Egyptian pound (for 27 million euros), the Jordanian dinar (for 18 million euros) and the Argentine peso (for 10 million euros) against the euro;
- which is more than offset:
 - by the positive effects of changes in the consolidation scope and other changes amounting to 167 million euros, including the effects of the takeover of Business & Decision on June 5, 2018, and the acquisitions of Basefarm on August 14, 2018 and Enovacom on February 21, 2018,
 - and organic change on a comparable basis, representing a 544 million euros increase in revenue.

In data on a comparable basis, the 1.3% or 544 million euros increase in Group revenue between 2017 and 2018 was attributable primarily to:

- the 250 million euros increase in revenue in Africa & Middle East countries (a 5.1% rise), driven by growth in 13 of the 17 countries consolidated as of December 31, 2018, with strong performances from the Sonatel subgroup (mainly in Guinea, Senegal and Mali), Egypt, the Côte d'Ivoire subgroup (mainly Burkina Faso), Morocco and Congo (DRC). The increase in mobile only services reflects the momentum in data services and Orange Money, partially offset by the decline in wholesale - particularly international wholesale - and incoming mobile traffic;
- the 163 million euros increase in revenue in France (an increase of 0.9%). This change was mainly due to (i) the favorable effect of including digital reading offers, (ii) the growth of convergence services, driven by both the increase in the customer base and the rise in the Convergent ARPO over 12 months, and, (iii) to a lesser extent, the increase in mobile equipment sales, (iv) partially offset

by the downward trend in fixed narrowband only services (conventional telephony), the contraction in mobile only services (mainly linked to the migration of contract offers to convergent offers and the structural decline in prepaid offers), and the decrease in wholesale (the growth in FTTH access only partially offsetting the anticipated fall in revenue from national roaming and unbundling);

- the 117 million euros increase in revenue in Spain (up 2.2%). This change was mainly due to (i) the development of convergence services, which benefited from the increase in the Convergent ARPO over 12 months (driven by the increase in access to very high-speed broadband and content offers) and growth in the customer base, and (ii) the increase in wholesale (the decline in incoming mobile traffic being more than offset by the growth in very high-speed broadband, other fixed revenue and the increase in national roaming);
- and the 94 million euros increase in revenue in Europe (a rise of 1.7%), mainly due to:
 - (i) strong growth in convergence services in Poland, Belgium and Romania, and to a lesser extent, (ii) the rise in mobile equipment sales in Romania, and (iii) growth in mobile wholesale (national roaming, incoming mobile traffic) and integration services and information technologies in Poland,
 - partially offset (i) by the slowdown in fixed only services (downward trend in conventional telephony) and equipment sales in Poland, (ii) the decrease in mobile only services in Poland and Romania, mainly due to migration toward convergence offers, and (iii) by the slowdown in mobile virtual network operators (MVNOs) services in Belgium.

These positive items were partially offset by:

- the 99 million euros fall in revenue from services to International Carriers & Shared Services (a 6.1% reduction), primarily due to more muted international carrier business (decline in the voice market for Africa and the Maghreb);
- and, to a lesser extent, the 16 million euros fall in revenue from services to Enterprises. Between the two periods, the contraction in fixed only services (voice and data services) and in mobile equipment sales are almost entirely offset by growth in IT & integration services.

3.1.2.1.2 Customers

Customers (at December 31, in thousands, at the end of the period)	2019	2018 data on a comparable basis (1)	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Number of convergent customers	10,762	10,412	10,890	3.4%	(1.2)%	10,319
Number of mobile services customers (2)	207,211	201,148	203,618	3.0%	1.8%	202,329
o/w: Customers with						
convergent offers	19,154	18,187	18,671	5.3%	2.6%	17,292
Customers with						
mobile only offers	188,057	182,960	184,947	2.8%	1.7%	185,037
o/w: Contract customers	74,205	70,783	70,840	4.8%	4.7%	74,115
Prepaid customers	133,006	130,365	132,778	2.0%	0.2%	128,214
Number of fixed broadband						
service customers	20,685	20,144	20,145	2.7%	2.7%	19,386
o/w: Customers with very						
high-speed broadband access	7,792	6,343	6,345	22.8%	22.8%	4,762
o/w: Customers with						
convergent offers	10,762	10,412	10,890	3.4%	(1.2)%	10,319
Customers with fixed only offers	9,923	9,732	9,256	2.0%	7.2%	9,067
Number of fixed telephony customers	37,809	40,199	40,199	(5.9)%	(5.9)%	41,706
Group total (2) (3)	265,705	261,490	263,962	1.6%	0.7%	263,423

See Section 3.1.5.1 Data on a comparable basis

Excluding customers of Mobile Virtual Network Operators (MVNOs).

Number of customers of mobile services, fixed-line broadband and narrowband services and fixed telephony customers.

3.1.2.2 Group operating results

3.1.2.2.1 EBITDAaL (adjusted EBITDA until December 31, 2018)

(at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
EBITDAaL	12,860	12,762	NA	0.8%	NA	NA
Telecom activities	13,019	12,907	NA	0.9%	NA	NA
EBITDAaL/Revenue						
from telecoms activities	30.8%	30.7%	NA			NA
Orange Bank activities	(160)	(147)	NA	(8.5)%	NA	NA
Historical indicators (up to December 3 Adjusted EBITDA	NA	NA NA	13,005	NA NA	NA NA	12,680
Telecom activities Adjusted EBITDA/Revenue	NA	NA	13,151	NA	NA	12,741
of telecoms activities	NA	NA	31.8%			31.2%
Orange Bank activities	NA	NA	(147)	NA	NA	(62)

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

This section includes (i) the transition from revenue to Group EBITDAaL by type of expense, after presentation adjustments, as shown in Section 3.1.5.2 EBITDAaL, for 2019 and 2018 in data on a comparable basis, and (ii) the transition from revenue to Group adjusted EBITDA by type of expense, after presentation adjustments, as shown in Section 3.1.5.8.1 Adjusted EBITDA and Reported EBITDA, for 2018 in data on a historical basis, and for 2017 in data on a historical basis and on a comparable basis. See also Note 1 to the consolidated financial statements.

(at December 31, in millions of euros)	2019	2018 data on a comparable basis (1)	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	42,238	41,986	41,381	0.6%	2.1%	40,859
External purchases (2)	(17,897)	(17,710)	(18,563)	1.1%	NA	(18,381)
Other operating income and expenses (2)(3)	193	102	84	89.2%	131.1%	165
Labor expenses (2) (3)	(8,470)	(8,454)	(8,268)	0.2%	2.4%	(8,200)
Operating taxes and levies (2)(3)	(1,827)	(1,812)	(1,809)	0.8%	1.0%	(1,851)
Gains (losses) on disposal of fixed assets,						
investments and activities (3) (4)	-	-	180	-	-	88
Depreciation and amortization						
of financed assets (5)	(14)	-	NA	-	NA	NA
Depreciation and amortization	, ,					
of right-of-use assets (5)	(1,239)	(1,232)	NA	0.6%	NA	NA
Impairment of financed assets (5)	-	=	NA	-	NA	NA
Impairment of right-of-use assets (5)	(O)	(O)	NA	0.0%	NA	NA
Interests on debts related	` ,	, ,				
to financed assets (5)	(1)	-	NA	-	NA	NA
Interest on lease liabilities (5)	(122)	(119)	NA	3.0%	NA	NA
Adjusted EBITDA	,	,				
(until December 31, 2018) (4)	NA	NA	13,005	NA	NA	12,680
EBITDAaL (4)	12,860	12,762	NA	0.8%	NA	NA

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

In 2019, Orange Group's EBITDAaL amounted to 12,860 million euros (comprising 13,019 million euros from telecoms activities and a 160 million euros loss posted by the Orange Bank business). The ratio of EBITDAaL of telecoms activities to revenue was 30.8% in 2019, up 0.1 points in data on a comparable basis compared with 2018.

Between 2018 and 2019, Group EBITDAaL included (i) currency gains of 59 million euros, mainly due to the change in the US dollar and Egyptian pound against the euro, (ii) the positive effects of consolidation scope changes and other changes amounting to 35 million euros, and (iii) the negative effects of the application of IFRS 16 and the change in operational performance indicators of 337 million euros (see Section 3.1.5.1 Data on a comparable basis).

 ⁽²⁾ See Section 7.2.1 Financial glossary.
 (3) Adjusted data (see Section 3.1.5 Financial indicators not defined by IFRS and Note 1 to the consolidated financial statements).

⁽⁴⁾ Proceeds from the disposal of fixed assets are presented in Proceeds from the disposal of fixed assets, investments and businesses (see Notes 3.1 and 8.1 to the consolidated financial statements). In 2019 and 2018 in data on a comparable basis, it was excluded from EBITDAAL. In 2018 in data on a historical basis, and in 2017 in data on a historical and comparable basis, it was included in the calculation of adjusted EBITDA (see Changes in operational performance indicators in 2019 in the heading of Section 3.1.5 Financial indicators not defined

⁽⁵⁾ Depreciation and amortization, impairment and interest on right-of-use assets and financed assets were not applied in 2018 and 2017 in data on a historical basis, due to the application of IFRS 16 as from January 1, 2019 using the simplified retrospective method without restatement of historical comparative periods (see Note 2.3 to the consolidated financial statements).

Further, between 2018 and 2019, EBITDAaL included the negative effect, between the two periods, of promotional offers on e-readers amounting to 90 million euros, due to positive effects being smaller in 2019 than in 2018 (at 68 million euros in 2019 compared with 158 million euros in 2018).

In data on a comparable basis, the 0.8% or 99 million euros increase in Group EBITDAaL between 2018 and 2019 was mainly due to:

- the 0.6% or 252 million euros increase in revenue, despite the negative effects, between the two periods, of promotions on e-readers;
- the 3.9% or 185 million euros decrease in service fees and inter-operator costs (see Section 7.2.1 Financial glossary), primarily resulting from (i) the decrease in interconnection costs for international wholesale, and secondarily, in Africa & Middle East and Europe, reflecting the decline in wholesale in those countries, and (ii) to a lesser extent, the decrease in network charges in Spain (due to the roll-out of fiber optics);
- the 89.2% or 91 million euros rise in other adjusted operating income and expenses (see Section 7.2.1 Financial glossary), due to (i) the increase in other adjusted operating income (reinvoicing as a result of network sharing, recovery costs, effects of various litigations, insurance indemnities for damage), essentially in Spain and Europe, (ii) partly offset by the increase in other adjusted operating expenses, mostly as a result of depreciation and losses on customer receivables:
- and the 0.8% or 62 million euros drop in commercial expenses, cost of equipment and content (see Section 7.2.1 Financial glossary), due to (i) lower commercial expenses and cost of equipment, mainly in France (as a result of the dramatic slowdown in equipment sales), (ii) partially offset by increased content cost, essentially in Spain and primarily due to the higher cost of soccer rights (see Section 1.3 Significant events).

These positive items were partially offset by:

- 14.1% or 338 million euros growth in other external purchases (see Section 7.2.1 Financial glossary), mainly in France (purchases for resale relating to the operation of public initiative networks), see Section 1.3 Significant events and, to a lesser extent, in Poland (in line with the development of integration services and information technologies, and the rise in energy sales);
- the 3.0% or 96 million euros increase in other IT and network charges (see Section 7.2.1 Financial glossary), mainly for Enterprise services, due to the increase in integration and IT service business, and to a lesser degree in France and countries in Africa and Middle East (extension of 4G network coverage and transformation projects);
- and to a lesser degree:
 - the 0.2% or 16 million euros rise in adjusted labor expenses (see Section 7.2.1 Financial glossary). Between the two periods, the effect of the 1.7% decrease in the average employee headcount (full-time equivalent, see Section 7.2.1 Financial glossary), representing a decrease of 2,279 full-time equivalent employees (mainly in France and Poland), partially offset the effects of wage policies in France and abroad,
 - the 0.8% or 15 million euros increase in adjusted operating taxes and levies (see Section 7.2.1 Financial glossary), essentially in African & Middle East countries (notably as a result of increased activity and the counter effect of the recognition, in 2018, of provision reversals due to cancellation of tax risks), partially offset by the decrease in France,

 and the recognition, in 2019, of a 14 million euros expense for depreciation of financed assets. In 2019, financed assets included the set-up boxes in France, which are financed by an intermediary bank and meet the standard criterion of a tangible asset according to IAS 16 (see Note 8.5 to the consolidated financial statements).

→ 2018 vs 2017

In 2018, Orange Group adjusted EBITDA amounted to 13,005 million euros (breaking down into 13,151 million euros for telecoms activities and a loss of 147 million euros for Orange Bank activities), up 2.6% in data on a historical basis and 2.7% on a comparable basis compared with 2017. The ratio of adjusted EBITDA of telecoms activities to revenue was 31.8% in 2018, up 0.6 percentage points in data on a historical basis and 0.6 percentage points on a comparable basis compared with 2017.

Between 2017 and 2018, adjusted EBITDA benefited from the positive 111 million euros effect of the inclusion of e-reader offers, due to a positive effect that was larger in 2018 than in 2017 (at 158 million euros in 2018, compared with 47 million euros in 2017).

In data on a historical basis, the 2.6% or 325 million euros rise in Group adjusted EBITDA between 2017 and 2018 reflected:

- the negative effect of foreign exchange fluctuations, which amounted to 28 million euros, mainly due to the performance of the U.S. dollar against the euro;
- which was more than offset by (i) the favorable effect of changes in the scope of consolidation and other changes, for 8 million euros, and (ii) organic growth on a comparable basis, for an increase of 345 million euros in adjusted EBITDA.

In data on a comparable basis, the 2.7% increase in the Group's adjusted EBITDA between 2017 and 2018 resulted mainly from:

- 1.3% or 544 million euros growth in revenue, boosted by the inclusion of digital reading offers;
- the 3.2% or 162 million euros reduction in service fees and inter-operator costs, resulting (i) mainly from the reduction in interconnection fees for services to international carriers (linked to the downturn in traffic), and also from the fall in interconnection fees in Spain (especially with the reduction in national mobile termination rates in February 2018) and (ii) to a lesser extent, lower enterprise service network fees, partially offset by growth linked to the development of cable offers in Belgium;
- the 107.0% or 93 million euros rise in adjusted proceeds from the disposal of fixed assets, investments and businesses, mostly for shared services, in Spain and Poland (mainly as a result of the disposals in 2018 to optimize real-estate assets);
- the 2.0% or 35 million euros fall in adjusted operating taxes and levies, mainly in Africa & Middle East countries due to reversals of provisions following the expiration of tax risks in 2018.

These positive items were partially offset by:

 5.4% or 163 million euros growth in other external purchases, particularly in France (purchases for resale related to the operation of networks managed by local authorities), in Africa & Middle East countries (real estate fees linked to network development and overheads), in Poland (reflecting trends in energy sales) and for enterprise services;

- the 1.8% or 127 million euros increase in commercial expenses, equipment costs and content costs, primarily due to (i) the increase in soccer rights in Spain, in line with commercial momentum, (ii) agreements, extensions and renewals of partnerships relating to content in 2017 and 2018, allowing offer enhancement, essentially in Europe and France, and (iii) the rise in commercial expenses and cost of equipment, chiefly in the Africa & Middle East countries (linked for the most part to the business growth of Orange Money) and in Romania (in line with higher mobile equipment sales);
- the 3.8% or 116 million euros increase in other network expenses and IT expenses, mainly in Africa & Middle East countries (primarily due to network development, particularly 4G sites);
- and the 49.3% or 81 million euros decrease in other adjusted operating income and expenses, mostly due to (i) the decrease in

Net Banking Income (NBI, due to the costs of acquiring new Orange Bank customers), and (ii) the increase in depreciation and losses on customer receivables, (iii) partially offset by improvements in the operational foreign exchange effect.

With a 0.1% or 4 million euros increase, adjusted labor expenses remained broadly stable. Between the two periods, the effect of the 2.5% fall in the average number of employees (full-time equivalent), representing a decrease of 3,533 full-time equivalent employees (mainly in France and Poland), offset (i) the effects of wage policies in France and abroad, and (ii) the higher share-based payment expense (mainly due to the recognition in 2018 of expenses relating to the "Orange Vision 2020" and "Long Term Incentive Plan (LTIP) 2018-2020" free share award plans, see Note 6.3 to the consolidated financial statements).

3.1.2.2.2 Operating income

(at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Operating Income	5,927	4,829	4,778
Telecom activities	6,112	4,997	4,870
Orange Bank activities	(186)	(169)	(93)

This section presents (i) the reconciliation from Group EBITDAaL to operating income by type of expense, after presentation adjustments, as shown in Section 3.1.5.2 EBITDAaL, for 2019 and 2018 in data on a comparable basis, and (ii) the reconciliation from adjusted EBITDA to Group operating income by type of expense, after presentation adjustments, as shown in Section 3.1.5.8.1 Adjusted EBITDA and reported EBITDA, for 2018 in data on a historical basis and for 2017 on a comparable basis. See also Note 1 to the consolidated financial statements.

(at December 31, in millions of euros)	2019	2018	2018	% change	% change	2017
		data on a	data on a	data on a	data on a	data on a
		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
EBITDAaL ⁽²⁾	12,860	12,762	NA	0.8%	NA	NA
Adjusted EBITDA						
(until December 31, 2018 (2))	NA	NA	13,005	NA	NA	12,680
Significant litigations	(49)	(34)	(33)	-	-	(271)
Specific labor expenses	(23)	(812)	(812)	-	-	(374)
Fixed assets, investments and						
businesses portfolio review (2)	277	182	17	-	-	(5)
Restructuring programs costs	(165)	(193)	(189)	-	-	(164)
Acquisition and integration costs	(24)	(11)	(11)	-	-	(3)
Reported EBITDA						
(until December 31, 2018)	NA	NA	11,977	NA	NA	11,863
Depreciation and amortization						
of fixed assets	(7,110)		(7,047)		-	(6,846)
Remeasurement to fair value of previously						
held equity interests	-		-		-	(27)
Reclassification of translation adjustment						
from liquidated entities	12		1		-	(8)
Impairment of goodwill	(54)		(56)		-	(20)
Impairment of fixed assets	73		(49)		-	(190)
Share of profits (losses) of associates						
and joint ventures	8		3		-	6
Elimination of interests on debts related						
to financed assets (3)	1		-		-	-
Elimination of interest on lease liabilities (3)	122		-		-	-
Operating Income	5,927		4,829		22.7%	4,778

See Section 3.1.5.1 Data on a comparable basis.

Proceeds from the disposal of fixed assets are presented in Proceeds from the disposal of fixed assets, investments and businesses (see Notes 3.1 and 8.1 to the consolidated financial statements). In 2019 and 2018 in data on a comparable basis, it was excluded from EBITDAaL. In 2018 in data on a historical basis, and in 2017 in data on a historical and comparable basis, it was included in the calculation of adjusted EBITDA (see Changes in operational performance indicators in 2019 in the heading of Section 3.1.5 Financial indicators not defined

Items recognized in the financial result. Interest on lease liabilities and liabilities relating to financed assets was not applicable in 2018 and 2017 in data on a historical basis, due to the application of IFRS 16 on January 1, 2019, using the simplified retrospective method without restatement of historical comparative periods (see Note 2.3 to the consolidated financial

→ 2019 vs 2018

In 2019, Orange Group operating income amounted to 5,927 million euros (breaking down into 6,112 million euros for the telecoms activities and a loss of 186 million euros for the Orange Bank activities), compared with 4,829 million euros in 2018 in data on a historical basis.

In data on a historical basis, the 22.7% or 1,098 million euros rise in Group operating income between 2018 and 2019 reflected:

- the 789 million euros decrease in specific labor expenses, principally as a result of recognition of the following:
 - a 25 million euros expense in 2019 for the French part-time for seniors plans (TPS) with proceeds of 6 million euros (see Notes 1.8 and 6 to the consolidated financial statements) and 31 million euros in related premiums,
 - a 812 million euros expense in 2018 for the French part-time for seniors plans (TPS) for 773 million euros (see Notes 1.8 and 6 to the consolidated financial statements) and 39 million euros in related premiums. The expense recorded in 2018 mainly relates to the effect of extending the 2015 French part-time for seniors plans (TPS) for three additional years;
- the 193 million euros increase as a result of the combined effect of
 (i) the 99 million euros rise in EBITDAaL in data on a comparable
 basis, as well as (ii) the positive effects on EBITDAaL of foreign
 exchange fluctuations (59 million euros) and changes in the
 consolidation scope and other changes (35 million euros);
- a 122 million euros improvement in impairment losses on goodwill and fixed assets (see Notes 7 and 8.3 to the consolidated financial statements), relating to the recognition of:
 - a favorable reassessment of 73 million euros in 2019, essentially concerning Egypt for 89 million euros. In Egypt, an 89 million euros provision reversal on fixed assets reflects the country's improved economic situation,
 - a 49 million euros impairment in 2018, primarily for Niger for 43 million euros. In Niger, the telecoms market sustained a loss of value in a difficult business environment. The company's economic and financial position led it, as a precaution, to recognize a fixed-asset impairment to cover Orange's exposure according to the best current estimate;
- and the 80 million euros increase in proceeds from the disposal of fixed assets, investments and businesses (see Note 3.1 to the consolidated financial statements), essentially due to higher proceeds from fixed-asset disposals (see Note 8.1 to the consolidated financial statements), in connection with real-estate asset optimization programs pertaining to Shared Services and to a lesser degree to Spain and Poland;
- partly offset by the 63 million euros increase in depreciation and amortization of fixed assets (see Note 8.2 to the consolidated financial statements), principally due to (i) increased investments in recent years, notably regarding the roll-out of very high-speed broadband networks (fiber optic and 4G) in European countries, particularly in France, and (ii) the roll-out of mobile networks and the amortization of new 4G licenses in countries in Africa & the Middle East.

→ 2018 vs 2017

In 2018, Orange Group operating income amounted to 4,829 million euros (breaking down into 4,997 million euros for telecoms activities and a loss of 169 million euros for Orange Bank activities), compared with 4,778 million euros in 2017 in data on a historical basis.

In data on a historical basis, the 1.1% or 51 million euros rise in Group operating income between 2017 and 2018 reflected:

- the 325 million euros increase in adjusted EBITDA;
- a 238 million euros decrease in net expense on the principal litigations, relating to the reassessment of risk on various disputes, with a net expense of 33 million euros in 2018, compared with 271 million euros in 2017;
- a 105 million euros reduction in impairment losses on goodwill and fixed assets (see Notes 7 and 8.3 to the consolidated financial statements), relating to the recognition of:
 - 105 million euros in impairment in 2018, primarily for Jordan for 56 million euros and Niger for 43 million euros. In Jordan, the goodwill impairment mainly reflects the effects of an uncertain political and economic climate and strong competitive pressure on fixed and mobile data markets. In Niger, the telecoms market sustained a loss of value in a difficult business environment. The company's economic and financial position led it, as a precaution, to recognize a fixed-asset impairment to cover Orange's exposure according to the best current estimate,
 - 210 million euros in impairment in 2017, primarily for the Congo (DRC) for 120 million euros, Niger for 52 million euros, and Luxembourg for 19 million euros. In the Democratic Republic of the Congo (DRC), the impairment loss reflected a still-uncertain political and economic context, a clear decline in purchasing power, with its effects on consumption of telecommunications products and services, and continued regulatory pressure. In Niger, the impairment loss signaled an uncertain political and economic context and the effects of strong tax and regulatory pressure. In Luxembourg, the impairment loss was an indication of strong competitive pressure;
- and, to a lesser degree, (i) the counter effect of the recognition, in 2017, of a 27 million euros loss as a result of the takeover of Groupama Banque (now Orange Bank) in 2016, and (ii) the 22 million euros increase from the investments and businesses portfolio review, with net income of 17 million euros in 2018, compared to a net expense of 5 million euros in 2017.

These positive items were partially offset by:

- the 438 million euros increase in specific labor expenses, principally as a result of the recognition of:
 - a 812 million euros expense in 2018 for the French part-time for seniors plans (TPS) for 773 million euros (see Notes 1.8 and 6 to the consolidated financial statements) and 39 million euros in related premiums. The expense recorded in 2018 mainly relates to the effect of extending the 2015 French part-time for seniors plans (TPS) for three additional years,
 - a 395 million euros expense in 2017 for the French part-time for seniors plans (TPS) for 310 million euros (see Notes 1.8 and 6 to the consolidated financial statements) and 85 million euros in related premiums;

- the 201 million euros increase in depreciation and amortization of fixed assets (see Note 8.2 to the consolidated financial statements), mostly in France and Spain, due primarily to (i) increased investments in recent years, particularly in relation to the very high-speed broadband network roll-out (fiber optic and 4G), (ii) accelerated depreciation resulting from the scheduled shutdown of a platform
- in France, and (iii) the increase in depreciation relating to leased handsets, *Livebox*, and equipment installed on customer premises;
- and, to a lesser degree, the 33 million euros increase in restructuring and integration costs (see Note 5.3 to the consolidated financial statements) relating primarily to employee departure plans and the streamlining of the real estate portfolio.

3.1.2.3 Group net income

(at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Operating Income	5,927	4,829	4,778
Cost of gross financial debt excluding financed assets	(1,108)	(1,341)	(1,274)
Interests on debts related to financed assets (1)	(1)	-	-
Gains (losses) on assets contributing to net financial debt	5	9	11
Foreign exchange gain (loss)	76	(4)	(63)
Interest on lease liabilities (1)	(122)	-	-
Other net financial expenses	15	25	(17)
Effects resulting from BT stake	(119)	(51)	(372)
Finance costs, net	(1,254)	(1,362)	(1,715)
Income tax	(1,447)	(1,309)	(1,052)
Consolidated net income of continuing operations	3,226	2,158	2,011
Consolidated net income of discontinued operations (EE)	-	-	29
Consolidated net income	3,226	2,158	2,040
Net income attributable to owners of the parent company	3,006	1,954	1,843
Non-controlling interests	220	204	197

⁽¹⁾ Interest on lease liabilities and liabilities relating to financed assets was not applicable in 2018 and 2017 in data on a historical basis, due to the application of IFRS 16 on January 1, 2019, using the simplified retrospective method without restatement of historical comparative periods (see Note 2.3 to the consolidated financial statements).

→ 2019 vs 2018

The consolidated net income of the Orange group totaled 3,226 million euros in 2019, compared with 2,158 million euros in 2018, an increase of 1,068 million euros. This increase was chiefly attributable to:

- the 1,098 million euros rise in operating income;
- and the 108 million euros improvement in finance costs, net (see Note 12.2 to the consolidated financial statements), primarily due to:
 - a combination of the 233 million euros improvement in the gross cost of debt excluding financed assets and the 80 million euros increase in foreign exchange gains, as a result of (i) the 155 million euros effect of derivatives (cross currency swaps) arranged by the Group to hedge its financial exposure to subordinated notes issued in pound sterling, for which the remeasurement in respect of the foreign exchange risk was not recognized, and (ii) the 51 million euros decrease in interest on bond debt after the hedging effect,
 - partly offset (i) by the recognition, in 2019, of 122 million euros in interest on lease liabilities as a result of the application of IFRS 16 on January 1, 2019 (see Note 2.3 to the consolidated financial statements), and (ii) the 68 million euros change in effects relating to the stake in BT Group, with the recognition of a 119 million euros expense in 2019, compared to a 51 million euros expense in 2018 (see Section 1.3 Significant events and Note 12.7 to the consolidated financial statements);
- partly offset by the 138 million euros rise in the income tax expense (see Note 10.2 to the consolidated financial statements), primarily

a result of the counter-effect of the recognition, in 2018, of a deferred tax expense asset due to the 2015 French part-time for seniors plans (TPS) being extended in 2018 for a further three years.

Non-controlling interests amounted to 220 million euros in 2019, compared with 204 million euros in 2018 (see Note 14.6 to the consolidated financial statements). After taking into account non-controlling interests, the net income attributable to owners of the parent company totaled 3,006 million euros in 2019, compared with 1,954 million euros in 2018, constituting a rise of 1,052 million euros.

→ 2018 vs 2017

The consolidated net income of the Orange group totaled 2,158 million euros in 2018, compared with 2,040 million euros in 2017, an increase of 118 million euros. This increase was chiefly attributable to:

- the 353 million euros improvement in net finance costs (see Note 12.2 to the consolidated financial statements), most of which came from the change in effects relating to the 321 million euros investment in BT Group, with the recognition of a 51 million euros expense in 2018, compared with a 372 million euros expense in 2017 (see Note 12.7 to the consolidated financial statements);
- and the 51 million euros rise in operating income;
- partially offset by the 257 million euros increase in income tax (see Note 10.2 to the consolidated financial statements):
 - the counter-effect in France in 2017 of (i) tax income of 304 million euros relating to the dispute over the 3% dividend tax, (ii) partially offset by the additional current tax expense of 78 million euros due to the exceptional surtax applicable to fiscal year 2017,

- and the recognition in Spain of a deferred tax expense of 86 million euros in 2018 to reflect the negative effect of strong competitive pressure on the recoverable amount of the deferred tax assets recognized.

Non-controlling interests amounted to 204 million euros in 2018, compared with 197 million euros in 2017 (see Note 14.6 to the consolidated financial statements). After taking into account non-controlling interests, the net income attributable to owners of the

parent company totaled 1,954 million euros in 2018, compared with 1,843 million euros in 2017, constituting a rise of 111 million euros.

3.1.2.4 Group comprehensive income

The transition from consolidated net income to consolidated comprehensive income is described in the consolidated statement of comprehensive income in the consolidated financial statements.

3.1.2.5 Group capital expenditures

Investments in property, plant and equipment and intangible assets (2) (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
eCAPEX Elimination of proceeds from sales of property, plant and equipment	7,293	7,248	NA	0.6%	NA	NA
and intangible assets (3)	610	226	NA	169.6%	NA	NA
CAPEX (until December 31, 2018)	NA	NA	7,442	NA	NA	7,209
Telecommunications licenses	519	201	200	157.7%	159.2%	318
Financed assets (4)	144	-	NA	-	NA	NA
Investments financed through finance leases	NA	NA	136	NA	NA	43
Group total	8,565	7,676	7,778	11.6%	12.1%	7,570

- (1) See Section 3.1.5.1 Data on a comparable basis
- See Notes 1.4 and 8 to the consolidated financial statements.
- (3) Elimination of proceeds from sales of property, plant and equipment included in Economic CAPEX (eCAPEX).
 (4) In 2019, financed assets included set-up boxes in France which are financed by an intermediary bank and meet the standard criterion of a tangible asset according to IAS 16.

Between 2018 and 2019, the increase in the Group's tangible and intangible investments was mainly due to (i) higher spending on telecoms licenses, and (ii) the increase in tangible and intangible investments excluding telecoms licenses, largely as a result of rolling out very high-speed fixed broadband networks (FTTH) in France (see Section 1.3 Significant events). Between 2017 and 2018, the increase

in the Group's investments in property, plant and equipment and intangible assets was due to the higher CAPEX and, to a lesser extent. to the increase in investments financed through finance leases, partially offset by the fall in acquisitions of telecommunication licenses.

Financial investments (see Section 7.2.1 Financial glossary) are described in Section 3.1.4 Cash flow, financial debt and equity.

3.1.2.5.1 Capital expenditure

3.1.2.5.1.1 Economic CAPEX (CAPEX until December 31, 2018)

(at December 31, in millions of euros)	2019	2018 data on a comparable basis (1)	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
eCAPEX	7,293	7,248	NA	0.6%	NA	NA
Telecom activities eCAPEX/Revenue	7,265	7,212	NA	0.7%	NA	NA
from telecoms activities	17.2%	17.2%	NA			NA
Orange Bank activities	28	36	NA	(23.4)%	NA	NA
Historical indicators (up to December 31, 201	8)					
CAPEX	NA	NA	7,442	NA	NA	7,209
Telecom activities	NA	NA	7,406	NA	NA	7,148
CAPEX/Revenue of telecoms activities	NA	NA	17.9%			17.5%
	NA	NA	36	NA	NA	61

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

In 2019, the Orange Group's Economic CAPEX amounted to 7,293 million euros (including 7,265 million euros in the telecom activities and 28 million euros in the Orange Bank business). The ratio of Economic CAPEX to revenue from telecoms activities was 17.2% in 2019, stable compared to 2018 in data on a comparable basis. In line with the outlooks announced by the Group, Economic CAPEX including the network sharing agreement with Vodafone in Spain (see Section 1.3 Significant events) rose by around 50 million euros compared with 2018 (+44 million euros) in data on a comparable basis, and Economic CAPEX excluding the network sharing agreement with Vodafone in Spain fell slightly (-12 million euros) compared to 2018 in data on a comparable basis.

Between 2018 and 2019, the Group's Economic CAPEX included (i) the positive effects of exchange rate fluctuations, amounting to 26 million euros, (ii) the positive effects of changes in the consolidated scope and other changes, amounting to 12 million euros, and (iii) the negative effects of the application of IFRS 16 and changes in operational performance indicators amounting to 232 million euros (see Section 3.1.5.1 Data on a comparable basis).

In data on a comparable basis, the 0.6% or 44 million euros increase in Group Economic CAPEX between 2018 and 2019 was attributable mainly to:

- increased investments in very high-speed broadband fixed networks (fiber, see Section 1.3 Significant events), mainly in France and, to a lesser degree, in the countries of Africa & Middle East and Central Europe, partially offset by lower Economic CAPEX in Spain. Between the two periods, the Group's investments benefited from external financing (joint financing received from other carriers, subsidies), mainly in France, Spain and Poland. As of December 31, 2019, 39.5 million households had connectivity to very high-speed broadband (an increase of 21.5% over one year), including 16.3 million in France, 14.9 million in Spain, 4.2 million in Poland, and 2.4 million in Romania (following the mutual network sharing agreement with Telekom Romania);
- partially offset by (i) the increase in fixed-asset disposals in Spain as a result of the disposal of non-strategic mobile sites (see Section 1.3 Significant events), (ii) lower Economic CAPEX in network real-estate, stores and others, essentially due to increased disposals of fixed assets as part of the real-estate optimization drive, specifically for shared services and in Poland, and (iii) lower Economic CAPEX relative to leased handsets, Liveboxes and other equipment installed in customer homes and on customer premises, essentially in France, and to a lesser degree, in Poland and for enterprise services.

→ 2018 vs 2017

In 2018, the CAPEX of the Orange group amounted to 7,442 million euros (including 7,406 million euros for telecoms activities and 36 million euros for Orange Bank activities), up 3.2% in data on a historical basis and 3.5% on a comparable basis compared with 2017. The ratio of CAPEX to revenue of telecoms activities was 17.9% in 2018, up 0.4 points in data on both a historical and a comparable basis compared with 2017.

In data on a historical basis, the 3.2% or 233 million euros rise in Group CAPEX between 2017 and 2018 included:

 the negative effect of foreign exchange fluctuations for 26 million euros; which was more than offset by (i) the positive effect of changes in the scope of consolidation and other changes, for 8 million euros, and (ii) organic growth on a comparable basis, or an increase of 251 million euros in CAPEX.

In data on a comparable basis, the 3.5% or 251 million euros increase in Group CAPEX between 2017 and 2018 was attributable mainly to:

- higher investments in very high-speed fixed broadband (fiber) networks, mainly in France and, to a lesser extent, in Africa & Middle East countries (notably Jordan, Morocco and Senegal) and in Poland. In 2018, Group capital expenditure benefited from co-financing from other operators, mostly in France and Spain. As of December 31, 2018, 32.5 million households had connectivity to very high-speed broadband (an increase of 22.4% year-on-year), including 13.8 million in Spain, 11.8 million in France, 3.4 million in Poland, and 2.3 million in Romania (following the mutual network sharing agreement with Telekom Romania);
- higher investments in very high-speed broadband mobile networks (4G), mainly in France and, to a lesser extent, Africa & Middle East countries (notably Mali, Morocco and Senegal), and in Poland. As of December 31, 2018, 4G coverage rates reached 98.6% of the population in France, 96.9% in Spain, 99.8% in Poland, 99.7% in Belgium, 97.4% in Luxembourg, 96.9% in Romania, 94.0% in Slovakia, and 98.0% in Moldova. In Africa & Middle East, 12 countries (excluding associates and joint ventures) had 4G coverage at the end of December 2018;
- and, to a lesser extent, (i) the increase in investments in IT and customer service platforms, mainly relating to transformation projects in Spain, shared services, and the redesign of information systems in Africa & Middle East countries, and (ii) additional investments in network real estate, stores and other assets, mostly in Africa & Middle East countries and for shared services (linked to the adaptation and modernization of the real estate portfolio);
- partially offset by (i) the fall in investments in 2G/3G mobile networks after significant capital expenditure in this area in recent years, notably in Africa & Middle East countries, and (ii) declining investment in leased terminals, *Livebox* and equipment installed on customer premises, due in particular to the optimization of *Livebox* costs in France and reduced customer project requirements for enterprise services.

3.1.2.5.1.2 Telecommunications licenses

In 2019, telecoms licenses (see Note 8.4 to the consolidated financial statements) amounted to 519 million euros, mostly relating to (i) Spain for 298 million euros, (ii) Burkina Faso for 119 million euros, with the acquisition of a technologically-neutral 2G/3G/4G license, and (ii) Guinea for 82 million euros, including the renewal of the current license with additional spectral resources and the acquisition of a 4G license, and the acquisition of a new technologically-neutral 2G/3G/4G license.

In 2018, acquisitions of telecommunication licenses totaled 200 million euros in **data on a historical basis** and mainly involved (i) Spain for 149 million euros (with the acquisition of a 5G license for 142 million euros), (ii) Congo (DRC) for 21 million euros (acquisition of a 4G license), and Senegal for 21 million euros (first tranche of the acquisition of additional 4G frequency blocks).

In 2017, acquisitions of telecommunication licenses amounted to 318 million euros in **data on a historical basis** and mainly involved (i) Mali for 152 million euros (acquisition of a universal license renewing

existing licenses and including a 4G license), (ii) Senegal for 76 million euros (second tranche of the acquisition of a universal license renewing existing licenses and including a 4G license), and (iii) Jordan for 49 million euros (acquisition of additional 3G frequency blocks).

3.1.2.5.2 Investment commitments

Investment commitments are set out in Note 15 to the consolidated financial statements.

3.1.2.5.3 Investment projects

As part of the Engage 2025 strategic plan (see Section 1.3 Significant events), the Group aims to overhaul the operator's role, by capitalizing on its lead in networks thanks to increased connectivity (FTTH and 5G), and consolidating its leadership in more open and enhanced infrastructures. The Group will continue its efforts to optimize investments, and is aiming for an Economic CAPEX to revenue from telecoms activities ratio of around 15% by 2023 (compared to 17.2% in 2019).

See Section 1.2.2 The Orange Group strategy.

3.1.3 Analysis by operating segment

Changes in operating performance in 2019

The Group applies IFRS 16 "Leases" as from 1 January 2019 using the simplified retrospective method, without restatement of historical comparative periods (see Note 2.3 to the consolidated financial statements). Therefore, data on a comparable basis for the 2019 and 2018 fiscal years is presented in line with the accounting standard IFRS 16. Data is presented on a historical basis for the 2018 and 2017 fiscal years, and on a comparable basis for the 2017 fiscal year, in line with the accounting standard IAS 17. Moreover, these changes in

accounting standards led the Group to adapt its key operational performance indicators and define new ones (see Section 3.1.5 Financial indicators not defined by IFRS and Accounting policies in Note 1 to the consolidated financial statements.)

For more details on segment information, see Note 1 to the consolidated financial statements.

Operating data by segment

The table below shows the key operating data (financial data and workforce) for the Orange group by segment for (i) FY 2019, (ii) FY 2018 in data on a comparable basis (compared with 2019) and on a historical basis, and (iii) 2017 in data on a comparable basis (compared with 2018) and on a historical basis.

For the year ended December 31 (in millions of euros)	France	Spain	Europe	Africa & Middle East	
2019					
Revenue	18,154	5,280	5,783	5,646	
EBITDAaL	7,135	1,646	1,492	1,815	
Operating Income	3,892	626	382	939	
eCAPEX	4,052	812	869	987	
Telecommunications licenses	0	298	9	212	
Average number of employees	53,720	6,931	20,786	14,824	
2018- Data on a comparable basis ⁽¹⁾					
Revenue	18,204	5,360	5,701	5,314	
EBITDAaL	7,130	1,642	1,443	1,659	
eCAPEX	3,655	1,068	884	1,007	
Telecommunications licenses	(1)	149	10	44	
Average number of employees	56,102	6,722	21,856	14,927	
2018 – Data on a historical basis					
Revenue	18,211	5,349	5,687	5,190	
Adjusted EBITDA	7,076	1,700	1,508	1,667	
Reported EBITDA	6,348	1,660	1,502	1,655	
Operating Income	3,198	555	339	659	
CAPEX	3,656	1,120	953	1,008	
Telecommunications licenses	(1)	149	10	42	
Average number of employees	56,102	6,695	21,823	14,956	
2017 – Data on a comparable basis ⁽¹⁾					
Revenue	18,048	5,232	5,593	4,940	
Adjusted EBITDA	6,879	1,568	1,460	1,585	
Reported EBITDA	6,446	1,564	1,422	1,565	
CAPEX	3,451	1,115	899	999	
Telecommunications licenses	11	10	-	293	
Average number of employees	59,680	6,569	22,706	15,210	
2017 – Data on a historical basis					
Revenue	18,046	5,231	5,578	5,030	
Adjusted EBITDA	6,878	1,567	1,456	1,612	
Reported EBITDA	6,444	1,563	1,417	1,591	
Operating Income	3,368	555	240	522	
CAPEX	3,451	1,115	897	1,021	
Telecommunications licenses	11	10	-	297	
Average number of employees	59,622	6,565	22,636	15,210	

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

Enterprise	International Carriers & Shared Services	Telecoms activities eliminations	Telecoms activities total	Orange Bank	Group eliminations	Group total
7,820 1,191 772 404 0 25,979	1,498 (261) (499) 141 0 12,529	(1,939) - - - - -	42,242 13,019 6,112 7,265 519 134,770	(160) (186) 28 - 849	(4) 1 1 - -	42,238 12,860 5,927 7,293 519 135,619
7,745 1,212 366 - 24,870	1,584 (178) 232 0 12,638	(1,919) - - - -	41,990 12,907 7,212 201 137,116	- (147) 36 - 782	(3) 2 - - -	41,986 12,762 7,248 201 137,898
7,292 1,245 1,153 765 353 - 22,963	1,534 (45) (194) (519) 316 - 12,621	(1,879) - - - - - -	41,384 13,151 12,124 4,997 7,406 200 135,160	(147) (148) (169) 36 - 783	(3) 1 1 1 - -	41,381 13,005 11,977 4,829 7,442 200 135,943
7,308 1,306 1,258 385 - 22,163	1,633 (77) (345) 282 - 12,485	(1,916) - - - - -	40,838 12,721 11,910 7,131 314 138,813	(62) (62) 60 - 663	(1) 1 1 - -	40,837 12,660 11,849 7,191 314 139,476
7,251 1,306 1,258 889 382 - 20,807	1,651 (78) (349) (704) 282 - 12,535	(1,926) - - - - -	40,861 12,741 11,924 4,870 7,148 318 137,375	(62) (62) (93) 61 -	(2) 1 1 1 - -	40,859 12,680 11,863 4,778 7,209 318 138,038

3.1.3.1 France

France (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	18,154	18,204	18,211	(0.3)%	(0.3)%	18,046
EBITDAaL	7,135	7,130	NA	0.1%	Ν̈́A	NA
EBITDAaL/Revenue	39.3%	39.2%	NA			NA
Operating Income	3,892	-	3,198	-	21.7%	3,368
eCAPEX	4,052	3,655	NA	10.9%	NA	NA
eCAPEX/Revenue	22.3%	20.1%	NA			NA
Telecommunications licenses	0	(1)	(1)	NA	NA	11
Average number of employees	53,720	56,102	56,102	(4.2)%	(4.2)%	59,622
Historical indicators (up to December 3	1, 2018)					
Adjusted EBITDA	NA	NA	7,076	NA	NA	6,878
Adjusted EBITDA/Revenue	NA	NA	38.9%			38.1%
Reported EBITDA	NA	NA	6,348	NA	NA	6,444
CAPEX	NA	NA	3,656	NA	NA	3,451
CAPEX/Revenue	NA	NA	20.1%			19.1%

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

3.1.3.1.1 Revenue – France

France	2019	2018	2018	% change	% change	2017
(at December 31, in millions of euros)		data on a	data on a	data on a	data on a	data on a
		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
Revenue	18,154	18,204	18,211	(0.3)%	(0.3)%	18,046
Retail services (2)	10,807	10,981	10,974	(1.6)%	(1.5)%	10,798
Convergence services	4,397	4,234	4,458	3.9%	(1.4)%	4,045
Mobile services only	2,324	2,429	2,348	(4.3)%	(1.0)%	2,409
Fixed services only	4,086	4,318	4,168	(5.4)%	(2.0)%	4,344
 Fixed only broadband services 	2,699	2,703	2,565	(0.2)%	5.2%	2,535
 Fixed only narrowband services 	1,387	1,615	1,603	(14.1)%	(13.4)%	1,809
Wholesale	5,487	5,332	5,342	2.9%	2.7%	5,388
Equipment sales	1,351	1,410	1,410	(4.2)%	(4.2)%	1,386
Other revenue	509	481	485	5.7%	4.8%	474

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

On a **historical basis**, the 57 million euros decrease in revenue in France between 2018 and 2019 stems from (i) the negative impact of changes in the scope of consolidation and other changes amounting to 7 million euros, and (ii) organic change on a comparable basis representing a 51 million euros decrease in revenue.

On a **comparable basis**, the 51 million euros decrease in revenue in France between 2018 and 2019 is mainly attributable to (i) the downward trend in fixed only narrowband services (conventional telephony), (ii) the unfavorable effect of promotional e-reader offers between the two periods, (iii) the decline in mobile only services, (iv) to a lesser extent, shrinking equipment sales, (v) partially offset by the growth in wholesale, driven by the development of fiber optic offers, in particular as part of the deployment and operation of Public Initiative Networks (PIN), see Section 1.3 *Significant events*).

On a comparable data basis, the customer bases are performing well in a highly competitive environment:

- the total mobile customer base contracted by only 0.3% year-on-year, with 21.8 million customers at December 31, 2019. Contract customers rose 1.1% year-on-year. This growth reflects both (i) the growth in premium offers, driven by Open convergent offers (which reached 9.7 million customers at December 31, 2019), and (ii) the growth in entry-level offers, driven by the development of SIM-only offers, including Sosh digital offers (which totaled

3.9 million customers at December 31, 2019). The prepaid customer bases are structurally in decline. In addition, there were 15.9 million 4G customers at December 31, 2019, an increase of 6.2% vear-on-year:

- the total fixed broadband customer base increased by 1.7% year-on-year (198,000 new customers) to attain 11.7 million customers at December 31, 2019. This growth is driven essentially by (i) the development of fiber optic offers, with a total of 3.3 million customers at December 31, 2019, an increase of 28.7% year-on-year and (ii) by the momentum of convergent offers, which grew by 2.5%, with 5.8 million customers at December 31, 2019. Moreover, 7.3 million customers had subscribed to IPTV and satellite TV offers at December 31, 2019, an increase of 3.2% year-on-year.

On a **comparable basis**, the 51 million euros decrease in revenue for France between the two periods, a fall of 0.3%, is mainly attributable to:

- the 232 million euros reduction in revenue from Fixed only services, almost exclusively due to the downward trend in conventional telephony (a fall of 14.1% or 228 million euros). Incidentally the change in the fixed only broadband ARPO over 12 months (see Section 7.2.1 Financial glossary), in decline by 1.8% between December 31, 2018 and December 31, 2019 is affected by the negative impact of promotional e-reader offers between the two periods;

⁽²⁾ See Section 7.2.1 Financial glossary.

- the 105 million euros decrease in revenue from Mobile only services, Is mainly due to the 2.9% reduction in the mobile only customer base connected to (i) the migration from contract offers to convergent offers) and (ii) the structural decline in the prepaid customer base. The 12 month mobile only ARPO (see Section 7.2.1 Financial glossary) remains stable between December 31, 2018 and December 31, 2019 despite the unfavorable effect of promotional offers on e-readers between the two periods;
- and to a lesser extent, to the 59 million euros decrease in Equipment sales, which is explained by the smaller number of devices sold in a strongly declining market in 2019.

This decline is partially offset:

- by the 163 million euros increase in revenue from Convergent services driven mainly by the 2.5% increase in the convergent customer base year-on-year, boosted by the success of the Open offers. This growth in volume was accompanied by a slight increase in value. The 12-month convergent ARPO (see Section 7.2.1 Financial glossary), therefore increases by 0.4% between December 31, 2018 and December 31, 2019 despite the unfavorable effect of promotional e-reader offers between the two periods; Furthermore the number of mobile telephones in households continues to grow, with 9.7 million convergent mobile customers at December 31, 2019 (growth of 4.7% year-on-year) equivalent to 1.67 mobile accesses per convergent customer;
- and by the revenue growth 155 million euros in Wholesale mainly connected to (i) the increase in fixed services to carriers due to the increased revenue from the construction, operation and marketing of fiber optic networks (ii) slightly offset by a fall in services to mobile operators.

→ 2018 vs 2017

On a **historical basis**, the 165 million euros increase in revenue in France between 2017 and 2018 stems from (i) the positive impact of changes in the scope of consolidation and other changes amounting to 2 million euros, and (ii) organic change on a comparable basis representing a 163 million euros increase in revenue.

On a **comparable basis**, the 163 million euros increase in revenue in France between 2017 and 2018 is mainly attributable to (i) the positive effect of the inclusion of e-reader offers, (ii) convergent services revenue growth, (iii) the development of fiber, particularly as part of the rollout and operation of Public Initiative Networks, and (iv) to a lesser extent, by the increase in equipment sales, (v) partially offset by the downward trend in fixed only narrowband services (traditional telephony), by the anticipated fall in revenue from national roaming and the fall in regulated prices for unbundling.

France's mobile and fixed customer bases withstood the highly competitive environment between 2017 and 2018, both on a historical and comparable basis:

- the total mobile customer base slightly decreasing by 0.4% year-on-year, with 21.7 million customers at December 31, 2018. Contract customers rose 2.1% year-on-year. This growth reflects both (i) the growth in premium offers, with Open convergent offers (which reached 9.3 million customers at December 31, 2018), and (ii) the growth in entry-level offers, with the development of SIM-only offers, including Sosh digital offers (which totaled 3.8 million customers at December 31, 2018). The prepaid customer bases are structurally in decline. In addition, there were 15.0 million 4G customers at December 31, 2018, an increase of 9.9% year-on-year;

- the total fixed broadband customer base stood at 11.5 million customers at December 31, 2018, up 2.1% year-on-year (232,000 new customers). This growth was driven essentially by (i) the development of fiber optic offers, which increased by 29.7% (i.e. 593,000 new customers), for a total of 2.6 million customers at December 31, 2018, and (ii) the momentum of convergent offers, which grew by 2.6% and had 6.1 million customers at December 31, 2018. In addition, 7.0 million customers subscribed to IPTV and satellite TV offers at December 31, 2018, up 2.7%.

On a **comparable basis**, the increase in the France revenue between the two periods is largely attributable to the increase in 413 million euros in the revenue from Convergent services mainly due to:

- the 2.6% increase in the convergent customer base year-on-year. This growth in volume, although negatively impacted by the discontinuation of "Sosh+Livebox" convergent offers, is driven by the success of Open offers. It is also boosted by the rise in the number of mobile phones per household, with 9.7 million convergent mobile customers at December 31, 2018 (up 5.5% year-on-year), or 1.6 mobile phones per convergent customer. Convergent customers represented 59.5% of the retail fixed broadband customer base at December 31, 2018;
- and the growth in value. In this respect, the 12-month convergent ARPO increases by 3.2% between December 31, 2017 and December 31, 2018, notably due to the positive effect of digital reader offers.

This increase is partially offset:

- by the reduction in revenue from Fixed only services, of 176 million euros due to the downward trend in conventional telephony (a decline of 11.4% or 207 million euros) and customer migration to convergent offers. The revenue from fixed only broadband services is up 1.2% year- on- year, driven by the 2.1% growth in 12- month fixed only broadband ARPO and the 1.5% year-on-year increase in the fixed only broadband customer base;
- by the 61 million euros decline in revenue from Mobile only services, mainly due to (i) the 4.7% reduction in the mobile only customer base (because of the migration from contract offers to convergent offers) and the structural decline in the prepaid customer base, (ii) partially offset by the 1.7% growth in 12- month mobile only ARPO;
- by the 48 million euros fall in the revenue from Wholesale, mainly connected to (i) the structural decline in national roaming revenue, and (ii) by the decline in revenue from wholesale ADSL access, caused by lower unbundling rates and accelerated migration of customers to very high-speed broadband networks, (especially FTTH), (iii) partially offset by the growth in revenue connected to the construction, operation and commercialization of fiber optic networks.

3.1.3.1.2 EBITDAaL (EBITDA adjusted until December 31, 2018) – France

\rightarrow 2019 vs 2018

In 2019, EBITDAaL in France totaled 7,135 million euros.

Between 2018 and 2019, EBITDAaL in France includes (i) the positive effect of the changes in the scope of consolidation and other changes for 60 million euros, and (ii) the negative impact of the IFRS 16 standard and a change in operational performance indicators for an amount of 5 million euros.

Further, between 2018 and 2019, EBITDAaL included the negative effect, between the two periods, of promotional offers on e-readers amounting to 90 million euros, due to a positive impact that was smaller in 2019 than in 2018 (with 68 million euros in 2019 compared with 158 million euros in 2018).

On a **comparable basis**, the 4 million euros increase in adjusted EBITDA in France between 2018 and 2019 was mainly attributable to:

- (i) the reduction in commercial charges and equipment costs mainly the costs of terminal and other equipment sold, notably connected with the marked slowdown in equipment sales, (ii) the fall in labor expenses connected with the reduction in average number of employees (full-time equivalents) and (iii) by the reduction in taxes and operating charges;
- partially offset (i) by the growth in other external purchases due to the increase in purchases for resale relating to the operation of Public Initiative Networks PIN, see Section 1.3 Significant events and to a lesser extent (ii) by the 51 million euros fall in revenue notably due to the negative effect of promotional e-reader offers between the two periods.

→ 2018 vs 2017

On a **historical basis**, the 198 million euros increase in adjusted EBITDA in France between 2017 and 2018 reflects (i) the negative impact of changes in the scope of consolidation and other changes for 1 million euros, and (ii) is more than offset by the organic change on a comparable basis, i.e. a 197 million euros increase in adjusted EBITDA.

Between 2017 and 2018, adjusted EBITDA benefited from the positive 111 million euros effect of the inclusion of e-reader offers, due to a positive effect that was larger in 2018 than in 2017 (at 158 million euros in 2018, compared to 47 million euros in 2017).

On a **comparable basis**, the 197 million euros increase in adjusted EBITDA in France between 2017 and 2018 was mainly attributable to:

- (i) 163 million euros in revenue growth, (ii) the fall in labor expenses, resulting primarily from the lower average number of employees (full-time equivalents) thanks to the ongoing transformation plans, and (iii) to a lesser extent, the decrease in other operating expenses and the reduction in commercial expenses and content costs;
- partially offset by (i) the increase in other external purchases, largely due to purchases for resale related to the operation of networks managed by local authorities, and (ii) the reduction in other operating income.

3.1.3.1.3 Operating income – France

→ 2019 vs 2018

On a **historical basis**, the 694 million euros decrease in operating income in France between 2018 and 2019 was largely attributable to:

- 582 million euros in specific labor expenses, largely due to the negative effect of the recognition of a 614 million expense in 2018 for "Part-Time for Seniors" plans (TPS, relating to agreements on the employment of senior workers in France) and related bonuses (see Notes 1.8 and 6 to the consolidated financial statements), The expense recorded in 2018 mainly relates to the effect of extending the 2015 French part-time for seniors plans (TPS) for three additional years;

- a decrease of 69 million euros in the cost of restructuring programs;
- and by the 64 million euros increase connected to the combined effect of (i) the rise in EBITDAaL on a comparable basis (4 million euros), and (ii) the positive effects on EBITDAaL of foreign exchange fluctuations and other changes (60 million euros);
- partly offset by the 31 million euros increase in depreciation and amortization of fixed assets mainly due to increased investment in recent years in the roll out of very high-speed networks (fiber optic and 4G).

→ 2018 vs 2017

On a **historical basis**, the 170 million euros decrease in operating income in France between 2017 and 2018 was largely attributable to:

- (i) the 307 million euros increase in specific labor expenses, primarily for the "Part- Time for Seniors" (TPS) plan (relating to agreements on the employment of older workers in France) and related bonuses, particularly with the three- year extension of the plan in December 2018, (ii) the 102 million euros increase in restructuring and integration costs, and (iii) the 75 million euros increase in depreciation and amortization of fixed assets, mainly linked to the increase in investments made in recent years (including the rollout of fiber);
- partially offset by (i) the 198 million euros increase in adjusted EBITDA, and (ii) the counter-effect of the recognition in 2017 of a 115 million euros charge for significant litigation.

3.1.3.1.4 Economic CAPEX (CAPEX until December 31, 2018) – France

→ 2019 vs 2018

In 2019, economic CAPEX in France totaled 4,052 million euros.

Between 2018 and 2019, economic CAPEX in France include the negative effects of applying the IFRS 16 standard and a change in operational and performance indicators for an amount of 1 million euros

On a **comparable basis**, the 397 million euros increase in economic CAPEX in France between 2018 and 2019 is largely attributable to increased investment in very high-speed (fiber optics, which is co-financed by other operators), mainly connected to the production of Orange's fiber network and the accelerated deployment of Public Initiative Networks (PIN, see Section 1.3 *Significant Events*). At December 31, 2019, France thus had 16.3 million households with very high-speed broadband connectivity, (up 38.0% year-on-year).

→ 2018 vs 2017

On both a **historical** and a **comparable basis**, the 205 million euros increase in CAPEX in France between 2017 and 2018 was largely attributable to increased investment in very high-speed fixed broadband (fiber, which is co-financed by other operators) and mobile broadband networks (4G). At December 31, 2018, France had 11.8 million households with very high-speed broadband connectivity, up 29.8% year-on-year. In addition, the 4G network covered 98.6% of the population in France at December 31, 2018, a rise of 2.7 percentage points year-on-year.

3.1.3.1.5 Telecommunication licenses - France

In 2019 and in 2018, no telecommunications license acquisition was recognized in France. In 2017, acquisitions of telecommunication licenses for France amounted to 11 million euros.

3.1.3.1.6 Additional information - France

France (at December 31, in thousands, at the end of the period)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Convergence services						
Number of convergent customers	5,797	5,654	6,132	2.5%	(5.5)%	5,978
Convergent ARPO over 12-month (in euros) (3)	67.7	67.5	64.8	0.4%	4.6%	62.8
Mobile services						
Number of mobile services customers (2)	21,795	21,725	21,725	0.3%	0.3%	21,803
o/w: Customers with convergent offers	9,694	9,262	9,746	4.7%	(0.5)%	9,237
Customers with mobile only offers	12,101	12,463	11,979	(2.9)%	1.0%	12,566
o/w: Contract customers	19,445	19,234	19,234	1.1%	1.1%	18,847
Prepaid customers	2,350	2,491	2,491	(5.7)%	(5.7)%	2,956
Mobile only ARPO over 12 months (in euros) (3)	17.0	17.0	17.2	(0.0)%	(1.0)%	16.9
Fixed-line services						
Number of fixed broadband						
service customers	11,658	11,460	11,460	1.7%	1.7%	11,228
o/w: Customers with very high-speed						
broadband access	3,337	2,592	2,592	28.7%	28.7%	1,999
o/w: Customers with convergent offers	5,797	5,654	6,132	2.5%	(5.5)%	5,978
Customers with fixed only offers	5,861	5,805	5,328	1.0%	10.0%	5,250
Fixed only broadband ARPO						
over 12 months (in euros) (3)	36.6	37.3	38.7	(1.8)%	(5.6)%	38.0
Number of fixed telephone lines	27,088	28,619	28,619	(5.3)%	(5.3)%	29,580
o/w: Retail (4)	15,137	15,480	15,480	(2.2)%	(2.2)%	15,804
o/w: Conventional fixed						
telephone lines (PSTN)	4,681	5,515	5,515	(15.1)%	(15.1)%	6,345
Operators	11,916	13,102	13,102	(9.1)%	(9.1)%	13,736

3.1.3.2 Spain

Spain (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
_		·		•		
Revenue	5,280	5,360	5,349	(1.5)%	(1.3)%	5,231
EBITDAaL	1,646	1,642	NA	0.3%	NA	NA
EBITDAaL/Revenue	31.2%	30.6%	NA			NA
Operating Income	626	-	555	-	12.7%	555
eCAPEX	812	1,068	NA	(24.0)%	NA	NA
eCAPEX/Revenue	15.4%	19.9%	NA			NA
Telecommunications licenses	298	149	149	100.5%	100.5%	10
Average number of employees	6,931	6,722	6,695	3.1%	3.5%	6,565
Historical indicators (up to December 31,	2018)					
Adjusted EBITDA	NA	NA	1,700	NA	NA	1,567
Adjusted EBITDA/Revenue	NA	NA	31.8%			30.0%
Reported EBITDA	NA	NA	1,660	NA	NA	1,563
CAPEX	NA	NA	1,120	NA	NA	1,115
CAPEX/Revenue	NA	NA	20.9%			21.3%

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

See Section 3.1.5.1 Data on a comparable basis.
 Excluding customers of Mobile Virtual Network Operators (MVNOs).
 See Section 7.2.1 Financial glossary.
 This figure includes (i) standard analog lines (excluding fully unbundled lines) and Numeris (ISDN) channels, each Numeris channel being recognized as a line, (ii) lines without narrowband (naked ADSL) telephone contracts sold directly by Orange to its retail customers, (iii) fiber optic (FTTH), and (iv) fixed 4G and other accesses.

3.1.3.2.1 Revenue - Spain

Spain (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,280	5,360	5,349	(1.5)%	(1.3)%	5,231
Retail services	3,760	3,871	3,855	(2.9)%	(2.5)%	3,808
Convergence services	2,092	2,143	2,143	(2.4)%	(2.4)%	2,078
Mobile services only	1,161	1,231	1,215	(5.7)%	(4.5)%	1,229
Fixed services only	501	496	496	1.0%	1.0%	501
IT & integration services	6	1	1	475.6%	475.6%	-
Wholesale	901	805	810	11.9%	11.2%	754
Equipment sales	620	684	684	(9.5)%	(9.5)%	669

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

On a **historical basis**, the 69 million euros reduction in revenue in Spain between 2018 and 2019 (i) includes the favorable impact of changes in the scope of consolidation and other changes amounting to 11 million euros, resulting mainly from the acquisition of Republica De Communicaciones Moviles on November 7, 2018, and (ii) organic change on a comparable basis representing a 80 million euros decrease in revenue.

On a **comparable basis**, the 80 million euros decrease in revenue from Spain between 2018 and 2019 is mainly explained by (i) the decrease in Mobile only services, the contraction in Equipment sales, and the fall in convergent services, partially offset by an increase in Wholesale and to a lesser extent by the increased revenue from Fixed only services and IT & Integration Services.

On a comparable basis, between 2018 and 2019, the commercial results of fixed bandwidth and mobile suffered from the competitive environment in Spain:

- the total mobile customer base increased by 0.8% year-on-year with 16.3 million customers on December 31, 2019. Contract customers increased by 2.0% year-on-year whilst prepaid customers (2.6 million customers on December 31, 2019) fell by 5.1% year-on-year. Furthermore the 4G customer totaled 11 million customers on December 31, 2019 a 12.9% increase year-on-year;
- the total fixed high-speed broadband customer base drops by 1.9% year-on-year mainly due to the fall in the convergent customer base. The very high speed fixed broadband customer base continues to progress with 11.0% growth year-on-year, and totaled 3.2 million customers on December 31, 2019. In addition, digital telephone television offers grew by 0.3% year on year driven by content offers, (especially transmissions of soccer championships and optional premium contents see Section 1.3 Significant events).

On a **comparable basis**, the 80 million euros reduction in revenue in Spain between the two periods i.e. a reduction of 1.5% is mainly attributable to:

- the 70 million euros decrease in revenue from Mobile only services, Is due to the market's slide towards low-cost offers engendering a fall of 3.4% in Mobile only ARPO over 12 months between December 31, 2018 and December 31, 2019;
- the 65 million euros decrease in Equipment sales, due to the decline in volumes and trading down on terminals sold;

- and the 51 million euros decrease in the revenue from Convergent services, connected to the 3.8% fall in the convergent customer base year-on-year and a difficult competitive environment. The 12-month convergent ARPO was stable between December 31, 2018 and December 31, 2019;
- partially offset by:
 - the 96 million euros increase in the revenue of Wholesale, driven mainly by the growth in international traffic,
 - and to a lesser extent by the increase in revenue of Fixed only services and integration and information technology services, notably due to the increase in infrastructure management solution offers and security offers.

→ 2018 vs 2017

On a **historical basis**, the 118 million euros increase in revenue in Spain between 2017 and 2018 stems from (i) the positive impact of changes in the scope of consolidation and other changes amounting to 1 million euros, and (ii) organic change on a comparable basis representing a 117 million euros increase in revenue.

On a **comparable basis**, the 117 million euros increase in revenue in Spain between 2017 and 2018 is largely attributable to (i) the growth in revenue from convergent services, (ii) the growth in revenue from fixed wholesale, and (iii) to a lesser extent, the increase in revenue from equipment sales.

On a comparable basis, Spain's mobile and fixed customer bases have withstood strong competition:

- the total mobile customer base stood at 16.2 million customers at December 31, 2018, up 1.8% from December 31, 2017. Offers with contracts totaled 13.5 million customers at December 31, 2018, up 2.3% year-on-year, whereas prepaid offers (amounting to 2.7 million customers at December 31, 2018) recorded a 5.7% decline over the same period. The number of 4G customers reached 9.8 million at December 31, 2018, an increase of 4.7% year-on-year;
- the total fixed broadband customer base totaled 4.1 million customers at December 31, 2018. The very high-speed fixed broadband customer base grew significantly, up 27.6% year-on-year to stand at 2.9 million customers at December 31, 2018. At December 31, 2018, digital television offers also grew by 14.5% year-on-year. This was driven by content offers, with a TV penetration rate of more than 17%.

On a **comparable basis**, the 117 million euros increase in revenue for Spain between the two periods is mainly attributable to:

- the 65 million euros increase in revenue from Convergent services which notably results from (i) the continued enhancement of convergent offers and the increase in (ii) the increase in the corresponding, customer base which reaches 3.1 million customers on December 31 2018 up by 1.1% year-on-year. In parallel, 12-month convergent ARPO rose by 1.3% year-on-year. Convergence offers now represent 84.7% of the retail fixed broadband customer base at December 31, 2018;
- the 56 million euros increase in revenue from Wholesale, driven by
 (i) the development of very high-speed broadband access and
 national roaming, partially offset by the decline in incoming mobile
 traffic (impact of the cuts in call termination rates since February 2018);
- And to a lesser extent by the 15 million euros increase in Equipment sales, because of the improvement in IoT commercial activity (smart security);
- partially offset by the 16 million euros reduction in Mobile only services essentially caused by the fall in revenue from prepaid offers, (due to the 5.7% contraction year-on-year in the number of prepaid customers). However, mobile only ARPO grew by 0.8% for the 12 months to December 31, 2018, while the mobile only customer base grew by 0.4% year-on-year.

3.1.3.2.2 EBITDAaL (EBITDA adjusted until December 31, 2018) – Spain

→ 2019 vs 2018

In 2019, Spain's EBITDAaL totals 1,646 million euros.

Between 2018 and 2019, EBITDAaL in Spain includes (i) the negative effect of applying the IFRS 16 standard and a change in operational performance indicators for an amount of 63 million euros, and (ii) the positive effect of changes to the scope of consolidation and other changes for 5 million euros.

On a **comparable basis**, the 4 million euros increase between 2018 and 2019 mainly results from:

- the reduction in commercial charges and equipment costs (reduction in the costs of terminals and other equipment sold, as well as distribution commissions, connected with the slowdown in equipment sales), the increase in other operating income, the fall in network charges and the reduction in other external purchases;
- partially offset by (i) the increase in content costs, connected to a large extent to the increase in soccer rights (see Section 1.3 Significant events), the 80 million euros decrease in sales revenue and the rise in interconnection charges.

→ 2018 vs 2017

On a **historical basis**, the 133 million euros increase in adjusted EBITDA in Spain between 2017 and 2018 can be attributed to (i) the positive impact of changes in the scope of consolidation and other changes of 1 million euros, and (ii) organic growth on a comparable basis amounting to an increase of 132 million euros in adjusted EBITDA.

On a **comparable basis**, the 132 million euros increase in adjusted EBITDA in Spain between 2017 and 2018 mainly resulted from (i) the 117 million euros increase in revenue, (ii) the increase in other operating income, (iii) the positive effect of fixed asset disposals in 2018 and (iv) the decline in service fees and inter-operator costs (with a fall in national mobile termination rates in February 2018), (v) partly offset by the increase in content costs, primarily due to soccer rights and offer enhancement, in line with the commercial momentum.

3.1.3.2.3 Operating income – Spain

→ 2019 vs 2018

On a **historical basis**, the increase of 71 million euros in the operating income for Spain between 2018 and 2019 is mainly explained by:

- the counter-effect from recognizing a 31 million euros charge for significant litigation in 2018;
- the 29 million euros decrease in depreciation and amortization of fixed assets mainly due to the reduction in depreciation for the mobile network relating to the fall in the investments made;
- the increase of 21 million euros in the income from disposals of fixed assets, investments and businesses, because of the increase in proceeds from disposals of fixed assets mainly due to selling non-strategic mobile sites.

→ 2018 vs 2017

On a **historical basis**, the stability of Spain's operating income between 2017 and 2018 mainly stems from the 133 million euros increase in adjusted EBITDA, largely offset by (i) the 97 million euros increase in depreciation and amortization of fixed assets, essentially owing to increased investment in recent years as part of the deployment of very high-speed broadband networks (4G and fiber) and the increased depreciation of leased handsets, *Livebox*, and equipment installed on customer premises, and (ii) the recognition, in the first half of 2018, of a 31 million euros charge relating to significant litigation.

3.1.3.2.4 Economic CAPEX (CAPEX until December 31, 2018) – Spain

→ 2019 vs 2018

In 2019, Economic CAPEX in Spain totaled 812 million euros.

Between 2018 and 2019, economic CAPEX in Spain includes (i) the negative effect of applying the IFRS 16 and a change in operational performance indicators for an amount of 53 million euros, and (ii) the positive effect of changes to the scope of consolidation and other changes for 1 million euros

On a **comparable basis**, the 256 million euros reduction in economic CAPEX in Spain between 2018 and 2019 mainly results from the (i) the increase in disposals of fixed assets due to the sale of non-strategic mobile sites to Cellnex in December 2019 for 185 million euros (see Section 1.3 *Significant events*), (ii) lower investment in very high speed broadband networks (less deployment and network sharing), (iii) the reduction in economic CAPEX in relation to leased handsets, *Liveboxes* and the equipment installed on customers premises (iv) partially offset by the increased investment in IT (application developments) and customer service platforms to support the digital transformation.

\rightarrow 2018 vs 2017

On both a **historical basis** and a **comparable basis**, the 5 million euros increase in CAPEX in Spain between 2017 and 2018 was largely attributable to increased investment in information systems and service platforms, offset by co-financing received from other carriers in very high-speed broadband networks.

3.1.3.2.5 Acquisitions of telecommunication licenses - Spain

Acquisitions of telecommunication licenses in Spain amounted (i) in 2019, to 298 million euros, and (ii) in 2018, to 149 million euros, mainly corresponding to the acquisition of a 5G license, and (iii) to 10 million euros in 2017 for historical data.

3.1.3.2.6 Additional information - Spain

Spain (at December 31, in thousands, at the end of the period)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Convergence services						
Number of convergent customers	2,996	3,116	3,116	(3.8)%	(3.8)%	3,082
Convergent ARPO over 12-month (in euros) (3) Mobile services	58.2	58.2	58.2	0.0%	0.0%	57.4
Number of mobile services customers (2)	16,313	16,186	16,186	0.8%	0.8%	15,893
o/w: Customers with convergent offers	5,849	5,881	5,881	(0.5)%	(0.5)%	5,776
Customers with mobile only offers	10,464	10,305	10,305	1.5%	1.5%	10,117
o/w: Contract customers	13,743	13,477	13,477	2.0%	2.0%	13,069
Prepaid customers	2,569	2,709	2,709	(5.1)%	(5.1)%	2,823
Mobile only ARPO over 12 months (in euros) (3)	12.0	12.4	12.4	(3.4)%	(3.4)%	12.3
Fixed-line services						
Number of fixed broadband						
service customers	4,075	4,155	4,155	(1.9)%	(1.9)%	4,152
o/w: Customers with very high-speed						
broadband access (VHSB)	3,200	2,883	2,883	11.0%	11.0%	2,260
o/w: Customers with convergent offers	2,996	3,116	3,116	(3.8)%	(3.8)%	3,082
Customers with fixed only offers	1,079	1,039	1,039	3.8%	3.8%	1,071
Fixed only broadband ARPO						
over 12 months (in euros) (3)	30.6	31.5	31.5	(2.9)%	(2.9)%	30.8

3.1.3.3 Europe

Europe (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,783	5,701	5,687	1.4%	1.7%	5,578
EBITDAaL	1,492	1,443	NA	3.4%	NA	NA
EBITDAaL/Revenue	25.8%	25.3%	NA			NA
Operating Income	382	-	339	-	12.6%	240
eCAPEX	869	884	NA	(1.7)%	NA	NA
eCAPEX/Revenue	15.0%	15.5%	NA	,		NA
Telecommunications licenses	9	10	10	(8.5)%	(9.1)%	-
Average number of employees	20,786	21,856	21,823	(4.9)%	(4.7)%	22,636
Historical indicators (up to December 3	31, 2018)					
Adjusted EBITDA	NA	NA	1,508	NA	NA	1,456
Adjusted EBITDA/Revenue	NA	NA	26.5%			26.1%
Reported EBITDA	NA	NA	1,502	NA	NA	1,417
CAPEX	NA	NA	953	NA	NA	897
CAPEX/Revenue	NA	NA	16.8%			16.1%

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

See Section 3.1.5.1 Data on a comparable basis.
 Excluding customers of Mobile Virtual Network Operators (MVNOs).
 See Section 7.2.1 Financial glossary.

3.1.3.3.1 Revenue – Europe

Europe (at December 31, in millions of euros)	2019	2018 data on a comparable basis (1)	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,783	5,701	5,687	1.4%	1.7%	5,578
Retail services	3,641	3,540	3,516	2.9%	3.6%	3,445
Convergence services	623	465	467	34.0%	33.3%	305
Mobile services only	2,143	2,189	2,194	(2.1)%	(2.3)%	2,254
Fixed services only	644	693	697	(7.2)%	(7.7)%	757
IT & integration services	232	193	158	20.3%	47.4%	129
Wholesale	1,071	1,145	1,150	(6.5)%	(6.9)%	1,133
Equipment sales	898	865	868	3.8%	3.5%	840
Other revenue	173	151	153	14.5%	11.9%	160

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

Europe (at December 31, in millions of euros)	2019	2018 data on a comparable basis (1)	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,783	5,701	5,687	1.4%	1.7%	5,578
Poland	2,654	2,600	2,605	2.1%	1.9%	2,590
Belgium & Luxembourg	1,341	1,298	1,280	3.3%	4.8%	1,245
Central Europe ⁽²⁾	1,801	1,814	1,813	(0.7)%	(0.6)%	1,750
Eliminations	(13)	(10)	(11)	29.4%	29.1%	(7)

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

On a **historical basis**, the 95 million euros increase in revenue for Europe between 2018 and 2019 includes (i) the favorable impact of changes in the scope of consolidation and other changes for 35 million euros, mainly resulting from the acquisition of BlueSoft in Poland on June 12, 2019 and BKM in Belgium on July 30, 2019 and, (ii) the negative impact of foreign exchange fluctuations for 21 million euros, and (iii) the organic change on a comparable basis, i.e. an increase of 81 million euros in revenue.

On a **comparable basis**, the 81 million euros increase in revenue in Europe between 2018 and 2019 Is mainly attributable to:

- (i) the growth in Convergent services, In all countries, and to a lesser extent, (ii) by the increase in IT & Integration Services in Poland and Romania, and (iii) by the increase in Equipment sales and (iv) the growth in Other revenue in Poland;
- partially offset partially offset by (i) the decrease in Wholesale, In all countries, and (ii) by the decrease in Mobile only services and Fixed only services, mainly in Poland.

On a comparable basis, Europe's customer bases grew between 2018 and 2019:

- the total mobile customer base grew by 2.6% year-on-year, mainly in Belgium and Poland, and totals 34.6 million customers at December 31, 2019;
- the total fixed customer base increased by 6.5% year-on-year, with a total 3.5 million customers at December 31, 2019 driven by the rollout of fiber, with its customers increasing by 36.3% year-on-year.

On a **comparable basis** the 158 million euros increase in revenue from convergent services in Europe between the two periods was mainly attributable to:

 the 20.0% increase in the convergent customer base year-on-year due to attractive convergent offers and the migration of customers towards them in almost all countries. Convergence customers now represent 56.7% of Europe's retail fixed broadband customer base at December 31, 2019. The number of convergent mobile customers also increased by 18.6% year-on-year;

 and a growth in value. The 12-month convergent ARPO therefore increased in Poland, Belgium and Romania between December 31, 2018 and December 31, 2019.

This strong growth in the revenue of convergent services between these two periods is also associated, to a lesser extent, with (i) an increase of 39 million euros in IT & Integration Services revenue mainly in Poland on the enterprise market, (ii) an increase of 33 million euros in Equipment sales year on year mainly in Poland and Belgium and (iii) growth of 22 million euros in Other revenue, driven to a large extent by the expansion in energy offers in Poland.

This growth was partially offset by:

- the 74 million euros decrease in revenue from Wholesale, mainly caused by reduced revenue from mobile services to carriers in all countries connected to the decline in the activity relating to virtual mobile network operators (MVNO) In Belgium and the fall in call termination in Romania;
- the 50 million euros reduction in revenue from Fixed only services and by the 47 million euros decrease in revenue from Mobile only services, mainly caused by customers migrating to convergent offers.

→ 2018 vs 2017

On a **historical basis** the 109 million euros increase in revenue in Spain between 2017 and 2018 stems from (i) the positive impact of changes in the scope of consolidation of 4 million euros and other changes amounting to 11 million euros, and (ii) organic change on a comparable basis representing a 94 million euros increase in revenue.

⁽²⁾ Central European countries: entities in Moldova, Romania and Slovakia.

On a **comparable basis**, the 94 million euros increase in revenue from Europe between 2017 and 2018 was mainly due to (i) the growth in Convergent services (Poland, Belgium and Romania), and to a lesser extent (ii) the increase in Integration and IT services, (iii) the growth in Equipment Sales, and (iv) the growth in Wholesale (mainly in Poland), (v) partially offset by the decline in Mobile only services and Fixed only services (mainly in Poland) and the decrease in Other revenue.

On a comparable basis, the change in mobile and fixed customer bases in Europe between 2017 and 2018 mainly reflects the good progress made in mobile and fixed customer bases in Poland, Belgium and Luxembourg:

- the total mobile customer base was 33.8 million customers at December 31, 2018, up 1.6% year-on-year, in line with the increase in the mobile customer bases in Belgium and Poland. The growth in contract offers (up 3.3% year-on-year) is driven by the growth in convergent offers, particularly with the *Love* offers in Poland and Belgium. The number of 4G customers reached 14.8 million at December 31, 2018, up 22.3% year-on-year;
- the fixed broadband customer base reached 3.3 million at December 31, 2018, up 10.5% year-on-year, due to the strong growth in the very high-speed broadband customer base in all European countries. This increase was mainly driven by (i) the development of very high-speed broadband offers, particularly cable offers in Belgium, and (ii) by convergent offers that continue to grow with 382,000 new customers in one year, mainly in Poland and Romania. Moreover, 1.8 million customers had subscribed to IPTV and satellite TV offers at December 31, 2018, up 17.9% year-on-year.

On a **comparable basis** the 163 million euros increase in Convergent services between the two periods is mainly due to the migration of customers to convergent offers in most European countries. The convergent customer base grew by 30.3% year-on-year (mainly in Poland, Belgium and Romania) and stood at 1.6 million customers at December 31, 2018. Convergent customers now make up 50.3% of the consumer fixed broadband customer base at December 31, 2018, up 7,6 points year-on-year.

To a lesser extent, the increased revenue off countries in Europe between the two periods was also caused by:

- the 29 million euros increase in IT and integration services, was largely related to the enterprise market in Poland;
- the 21 million euros increase in Equipment sales, driven by the growth in mobile equipment sales based mainly in Romania due to the increased penetration of smartphones;
- and the 17 million euros increase in revenue for Wholesale was largely related to (i) the growth in national roaming (Poland, Slovakia), the growth in visitor roaming (Belgium, Romania) and the increase in incoming mobile traffic in Poland, (ii) partially offset by the decline in virtual mobile network operators (MVNO) in Belgium.

These favorable developments are partially offset between the two periods:

 by the 60 million euros decrease in Fixed only services revenue (stemming for the most part from Poland) mainly resulting from (i) by the downward trend in fixed-line telephony revenue in Poland and (ii) customer migration towards convergent offers, which was very marked in Poland;

- by the 58 million euros decline in Mobile only services, reflecting the 0.7% fall in the mobile only customer base, which is mainly due to the migration of customers towards convergent offers in almost all countries, and especially in Poland;
- and by the 18 million euros decrease in Other revenue mainly in Belgium and to a lesser extent in Poland despite the development of energy offers.

3.1.3.3.2 EBITDAaL (EBITDA adjusted until December 31, 2018) – Europe

→ 2019 vs 2018

in 2019, the EBITDAaL of the Europe countries totaled 1,492 million euros.

Between 2018 and 2019, the EBITDAaL of the Europe countries includes (i) the negative effects of IFRS 16 standard and a change in operational performance indicators for an amount of 63 million euros, (ii) the negative effects of foreign exchange fluctuations of 5 million euros and (iii) the positive effect of changes in the scope of consolidation and other changes of 2 million euros.

On a **comparable basis**, the 49 million euros increase in the EBITDAaL in the Europe countries between 2018 and 2019 is mainly attributable to:

- (i) the 81 million euros increase in revenue, (ii) the fall in interconnection charges, associated with the decline in Wholesale, (iii) the decrease in distribution commissions mainly in Poland due to lower volumes and to a lesser extent in Belgium following the revision of the sales policy and (iv) by the increase in other operating income;
- partially offset (i) by the increase in other external purchases mainly in Poland due to the expansion in IT & Integration Services and the growth of energy sales, (ii) by the increased cost of content across all countries (see Section 1.3 Significant events), and (iii) by the increased costs of terminals and other equipment sold, especially in Poland and Belgium connected with increased equipment sales.

→ 2018 vs 2017

On a **historical basis**, the 52 million euros increase in adjusted EBITDA in Europe countries between 2017 and 2018 is explained by (i) foreign exchange gains of 2 million euros, (ii) the favorable effect of changes in the scope of consolidation and other changes in the amount of 2 million euros, and (iii) by organic change on a comparable basis, i.e. a 48 million euros increase in adjusted EBITDA.

On a **comparable basis**, the 48 million euros increase in adjusted EBITDA for Europe between 2017 and 2018 can essentially be attributed to:

- (i) the 94 million euros increase in revenue, (ii) gains on the disposal
 of fixed assets, mainly in Poland, In particular the disposals in 2018
 within the scope of the optimization of the real estate portfolio, (iii)
 the reduction in commercial expenses, and equipment costs, mainly
 in Poland and (iv) the decrease in labor expenses, mainly in Poland;
- partially offset by (i) the increase in content costs, (ii) the increase in network charges, corresponding mainly to the increase in network access connection charges in Belgium, in line with the increase in the customer base for cable offers in the country, and (iii) expenses related to the development of energy sales in Poland.

3.1.3.3.3 Operating income – Europe

→ 2019 vs 2018

On a **historical basis**, the increase of 43 million euros in the operating income for the countries of Europe between 2018 and 2019 is mainly explained by:

- the 46 million euros increase as a result of the combined effect of
 (i) the rise in EBITDAaL on a comparable basis (49 million euros), as
 well as (ii) the positive effects on EBITDAaL of changes in the
 consolidation and other changes (2 million euros) and (iii) the
 unfavorable effects of foreign exchange fluctuations (5 million euros);
- the 45 million euros reduction in depreciation and amortization of fixed assets mainly in Poland;
- and by the increase of 19 million euros in the income from disposals
 of fixed assets, investments and businesses, related to the increased
 income from disposals of fixed assets mainly connected with real
 estate optimization programs in Poland;
- partially offset by the 49 million euros increase in the restructuring program costs mainly due to departure plans for employees in Poland in 2019 (see Note 5.3 of the notes to the consolidated financial statements).

→ 2018 vs 2017

On a **historical basis**, the 99 million euros improvement in operating income in Europe between 2017 and 2018 was mainly attributable to (i) the 52 million euros increase in adjusted EBITDA, (ii) the 33 million euros decrease in restructuring and integration costs and (iii) the counter-effect of the recognition, in 2017, of 19 million euros in impairment of goodwill relating to Luxembourg, and mainly reflecting strong competitive pressure.

3.1.3.3.4 Economic CAPEX (CAPEX until December 31, 2018) – Europe

→ 2019 vs 2018

In 2019, economic CAPEX in Europe totaled 869 million euros.

Between 2018 and 2019, the economic CAPEX in Europe includes (i) the negative effects of the application of the IFRS 16 standard and a change in operational performance indicators for an amount of 59 million euros, and (ii) the unfavorable effects of changes in the scope of consolidation and other changes for 7 million euros and the negative effect of foreign exchange fluctuations, i.e. 4 million euros

On a **comparable basis**, the 15 million euros decrease in economic CAPEX in Europe between 2018 and 2019 Is mainly explained by the reduction in economic CAPEX in Poland because of the increase in disposals of real estate within the scope of the real estate optimization program partially offset by the increase in economic CAPEX in central European countries especially Romania due to the rollout of fiber optic.

\rightarrow 2018 vs 2017

On a **historical basis**, the 56 million euros increase in revenue in CAPEX in Europe between 2017 and 2018 is explained by (i) foreign exchange gains of 1 million euros, (ii) the favorable effects of changes in the scope of consolidation and other changes amounting to 1 million euros, and (iii) organic change on a comparable basis representing a 54 million euros increase in CAPEX.

On a **comparable basis**, the 54 million euros increase in CAPEX in Europe between 2017 and 2018 Is explained by the continued investment in mobile and fixed very high speed broadband networks (4G and FTTH), particularly in Poland.

3.1.3.3.5 Acquisitions of telecommunication licenses – Europe

Acquisitions of telecommunication licenses in Europe amounted (i) in 2019, to 9 million euros, for Slovakia and (ii) in 2018, to 10 million euros for data on a historical basis mainly involving Poland. In 2017 no telecommunications license acquisition was recognized in Europe.

3.1.3.3.6 Additional information - Europe

Europe (at December 31, in thousands, at the end of the period)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Convergence services						
Number of convergent customers	1,969	1,642	1,642	20.0%	20.0%	1,259
o/w: Poland	1,369	1,236	1,236	10.8%	10.8%	1,035
Belgium & Luxembourg	237	167	167	41.8%	41.8%	97
Central Europe ⁽⁴⁾	364	239	239	52.2%	52.2%	127
Convergent ARPO over 12 months (3)						
Poland (in zlotys)	102.4	102.0	102.0	0.4%	0.4%	105.9
Belgium (in euros)	77.1	74.7	74.7	3.3%	3.3%	72.2
Mobile services						
Number of mobile services customers (2)	34,621	33,750	33,750	2.6%	2.6%	33,211
o/w: Customers with convergent offers	3,611	3,045	3,045	18.6%	18.6%	2,279
Customers with mobile only offers	31,010	30,705	30,705	1.0%	1.0%	30,931
o/w: Contract customers	23,056	22,219	22,219	3.8%	3.8%	21,502
Prepaid customers	11,565	11,531	11,531	0.3%	0.3%	11,709
o/w: Poland	15,284	14,805	14,805	3.2%	3.2%	14,424
Belgium & Luxembourg	4,690	4,342	4,342	8.0%	8.0%	4,038
Central Europe ⁽⁴⁾	14,647	14,603	14,603	0.3%	0.3%	14,749
Mobile only ARPO over 12 months (3)						
Poland (in zlotys)	20.1	21.6	21.6	(6.9)%	(6.9)%	22.9
Belgium (in euros)	18.0	18.3	18.3	(1.8)%	(1.8)%	18.1
Fixed-line services						
Number of fixed broadband						
service customers	3,472	3,261	3,261	6.5%	6.5%	2,951
o/w: Customers with very						
high-speed broadband access	1,069	784	784	36.3%	36.3%	488
o/w: Customers with convergent offers	1,969	1,642	1,642	20.0%	20.0%	1,259
Customers with fixed only offers	1,503	1,619	1,619	(7.2)%	(7.2)%	1,692
Fixed only broadband ARPO						
over 12 months (in euros) (3)						
Poland (in zlotys)	55.4	56.6	56.6	(2.1)%	(2.1)%	57.6
Number of fixed telephone lines	3,634	4,043	4,043	(10.1)%	(10.1)%	4,442
o/w: Poland	3,501	3,920	3,920	(10.7)%	(10.7)%	4,306
Belgium & Luxembourg	133	124	124	7.7%	7.7%	136
Central Europe ⁽⁴⁾	-	-	-	-	-	-

3.1.3.4 Africa & Middle East

Africa & Middle East (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,646	5,314	5,190	6.2%	8.8%	5,030
EBITDAaL	1,815	1,659	NA	9.4%	NA	NA
EBITDAaL/Revenue	32.2%	31.2%	NA			NA
Operating Income	939	-	659	-	42.5%	522
eCAPEX	987	1,007	NA	(2.0)%	NA	NA
eCAPEX/Revenue	17.5%	18.9%	NA			NA
Telecommunications licenses	212	44	42	382.9%	396.1%	297
Average number of employees	14,824	14,927	14,956	(0.7)%	(0.9)%	15,210
Historical indicators (up to December 3	31, 2018)					
Adjusted EBITDA	NA	NA	1,667	NA	NA	1,612
Adjusted EBITDA/Revenue	NA	NA	32.1%			32.1%
Reported EBITDA	NA	NA	1,655	NA	NA	1,591
CAPEX	NA	NA	1,008	NA	NA	1,021
CAPEX/Revenue	NA	NA	19.4%			20.3%

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

See Section 3.1.5.1 Data on a comparable basis.
 Excluding customers of Mobile Virtual Network Operators (MVNOs).
 See Section 7.2.1 Financial glossary.
 Central European countries: entities in Moldova, Romania and Slovakia.

Africa & Middle East continue to suffer political, security or economic instability and sometimes tax or regulatory pressures that may affect the business, activity and results of Group subsidiaries and holdings, and could continue to affect them in the future. In some cases, these situations have led the Group to book impairments on its assets (see Notes 7, 8.3 and 11 to the consolidated financial statements). For further information on these risk factors, see Section 2.1 Risk factors.

3.1.3.4.1 Revenue - Africa & Middle East

Africa & Middle East (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,646	5,314	5,190	6.2%	8.8%	5,030
Retail services	4,738	4,362	4,265	8.6%	11.1%	4,038
Mobile services only	4,230	3,894	3,809	8.6%	11.1%	3,600
Fixed services only	493	447	435	10.3%	13.5%	431
IT & integration services	14	21	21	(33.0)%	(32.8)%	7
Wholesale	780	834	811	(6.4)%	(3.8)%	894
Equipment sales	96	88	85	8.9%	13.6%	66
Other revenue	32	30	29	5.5%	7.4%	32

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

Africa & Middle East (at December 31, in millions of euros)	2019	2018 data on a comparable basis (1)	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	5,646	5,314	5,190	6.2%	8.8%	5,030
Sonatel sub-group (2)	1,797	1,676	1,674	7.2%	7.3%	1,597
Côte d'Ivoire sub-group (3)	1,195	1,135	1,132	5.2%	5.5%	1,096
Egypt	796	737	660	7.9%	20.6%	633
Morocco	602	578	562	4.2%	7.2%	535
Jordan	402	409	387	(1.7)%	3.8%	416
Cameroon	312	297	297	5.0%	5.0%	281
Congo (DRC)	312	271	257	15.1%	21.5%	239
Other countries (4)	285	273	283	4.7%	0.8%	283
Eliminations	(55)	(62)	(62)	(11.5)%	(11.5)%	(50)

See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

On a historical basis, the 456 million euros revenue increase in Africa & Middle East between 2018 and 2019 included (i) the positive impact of foreign exchange fluctuations of 133 million euros, mainly due to fluctuations in the Egyptian pound, the Jordanian dinar, and the Moroccan dirham, against the euro, (ii) the negative effect of changes in the scope of consolidation and other changes representing 8 million euros, and (iii) organic change on a comparable basis namely a 331 million euros increase in revenue.

On a comparable basis, the 331 million euros revenue increase in Africa & Middle East between 2018 and 2019 is mainly explained by growth in the business (i) of the Sonatel sub-group, primarily driven by Guinea, Senegal and Mali, (ii) Côte d'Ivoire sub-group primarily driven by Burkina Faso and the Côte d'Ivoire, (iii) Egypt, (iv) the Congo (DRC) and (v) to a lesser extent Morocco.

The growth in the revenue of the countries of Africa & Middle East between the two periods is mainly attributable to:

- the 337 million euros increase in Mobile only services, connected to a large extent:
 - the 25.2% increase in data services which benefits from the 42.6% growth in the 4G customer base with a total of 23.8 million customers on December 31, 2019,

- and the sustained growth of Orange Money (see Section 1.3 Significant events), With an increase of 20.1% year-on-year of the active Customer base, which is growing in all countries and totals 18.2 million active customers as of December 31, 2019. Orange Money's 2019 revenue totals 425 million euros, an increase of 27.1% Moreover, mobile voice services continue to grow due to the enhancement of the abundances offers especially in the countries in the sub Saharan zone;
- and to a lesser extent the increase of 46 million euros in Fixed only services, mainly due to the expansion of fiber especially in Morocco, Jordan and Senegal;
- partially offset by the 54 million euros decrease in Wholesale, mainly reflecting the fall in volumes of call termination rates and incoming international traffic and (ii) to a lesser extent the fall in roaming revenues connected with the gradual implementation of free roaming agreements (agreement allowing mobile customers in other countries to keep their local number without a surcharge, to receive calls free of charge and to make calls at local rates) in the West African region.

→ 2018 vs 2017

On a historical basis, the 160 million euros revenue increase in Africa & Middle East between 2017 and 2018 included (i) foreign exchange

Sonatel sub-group: entities in Senegal, Mali, Guinea, Guinea-Bissau and Sierra Leone. Côte d'Ivoire sub-group: entities in Côte d'Ivoire, Burkina Faso and Liberia.

 ⁽³⁾ Côte d'Ivoire sub-group: entities in Côte d'Ivoire, Burkina Faso and Liberia.
 (4) Other countries: mainly Botswana, Central African Republic (CAR), Madagascar and Niger, up until its disposal on November 22, 2019 (see Section 1.3 Significant events).

losses of 90 million euros, mainly due to fluctuations in the Egyptian pound, the Moroccan dirham, the Jordanian dinar and, to a lesser extent, the Guinean franc against the euro, (ii) more than offset by the organic change on a comparable basis, representing a 250 million euros increase in revenue.

On a **comparable basis**, the 250 million euros revenue increase in Africa & Middle East countries between the 2017 and 2018 was mainly due to the increase in revenue generated by (i) the Sonatel sub-group for 92 million euros (primarily driven by Guinea, Senegal and Mali), (ii) Egypt for 54 million euros, (iii) the Côte d'Ivoire sub-group (primarily driven by Burkina Faso) for 39 million euros, (iv) Morocco for 33 million euros and (v) Congo (DRC) for 29 million euros.

On a comparable basis, revenue growth of 271 million euros in Mobile only services reflects the commercial momentum of data services and Orange Money, and the almost stability of outgoing voice services, due notably to the development of abundance offers. Revenue for Orange Money services amounted to 334 million euros as of December 31, 2018, up 39.8% year-on-year in line with the 25.3% increase in the Orange Money active customer base (15.1 million customers at December 31, 2018). The total customer base of Orange Money stood at 39.2 million customers at December 31, 2018. The mobile only customer base totaled 120.6 million customers at December 31, 2018, down 0.7% compared to December 31, 2017. Between the two periods, the growth in the mobile only customer base in Africa and Middle East countries (excluding Egypt) was more than offset by the decline in the mobile only customer base in Egypt, resulting from the change in regulations in the country (related notably to the impact of the change in the indirect distribution regulatory framework).

On a comparable basis, the 13 million euros increase in revenue for Fixed only services between the two periods, was mainly due to revenue growth posted by fixed only broadband services in Morocco, offsetting the decrease in voice usage, for the Côte d'Ivoire sub-group and Jordan in particular.

On a comparable basis, the 67 million euros reduction in revenue from Wholesale between the two periods principally reflected the reduction in services to international carriers and incoming mobile traffic, particularly for the Sonatel sub-group.

3.1.3.4.2 EBITDAaL (adjusted EBITDA to December 31, 2018) – Africa & Middle East

→ 2019 vs 2018

In 2019, the EBITDAaL in Africa & Middle East totaled 1,815 million euros.

Between 2018 and 2019, the EBITDAaL of the Europe countries includes (i) the negative effects of the IFRS 16 standard and a change in operational performance indicators for an amount of 50 million euros, (ii) the positive effects of foreign exchange fluctuations of 43 million euros and (iii) the negative effects of changes in the scope of consolidation and other changes of 1 million euros.

On a **comparable basis**, the 157 million euros increase in EBITDAaL in Africa & Middle East between 2018 and 2019 is primarily explained by:

 the 331 million euros growth in revenue, and to a lesser extent the fall in service fees and inter-operator costs, the fall in incoming volumes and the reduction in call termination rates in some countries in the zone; partially offset (i) by the increase in operating taxes and levies payable due to the growth in the activity and the counter-effect of the recognition of the reversal of provisions to extinguish tax risks in 2018, (ii) by the increase in commercial expenses and the cost of equipment notably connected with the growth in the Orange Money activity and, to a lesser extent, (iii) the increase in labor expenses and (iv) the rise in the network's other expenses and IT expenses connected to the deployment of the network and overheads).

→ 2018 vs 2017

On a **historical basis**, the 55 million euros increase in adjusted EBITDA in Africa & Middle East between 2017 and 2018 included (i) foreign exchange losses of 24 million euros and the unfavorable impact of changes in the scope of consolidation and other changes for 3 million euros, (ii) more than offset by organic change on a comparable basis, representing an 82 million euros increase in adjusted EBITDA.

On a **comparable basis**, the 82 million euros increase in adjusted EBITDA in Africa & Middle East between 2017 and 2018 was largely attributable to:

- (i) 250 million euros in revenue growth, (ii) the fall in service fees and inter-operator costs, and (iii) the reduction in operating taxes and levies due to reversals on provisions for the extinction of tax risks in 2018:
- partially offset (i) by the growth in other network expenses and IT expenses (primarily due to the increase in work on mobile sites, particularly the deployment of 4G sites) (ii) the increase in commercial expenses (related in particular to the growth of Orange Money), (iii) increased labor expenses, and (iv) the growth of other external purchases (property expenses due to the development of the network and overheads).

3.1.3.4.3 Operating income – Africa & Middle East

→ 2019 vs 2018

On a **historical basis**, the 280 million euros increase in operating income in Africa & Middle East between 2018 and 2019 was largely attributable to:

- the 198 million euros increase connected to the combined effect of
 (i) the increase in EBITDAaL on a comparable basis (157 million
 euros), (ii) the positive effects of foreign exchange fluctuations
 (43 million euros), and (iii) the negative impact of changes to the
 scope of consolidation and other changes (1 million euros);
- and by the 135 million euros improvement in impairment losses on fixed assets (see Notes 7 and 8.3 to the consolidated financial statements), due to the recognition of:
 - an 89 million euros provision reversal on fixed assets in Egypt in 2019 reflecting the country's improved economic situation,
 - a 46 million euros impairment in 2018, primarily for Niger for 43 million euros. In Niger, the telecoms market sustained a loss in value in a difficult business environment. The Company's economic and financial situation has led it, as a precaution, to recognize a fixed-asset impairment to cover Orange's exposure according to the best current estimate;
- partly offset by the 66 million euros increase in depreciation and amortization of fixed assets mainly due to the roll out of mobile networks and the amortization of new 4G licenses.

→ 2018 vs 2017

On a **historical basis**, the 137 million euros increase in operating income in Africa & Middle East between 2017 and 2018 was largely attributable to:

- a 79 million euros reduction in impairment losses on goodwill and fixed assets (see Notes 7 and 8.3 to the consolidated financial statements), mainly due to the recognition of:
 - in 2018, (i) impairment loss on goodwill of 56 million euros on Jordan, and (ii) impairment loss on fixed assets for 43 million euros on Niger. In Jordan, the goodwill impairment mainly reflects the effects of an uncertain political and economic climate and strong competitive pressure on fixed and mobile data markets. In Niger, the telecoms market sustained a loss of value in a difficult business environment. The Company's economic and financial position led it, as a precaution, to recognize a fixed-asset impairment to cover Orange's exposure according to the best current estimate.
 - 181 million euros in impairment in 2017, primarily for the Democratic Republic of the Congo for 120 million euros and Niger for 52 million euros. In the Democratic Republic of the Congo (DRC), the impairment loss reflected a still-uncertain political and economic context, a clear decline in purchasing power, with its effects on consumption of telecommunications products and services, and continued regulatory pressure. In Niger, the impairment loss reflected an uncertain political and economic context and the effects of strong tax and regulatory pressure;
- and the 55 million euros increase in adjusted EBITDA.

3.1.3.4.4 Economic CAPEX (CAPEX until December 31, 2018) – Africa & Middle East

→ 2019 vs 2018

In 2019, economic CAPEX in Africa & Middle East countries totaled 987 million euros.

Between 2018 and 2019, the economic CAPEX of Africa & Middle East countries includes (i) the negative effects of the application of the IFRS 16 standard and a change in operational performance indicators for an amount of 28 million euros, (ii) the positive effects of foreign exchange fluctuations of 26 million euros and (iii) the negative effects of changes in the scope of consolidation and other changes of 1 million euros.

On a **comparable basis**, the 20 million euros reduction in economic CAPEX in Africa & Middle East countries between 2018 and 2019 was attributable to lower investment in information systems and customer service platforms, partially offset by the increased investment in very high-speed fixed broadband networks (FTTH).

→ 2018 vs 2017

On a **historical basis**, the 13 million euros decrease in CAPEX in Africa & Middle East countries between 2017 and 2018 reflects (i) negative foreign exchange effects of 22 million euros, (ii) in part offset by organic change on a comparable basis, i.e. an increase of 9 million euros in CAPEX.

On a **comparable basis**, the 9 million euros increase in CAPEX for Africa & Middle East countries between 2017 and 2018 was mainly attributable to (i) the continuing investment in very high-speed mobile and fixed broadband networks with, in particular, 12 countries with 4G coverage (excluding associates and joint ventures) as of December 31, 2018, (ii) partially offset by the reduction in other investments (particularly 2G/3G mobile access networks after significant capital expenditure in this area over the last few years).

3.1.3.4.5 Acquisitions of telecommunication licenses – Africa & Middle East

In 2019, telecoms licenses In Africa & Middle East countries amounted to 212 million euros, mostly relating to (i) Burkina Faso for 119 million euros with the acquisition of a technologically-neutral 2G/3G/4G license, and (ii) Guinea for 82 million euros, including the renewal of the current license with additional spectral resources and the acquisition of a 4G license, and secondly the acquisition of a new technologically-neutral 2G/3G/4G license.

In 2018, acquisitions of telecommunication licenses in Africa & Middle East amounted to 42 million euros and mainly involved (i) Congo (DRC) for 21 million euros (acquisition of a 4G license) and (ii) Senegal for 21 million euros (first tranche of the acquisition of additional 4G frequency blocks).

In 2017, acquisitions of telecommunication licenses In Africa & Middle East amounted to 297 million euros, on a historical basis, and mainly involved (i) Mali for 152 million euros (acquisition of a universal license renewing existing licenses and including a 4G license), (ii) Senegal for 76 million euros (second tranche of the acquisition of a universal license renewing existing licenses and including a 4G license), and (iii) Jordan for 49 million euros (acquisition of additional 3G frequency blocks).

3.1.3.4.6 Additional information - Africa & Middle East

Africa & Middle East (at December 31, in thousands, at the end of the period)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Mobile services						
Number of mobile services customers (2)	121,969	118,104	120,574	3.3%	(1.2)%	121,449
o/w: Contract customers	5,447	4,469	4,527	21.9%	20.3%	10,723
Prepaid customers	116,522	113,635	116,047	2.5%	0.4%	110,726
o/w: Sonatel sub-group (3)	32,301	29,184	29,184	10.7%	10.7%	29,706
Côte d'Ivoire sub-group (4)	23,762	23,257	23,257	2.2%	2.2%	21,785
Egypt	28,098	29,475	29,475	(4.7)%	(4.7)%	34,117
Morocco	12,884	12,805	12,805	0.6%	0.6%	12,744
Jordan	2,080	2,102	2,102	(1.0)%	(1.0)%	2,199
Cameroon	7,872	6,940	6,940	13.4%	13.4%	6,653
Congo (DRC)	10,661	10,602	10,602	0.6%	0.6%	9,059
Other countries (5)	4,311	3,739	6,209	15.3%	(30.6)%	5,186
Fixed-line services						
Number of fixed broadband						
service customers	1,229	1,018	1,020	20.7%	20.5%	797
Number of fixed telephone lines	823	959	959	(14.2)%	(14.2)%	955

3.1.3.5 **Enterprise**

Enterprise	2019	2018	2018	% change	% change	2017
(at December 31, in millions of euros)		data on a	data on a	data on a	data on a	data on a
		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
Revenue	7,820	7,745	7,292	1.0%	7.2%	7,251
EBITDAaL	1,191	1,212	NA	(1.7)%	NA	NA
EBITDAaL/Revenue	15.2%	15.6%	NA			NA
Operating Income	772	-	765	-	0.9%	889
eCAPEX	404	366	NA	10.3%	NA	NA
eCAPEX/Revenue	5.2%	4.7%	NA			NA
Average number of employees	25,979	24,870	22,963	4.5%	13.1%	20,807
Historical indicators (up to December 3	1, 2018)					
Adjusted EBITDA	NA	NA	1,245	NA	NA	1,306
Adjusted EBITDA/Revenue	NA	NA	17.1%			18.0%
Reported EBITDA	NA	NA	1,153	NA	NA	1,258
CAPEX	NA	NA	353	NA	NA	382
CAPEX/Revenue	NA	NA	4.8%			5.3%

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

See Section 3.1.5.1 Data on a comparable basis.
 Excluding customers of Mobile Virtual Network Operators (MVNOs).
 Sonatel sub-group: entities in Senegal, Mali, Guinea, Guinea-Bissau and Sierra Leone.
 Côte d'Ivoire sub-group: entities in Côte d'Ivoire, Burkina Faso and Liberia.
 Other countries: mainly Botswana, Central African Republic (CAR), Madagascar and Niger, up until its disposal on November 22, 2019 (see Section 1.3 Significant events).

3.1.3.5.1 Revenue - Enterprise

Enterprise (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	7,820	7,745	7,292	1.0%	7.2%	7,251
Fixed services only	3,963	4,030	3,997	(1.7)%	(0.8)%	4,152
Voice services (2)	1,289	1,382	1,385	(6.8)%	(7.0)%	1,452
Data services (3)	2,674	2,647	2,612	1.0%	2.4%	2,700
IT & integration services	2,909	2,732	2,312	6.5%	25.8%	2,092
Services and mobile equipment (4)	949	984	983	(3.6)%	(3.5)%	1,007
Mobile services only	727	743	743	(2.1)%	(2.1)%	751
Wholesale	34	35	35	(3.9)%	(3.9)%	32
Equipment sales	187	205	205	(8.7)%	(8.7)%	224

- See Section 3.1.5.1 Data on a comparable basis
- Voice services include (i) legacy voice offerings (PSTN access), (ii) Voice over Internet Protocol (VoIP) products, (iii) audio conference services, and (iv) incoming traffic for call centers.
 Data services include (i) legacy data solutions still offered by Orange Business Services (Frame Relay, Transrel, leased lines, narrowband), (ii) services having reached a certain maturity such as IP-VPN, and broadband infrastructure products such as satellite or fiber optic access, (iii) satellite TV broadcast services and (iv) Business Everywhere roaming offers.
 Services and mobile equipment include (i) Mobile only services, wholesale, corresponding to incoming enterprise mobile traffic invoiced to other carriers, and (ii) mobile equipment sales

→ 2019 vs 2018

On a historical basis, the 529 million euros increase in Enterprise revenue between 2018 and 2019 was due to:

- the positive effects of changes in the consolidation scope and other changes amounting to 385 million euros, including the effects of the takeover of Business & Decision on June 5, 2018, and the acquisitions of Basefarm on August 14, 2018, SecureLink on July 8, 2019, and SecureData on January 31, 2019 (see Section 1.3 Significant events);
- the positive effect of foreign exchange rate fluctuations of 69 million euros mainly resulting from the performance of the US dollar against the euro:
- and by organic change on a comparable basis, representing a 75 million euros increase in revenue.

On a comparable basis, the 75 million euros increase in Enterprise revenue between 2018 and 2019 is driven:

- by the 177 million euros increase in IT & Integration Services, mainly driven by the sharp increase in cyber security services (with revenue of 580 million euros in 2019, a 14.5% increase year-on-year) and Cloud services (up 14.6% year-on-year);
- and to a lesser extent by the 27 million euros increase in revenue from Data services (see the definition above in the footnote to the table), sustained by the development of the Wide Area Network (WAN), see 1.3 Significant events).

This growth between the two periods is partially up offset:

- by the 94 million euros fall in revenue of Voice services (see the above definition in the footnote to the table), mainly due to the trend of the natural decline of historic services;
- by the 35 million euros decrease in revenue from Services and mobile equipment (see the above definition in the footnote to the table), connected to (ii) the 17 million euros reduction in equipment sales and (iii) the 16 million euros reduction in revenue from mobile services only, mainly due to the fall in value from the contraction of the mobile customer base.

→ 2018 vs 2017

On a historical basis, the 41 million euros increase in Enterprise revenue between 2017 and 2018 was due to:

- the positive effects of changes in the consolidation scope and other changes of 151 million euros, mainly resulting from the takeover of Business & Decision on June 5, 2018, and the acquisitions of Basefarm on August 14, 2018 and Enovacom on February 21, 2018:
- more than offset by (i) the unfavorable effect of foreign exchange fluctuations for 94 million euros, mainly due to the change in the value of the US dollar against the euro, and (ii) the organic change on a comparable basis, i.e. a 16 million euros decrease in revenue.

On a comparable basis, the 16 million euros decrease in Enterprise revenue between 2017 and 2018 is attributable to:

- a 58 million euros decline in revenue of Voice Services which is mainly explained by the (i) the downward trend in conventional fixed telephony (down 6.4% year-on-year) and (ii) to a lesser extent, the decline in audio conference services;
- the 40 million euros reduction in revenue from Data services, mainly resulting from the 25 million euros reduction in revenue from satellite broadcast services (broadcast) and the natural decline in historic services:
- and the 24 million euros decline in Services and mobile equipment revenue caused (i) by the 19 million euros reduction in mobile equipment sales mainly connected to the adverse effects effect of a large contract in the second half of 2017 and (ii) the 8 million euros fall in revenue from mobile only services;
- largely offset by the 106 million euros increase in IT and Integration services revenue due in large part to the growth in Cloud (up 10.1% year-on-year) and cybersecurity services (12.3% year-on-year), and the signing of new contracts in 2018.

3.1.3.5.2 EBITDAaL (EBITDA adjusted until December 31, 2018) -Enterprises

→ 2019 vs 2018

In 2019, the EBITDAaL of Enterprises totaled 1,191 million euros.

Between 2018 and 2019, the EBITDAaL of Enterprises includes (i) the negative effects of the IFRS 16 standard and a change in operational performance indicators for an amount of 29 million euros, (ii) the negative effects of changes in the scope of consolidation and other changes for 27 million euros (iii) the positive effect of foreign exchange fluctuations of 23 million euros.

On a **comparable basis**, the 21 million euros decrease in adjusted EBITDA for Enterprises between 2018 and 2019 can essentially be attributed to:

- (i) the increase in labor expenses mainly due to the increase in the average number of employees (Full-time equivalents) connected to the development of new Cloud and cybersecurity activities, (ii) the increased cost of terminals and other sold production notably due to the increase in IT and integration services and (iii) the increase in other network expenses and IT expenses, due to the growth in the activity;
- partially offset by (i) the 75 million euros increase in revenue, (ii) the fall in other operating expenses (net of other operating income) and (iii) by the reduction in other external purchases.

→ 2018 vs 2017

On a **historical basis**, the 61 million euros decrease in Enterprise adjusted EBITDA between 2017 and 2018 was due to (i) the adverse effect of foreign exchange fluctuations, i.e. 10 million euros, completely offset by the favorable impact of changes in the scope of consolidation and other changes for 10 million euros and (ii) the organic change on a comparable basis, i.e. a decline of 61 million euros in adjusted EBITDA.

On a comparable basis, the 61 million euros reduction in Enterprise adjusted EBITDA between 2017 and 2018 is mainly explained by (i) increased labor expenses, principally related to the growth in the average number of employees (full-time equivalents), (ii) the decrease in other operating income and expenses and (iii) the 16 million euros decrease in revenue, (iv) partially offset by lower service fees and inter-operator costs.

3.1.3.5.3 Operating income – Enterprise

→ 2019 vs 2018

On a **historical basis**, the increase of 7 million euros in the operating income for Enterprise between 2018 and 2019 is mainly explained by:

 the 69 million euros reduction in specific labor expenses, largely due to the adverse effect of the recognition of a 68 million expense in 2018 for "Part-Time for Seniors" plans (TPS, relating to agreements on the employment of senior workers in France) and related premiums (see Notes 1.8 and 6 to the consolidated financial statements), The expense recorded in 2018 mainly relates to the effect of extending the 2015 French part-time for seniors plans (TPS) for three additional years;

- partially offset by:
 - the 26 million euros decrease connected to the combined effect
 of (i) the increase in EBITDAaL on a comparable basis (21 million
 euros), (ii) negative impact of changes to the scope of
 consolidation and other changes (27 million euros) and (iii) the
 positive effects of foreign exchange fluctuations (23 million euros),
 - the 12 million euros increase in depreciation and amortization due to new entities acquired in 2018 (Basefarm, Business & Decision and Enovacom) and in 2019 (SecureLink and SecureData,) see Section 1.3 Significant events).

→ 2018 vs 2017

On a **historical basis**, the 124 million euros decrease in the Enterprise operating income between 2017 2018 is mainly explained by (i) the 61 million euros decrease in adjusted EBITDA, (ii) the 53 million euros increase in specific labor expenses primarily for the "Part-time for Seniors (TPS) plan and related bonuses particularly with the three-year extension of the plan in December 2018 and (iii) by the 16 million euros increase in depreciation and amortization of fixed assets.

3.1.3.5.4 Economic CAPEX (CAPEX until December 31, 2018) – Enterprises

→ 2019 vs 2018

In 2019, Economic CAPEX for Enterprises totaled 404 million euros.

Between 2018 and 2019, Enterprise economic CAPEX included (i) the positive effect of changes in the scope of consolidation and other changes for 11 million euros, and (ii) the favorable impact of exchange rate fluctuations, i.e. 3 million euros.

On a **comparable basis**, the 38 million euros increase in Enterprise economic CAPEX between 2018 and 2019 is explained by stronger customer project investment requirements, in line with the growth in activity, and by the increased network investments made.

→ 2018 vs 2017

On a **historical basis**, the 29 million euros decrease in Enterprise CAPEX between 2017 and 2018 is reflected (i) by the 5 million euros adverse impact of foreign exchange fluctuations, more than offset by the favorable impact of changes in the scope of consolidation and other changes for 8 million euros and (ii) the organic change on a comparable basis, namely a 32 million euros reduction in CAPEX.

On a **comparable basis**, the 32 million euros decrease in Enterprise CAPEX between 2017 and 2018 is due to lower customer project requirements and the optimization of investments related to the network and IT system.

Additional information - Enterprise 3.1.3.5.5

Enterprise (at December 31, in thousands, at the end of the period)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Mobile services						
Number of mobile services customers in France ⁽²⁾ Fixed-line services	12,513	11,383	11,383	9.9%	9.9%	9,974
Number of fixed telephone lines in France (3) Number of IP-VPN accesses worldwide (4) o/w: Number of IP-VPN	2,190 360	2,424 357	2,424 357	(9.6)% 0.9%	(9.6)% 0.9%	2,576 352
accesses in France (4)	302	299	299	1.0%	1.0%	295

See Section 3.1.5.1 Data on a comparable basis.

3.1.3.6 **International Carriers & Shared Services**

International Carriers	2019	2018	2018	% change	% change	2017
& Shared Services		data on a	data on a	data on a	data on a	data on a
(at December 31, in millions of euros)		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
Revenue	1,498	1,584	1,534	(5.4)%	(2.3)%	1,651
EBITDAaL	(261)	(178)	NA	(46.3)%	NA	NA
EBITDAaL/Revenue	(17.4)%	(11.3)%	NA			NA
Operating Income	(499)	-	(519)	-	4.1%	(704)
eCAPEX	141	232	NA	(39.3)%	NA	NA
eCAPEX/Revenue	9.4%	14.6%	NA			NA
Average number of employees	12,529	12,638	12,621	(0.9)%	(0.7)%	12,535
Historical indicators (up to December 31	, 2018)					
Adjusted EBITDA	NA	NA	(45)	NA	NA	(78)
Adjusted EBITDA/Revenue	NA	NA	(3.0)%			(4.8)%
Reported EBITDA	NA	NA	(194)	NA	NA	(349)
CAPEX	NA	NA	316	NA	NA	282
CAPEX/Revenue	NA	NA	20.5%			17.1%

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

3.1.3.6.1 Revenue - International Carriers & Shared Services

International Carriers & Shared Services (at December 31, in millions of euros)	2019	2018 data on a comparable basis ⁽¹⁾	2018 data on a historical basis	% change data on a comparable basis (1)	% change data on a historical basis	2017 data on a historical basis
Revenue	1,498	1,584	1,534	(5.4)%	(2.3)%	1,651
Wholesale	1,077	1,204	1,150	(10.6)%	(6.3)%	1,275
Other revenue	421	379	384	11.0%	9.6%	376

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis.

→ 2019 vs 2018

On a historical basis, the 36 million euros decrease in International Carriers & Shared Services revenue between 2018 and 2019 can be attributed to (i) the negative impact of changes in the scope of consolidation and other changes for 53 million euros, (ii) the adverse effect of foreign exchange fluctuations for 4 million euros, and (iii) organic change on a comparable basis, namely an 85 million euros decrease in revenue.

On a comparable basis, the 85 million euros decrease in International Carriers and Shared Services between 2018 and 2019 is attributable to:

- the 127 million euros fall in Wholesale, due to the reduction in International wholesale due to the downward trend in the voice market:

- partially offset by the growth of 42 million euros in Other revenue, notably due to the growth in the Orange Cinéma Series driven by the success of series (notably Game of Thrones) and the growth in Orange Marine's submarine cable laying activity.

→ 2018 vs 2017

On a historical basis, the 117 million euros decrease in International Carriers & Shared Services revenue between the two periods can be attributed to (i) the adverse effect of foreign exchange fluctuations for 13 million euros, (ii) the negative effect of changes in the scope of consolidation and other changes representing 5 million euros, and (iii) organic change on a comparable basis, namely a 99 million euros decrease in revenue.

Contract customers Excluding customers of Mobile Virtual Network Operators (MVNOs).

This figure includes standard analog lines (excluding fully unbundled lines) and Numeris (ISDN) channels, each Numeris channel being booked as a line). Access of customers outside the Orange Group, not including operators' market.

On a **comparable basis**, the 99 million euros decrease in revenue of International Carriers & Shared Services between 2017 and 2018 was due to (i) the 118 million euros decline in the international Wholesale, with in particular the decline in the voice market to Africa and the Maghreb, (ii) partly offset by the 19 million euros growth of Other revenue.

3.1.3.6.2 EBITDAaL (EBITDA adjusted until December 31, 2018) – International Carriers & Shared Services

→ 2019 vs 2018

In 2019, the EBITDAaL for International Carriers & Shared Services is negative by 261 million euros.

Between 2018 and 2019, the EBITDAaL of International Carriers & Shared Services includes (i) the negative effects of the IFRS 16 standard and a change in operational performance indicators for an amount of 127 million euros, (ii) the negative effects of changes in the scope of consolidation and other changes for 4 million euros (iii) the positive effect of foreign exchange fluctuations of 2 million euros.

On a **comparable basis**, the 82 million euros decline in adjusted EBITDA for International Carriers & Shared Services between 2018 and 2019 was mainly attributable to (i) the 85 million euros decline in revenue, (ii) the reduction in other operating income and expenses, (iii) increased labor expenses, (iv) the increase in other external purchases (mainly expenses for the costs of leases due to the transformation of the real estate park in France), (v) by the increase In taxes and operating payables, and (vi) by the increase in the cost of content in connection with the growth in the Orange Cinema Séries activity, (vii) partly offset by the strong reduction in service fees and inter-operator costs connect to the decline in the International Carriers activity.

→ 2018 vs 2017

On a **historical basis**, the 33 million euros growth in adjusted EBITDA of International Carriers & Shared Services between 2017 and 2018 can be attributed to (i) the positive effect of foreign exchange fluctuations for 3 million euros, partially offset by the unfavorable effect of changes in the scope of consolidation and other changes for 2 million euros, and (ii) the organic change on a comparable basis, namely a 32 million euros increase in adjusted EBITDA.

On a **comparable basis**, the increase of 32 million euros in adjusted EBITDA for International Carriers & Shared Services between 2017 and 2018 is mainly explained by (i) the fall in service fees and inter-operator costs resulting from the decline in the international carriers activity, (ii) the increased income from the sale of fixed assets within the scope of the real estate optimization program, (iii) the increase in other operating income and expenses, (iv) partly offset by a 99 million euros reduction in revenue and by the increase in labor expenses.

3.1.3.6.3 Operating income – International Carriers & Shared Services

\rightarrow 2019 vs 2018

On a **historical basis**, the 20 million euros improvement in the operating income for International Carriers & Shared Services between 2018 and 2019 is mainly attributable to:

 135 million euros decrease in specific labor expenses, largely due to the adverse effect of the recognition of a 129 million expense in 2018 for "Part-Time for Seniors" plans (TPS, relating to agreements on the employment of senior workers in France) and related premiums (see Notes 1.8 and 6 to the consolidated financial statements), The expense recorded in 2018 mainly relates to the effect of extending the 2015 "Part-time for Seniors" plans (TPS) for three additional years;

- and by the increase of 74 million euros in the income from disposals
 of fixed assets, investments and businesses, related to the increased
 income from disposals of fixed assets mainly connected with real
 estate optimization programs;
- partially offset by:
 - the 88 million euros decrease connected to the combined effect
 of (i) the decrease in EBITDAaL on a comparable basis (82 million
 euros), (ii) negative impact of changes to the scope of
 consolidation and other changes (4 million euros) and (iii) foreign
 exchange fluctuations (2 million euros),
 - the recognition, in 2019, of a 47 million euros expense for significant litigation, and an increase of 24 million euros for depreciation and amortization of real estate assets.

→ 2018 vs 2017

On a historical basis, the 185 million euros improvement in International Carriers & Shared Services operating income between 2017 and 2018 was mainly attributable to (i) the counter-effect of the recognition, in 2017, of an expense of 156 million euros for significant litigation, (ii) the 33 million euros increase in adjusted EBIDTA, (iii) the 23 million reduction in restructuring and integration costs, mainly resulting from the restructuring of real estate and (iv) the positive 21 million euros effect of the review of the securities and activities portfolio, (v) partially offset by the 76 million euros increase in specific labor expenses, mainly due to the French "Part-Time for Seniors" plan (TPS, procedures in relation to agreements on the employment of seniors in France) and associated bonuses, notably with the renewal in December 2018 of these provisions for three years.

3.1.3.6.4 Economic CAPEX (CAPEX until December 31, 2018) – International Carriers & Shared Services

→ 2019 vs 2018

In 2019, the Economic CAPEX of International Carriers & Shared Services totaled 141 million euros.

Between 2018 and 2019, the Economic CAPEX of International Carriers & Shared Services included (i) the negative impact of the effects of the IFRS 16 standard and a change in performance indicators for 91 million euros, and (ii) the positive impact of changes in the scope of consolidation and other changes for 7 million euros.

On a **comparable basis**, the 91 million euros decrease in the economic CAPEX of International Carriers & Shared Services between 2018 and 2019 mainly resulted from the rise in disposals of fixed assets within the scope of the real estate optimization program.

→ 2018 vs 2017

On both a **historical basis** and a **comparable basis**, the 34 million euros increase in CAPEX for International Carriers & Shared Services between 2017 and 2018 was mainly due to (i) the increase in investments in real estate projects (in line with the adaptation and modernization of the real estate portfolio) and (ii) by the investments in submarine cables, with in particular the Kanawa cable that connects French Guyana, Martinique and Guadeloupe.

3.1.3.7 Orange Bank

Orange Bank continued to develop its mobile financial services, with (i) the launch of its Visa Premium card in March 2019 and the introduction of cashback (refund of a portion of the initial purchase price of certain purchases to purchasers) beginning in July 2019, and (ii) with the launch of the banking offer in Spain in November 2019 (see Section 1.3 Significant events).

As of December 31, 2019, Orange Bank had over 500,000 customers won via Orange stores, Groupama branches and digital channels, of which 390,000 were account holders.

Orange Bank	2019	2018	2018	% change	% change	2017
(at December 31, in millions of euros)		data on a	data on a	data on a	data on a	data on a
		comparable basis (1)	historical basis	comparable basis (1)	historical basis	historical basis
Net banking income (NBI) (2)	40	43	43	(6.3)%	(6.3)%	73
Cost of bank credit risk (3)	(10)	(7)	(7)	41.7%	41.7%	(6)
Operating Income	(186)	-	(169)	-	(9.8)%	(93)
eCAPEX	28	36	NA	(23.4)%	NA	NA
Average number of employees	849	782	783	8.5%	8.5%	663
Historical indicators (up to December 31	, 2018)					
CAPEX	NA	NA	36	NA	NA	61

⁽¹⁾ See Section 3.1.5.1 Data on a comparable basis

3.1.3.7.1 Operating activities

Segment information for Orange Bank (operating income, investments in property, plant and equipment and intangible assets) is presented in Notes 1.2 and 1.3 to the consolidated financial statements.

→ 2019 vs 2018

On a **historical basis**, the 17 million euros deterioration in Orange Bank's operating income between 2018 and 2019 was mainly attributable to:

- the increase in operating expenses, resulting from the development of the Orange Bank in Spain partially offset by the reduction in operating expenses connected to the activity in France;
- the drop in Net banking income (NBI, see Note 1.2 to the consolidated financial statements), notably due to a review of the value of the securities portfolio, despite the increase in the NBI of the Orange Bank offer launched in France in 2017;
- and by the increase in the cost of bank credit risk.

Orange Bank's economic CAPEX totaled 28 million euros in 2019.

On a **comparable basis**, Orange Bank's economic CAPEX decreased by 8 million euros between 2018 and 2019 mainly due to the decreased investment in France, which was partially offset by the increased investment in Spain within the scope of launching the banking offer in this country (see Section 1.3 Significant events).

→ 2018 vs 2017

On a **historical basis**, the 76 million euros deterioration in Orange Bank's operating income between 2017 and 2018 was mainly attributable to:

- the decrease in Net Banking Income (NBI) mainly due (i) to the costs of acquiring new customers related to the increase in the volume of accounts produced during the fiscal year and (ii) the decrease in NBI from cash transactions;
- and the increase in operating expenses, resulting from the recent launch of the Orange Bank offering (IT maintenance and development, hiring, depreciation and amortization of the new investments, etc.);

 partially offset by the counter-effect of the recognition of a loss of 27 million euros in 2017 due to the Groupama Bank (now Orange Bank) takeover in 2016.

On a **historical basis**, the 25 million euros decrease in Orange Bank CAPEX between 2017 and 2018 reflects the 1 million euros adverse impact of changes in the scope of consolidation and other changes and by the organic change on a comparable basis, namely a 24 million euros reduction in CAPEX.

On a **comparable basis**, the decrease of 24 million euros in Orange Bank CAPEX between 2017 and 2018 resulted mainly from lower investments in 2018, as fiscal year 2017 had concentrated most of the investments dedicated to the launch of the new bank offering.

3.1.3.7.2 Assets, liabilities and cash flows

The segment information pertaining to Orange Bank (operating income, investments in property, plant and equipment and intangible assets, assets, liabilities and cash flows) are presented in Note 1 to the consolidated financial statements, and Orange Bank's activities (financial assets and liabilities, management of market risks connected with the activities, and unrecognized contractual commitments) are described in Note 16 to the consolidated financial statements.

Outstanding loans and receivables to customers as of December 31, 2019 came to 1.9 billion euros, a decrease of 63 million euros compared to December 31, 2018 due to the progressive extinction of business and corporate loans. Retail loans made up 90.1% of that total. 44.9% were consumer loans (see Note 16.1.1 to the consolidated financial statements).

Outstanding payables to customers (deposits and savings) as of December 31, 2018 totaled 3.4 billion euros, a reduction of 39 million euros compared to December 31, 2018. This was composed mainly of retail deposits, which were down primarily in response to the end of sales of Elancio financial products. Institutional investors' deposits made up less than half of the total (see Note 16.1.2 to the consolidated financial statements).

For further information on the risks relating to the Orange Bank activities, see Section 2.1.3 Financial risks.

⁽²⁾ Net Banking Income (NBI) recognized as other operating income (see Notes 1.2 and 4.2 to the consolidated financial statements).

⁽³⁾ Cost of bank credit risk recognized in other operating expenses (see Notes 1.2 and 5.2 to the consolidated financial statements).

3.1.4 Cash flow, equity and financial debt

To ensure the transparency of the financial statements and separate out the performances of the telecoms activities and the Orange Bank activities, the analysis and financial commentary are split to reflect these two scopes of operation. Accordingly, Sections 3.1.4.1 Liquidity and cash flows of telecoms activities and 3.1.4.2. Financial debt and liquidity position of telecoms activities deal with the telecom activities, and Section 3.1.3.7 Orange Bank covers the Orange Bank activities.

3.1.4.1 Liquidity and cash flows of telecoms

Cash flows for the telecoms activities are presented in Note 1.7 to the consolidated financial statements.

Simplified statement of cash flows of telecoms activities (1) (at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Net cash provided by operating activities Net cash used in investing activities Net cash used in financing activities Cash change in cash and cash equivalents	10,983	9,672	9,902
	(9,707)	(8,426)	(7,962)
	(247)	(1,499)	(2,834)
	1,029	(253)	(894)
Cash and cash equivalents in the opening balance Cash change in cash and cash equivalents Non-cash change in cash and cash equivalents Cash and cash equivalents in the closing balance	5,081	5,333	6,267
	1,029	(253)	(894)
	3	1	(40)
	6,112	5,081	5,333

⁽¹⁾ See Note 1.7 to the consolidated financial statements

Organic cash flow (telecoms activities) 3.1.4.1.1

Organic cash flow from telecom activities is not a financial aggregate defined by IFRS standards. For further information on the calculation of organic cash flow from telecoms activities and the reasons why the Orange Group uses this aggregate, see Section 3.1.5 Financial indicators not defined by IFRS and Section 7.2.1 Financial glossary.

Organic cash flow from telecoms activities stood at 2,345 million euros in 2019 (see Note 1.7 to the consolidated financial statements).

Organic cash flow from telecoms activities	2019
(at December 31, in millions of euros)	
EBITDAaL of telecoms activities	13,019
eCAPEX of telecoms activities	(7,265)
EBITDAaL - eCAPEX of telecoms activities	5,754
Increase (decrease) in eCAPEX suppliers (1)	45
Decrease (increase) in working capital requirement ⁽²⁾	(204)
Interest paid and interest rate effects on derivatives, net (net of dividends received) (3)	(1,196)
Cash tax payments	(1,079)
Other operating items (4)	(975)
Organic cash flow from telecoms activities	2,345

Including investing donations received in advance.

3.1.4.1.2 Net cash provided by operating activities (telecoms activities)

Net cash generated by telecoms activities was 10,983 million euros in 2019, versus 9,672 million euros in 2018 and 9,902 million euros in 2017.

In 2019, Orange pursued its policy of actively managing its working capital requirement. The effects on the change in working capital requirement (i) of the sale of receivables, and (ii) the extended payment terms on certain suppliers of goods and services and fixed assets, are described in Notes 4.3 and 5.6, respectively, to the consolidated financial statements.

See Section 7.2.1 Financial glossary.

Excluding 97 million euros in interest disbursed on lease liabilities (See Note 1.7 to the consolidated financial statements).

Including (i) disbursements related to "Temps Partiel Séniors" (TPS, measures relating to the French Part-Time for Seniors agreements) and restructuring and integration costs, (ii) repayment of debt liabilities, and (iii) elimination of the non-monetary effects included in the EBITDAaL.

→ 2019 vs 2018

Change in net cash provided by telecoms activities - 2019 vs 2018

(at December 31, in millions of euros)

Net cash provided by operating activities in 2018	9,672
Increase (decrease) in the operating income	1,098
Change in working capital requirement	(5)
Decrease (increase) in operating taxes and levies paid	(163)
Decrease (increase) in interest paid and interest rate effects on derivatives, net (net of dividends received)	(85)
Decrease (increase) in income tax paid	(151)
Change in non-monetary items included in operating income and reclassified items for presentation (1)	616
Net cash generated by operating activities in 2019	10,983

⁽¹⁾ Reclassified items for presentation include the elimination of operating taxes and levies payable included in the operating income and presented separately above.

Between 2018 and 2019, the 1,311 million euros increase in net cash from telecoms activities, was largely attributable to the effects of the application of IFRS 16 at January 1, 2019 (see Note 2.3 to the consolidated financial statements), with the presentation, in 2019, of

lease liability repayments (1,395 million euros in the first half of 2019, see below) in net cash used in financing activities, while these flows were shown in net cash provided by operating activities in 2018.

→ 2018 vs 2017

Change in net cash generated by telecoms activities - 2018 vs 2017

(at December 31, in millions of euros)

Net cash provided by operating activities in 2017	9,902
Increase (decrease) in EBITDA	200
Change in working capital requirement	(281)
Decrease (increase) in operating taxes and levies paid	155
Decrease (increase) in interest paid and interest rate effects on derivatives, net (net of dividends received)	65
Decrease (increase) in income tax paid	(344)
Other ⁽¹⁾	(25)
Net cash provided by operating activities in 2018	9,672

⁽¹⁾ Of which the change in the elimination of non-monetary effects included in the calculation of reported EBITDA.

Between 2017 and 2018, the 230 million euros decrease in net cash generated by telecoms activities was largely attributable to:

- the 344 million euros increase in current tax expense paid, mainly in France, primarily due to (i) counter-effects of the 3% tax on dividends in 2017, and particularly the repayment of 304 million euros by the French tax authorities in 2017 in relation to the dispute regarding this tax (see Note 10.2 to the consolidated financial statements), and (ii) the increase in down payments during the year due to the exhaustion of tax losses carryforwards in 2018, and (iii) partly offset by the counter-effect of the implementation of the exceptional surtax applicable to 2017 (see Note 10.2 to the consolidated financial statements);
- the 281 million euros change in working capital, largely resulting from (i) a less pronounced increase in trade payables on other goods and services in 2018 than in 2017, and (ii) a larger increase in gross inventories in 2018 than in 2017;
- partly offset by (i) a 200 million euros increase in reported EBITDA, and (ii) by the 155 million euros decrease in operating taxes and levies paid.

3.1.4.1.3 Net cash used in investing activities (telecoms activities)

The net cash used in investing activities of telecoms activities amounted to a negative 9,707 million euros in 2019 as against a negative 8,426 million euros in 2018, and a negative 7,962 million euros in 2017.

→ 2019 vs 2018

Between 2018 and 2019, the 1,281 million euros increase in net cash used in investing activities of telecoms activities was largely attributable to:

- the 1,581 euros increase in investments and other financial assets, primarily related to cash received when bonds were issued in 2019 (see Note 12.5 to the consolidated financial statements);
- and by the 219 million euros increase in acquisitions of investment securities (net of cash acquired), owing mainly to the acquisitions of SecureLink, SecureData, BKM and BlueSoft in 2019 (see Section 1.3 Significant Events) versus the acquisitions of Basefarm, Business & Decision and Enovacom in 2018 (see Note 3.2 to the consolidated financial statements);

- partially offset by the effects of proceeds from the disposal of BT securities for 490 million euros, with proceeds of 543 million euros in 2019, compared to 53 million euros in 2018 (see Section 1.3 Significant events and Note 12.7 to the consolidated financial statements).

→ 2018 vs 2017

Between 2017 and 2018, the 464 million euros increase in net cash used in investing activities of telecoms activities was largely attributable to:

- the effects of proceeds from the disposal of BT securities for 380 million euros, with proceeds of 53 million euros in 2018, compared to 433 million euros in 2017 (amount net of costs, see Note 12.7 to the consolidated financial statements);

- the recognition of the 346 million euros escrow amount in 2018 relating to the Digicel dispute (see Notes 12.7 and 17 to the consolidated financial statements);
- the 344 million euros increase in acquisitions and disposal of property, plant and equipment and intangible assets (net of changes in the fixed asset payables), mainly in France, in line with the growth in CAPEX between the two periods (see Section 3.1.2.5 Group capital expenditures);
- and by the acquisitions, in 2018, of Basefarm for 230 million euros (see Note 3.2 to the consolidated financial statements);
- partly offset by the counter-effect on the 1,074 million euros increase of investments at fair value (excluding cash equivalents) in 2017.

3.1.4.1.3.1 Purchases and sales of property, plant and equipment and intangible assets

Purchases and sales of property, plant and equipment and intangible assets (at December 31, in millions of euros, net of change in the fixed asset payables)	2019	2018 data on a historical basis	2017 data on a historical basis
Purchases of property, plant and equipment and intangible assets ⁽¹⁾	(8,394)	(7,606)	(7,466)
eCAPEX	(7,265)	NA	NA
CAPEX (until December 31, 2018)	NA	(7,406)	(7,148)
Elimination of proceeds from sales of property, plant and equipment and intangible assets (2) Telecommunications licenses	(610)	NA	NA
	(519)	(200)	(318)
Increase (decrease) in fixed asset trade payables ⁽³⁾ Sales of property, plant and equipment and intangible assets ⁽⁴⁾	211	(241)	8
	628	192	147
Telecoms activities total	(7,555)	(7,655)	(7,311)

⁽¹⁾ Financed assets and capital expenditure financed through finance leases have no effect on cash flows when acquired (see Section 3.1.2.5 Group capital expenditures and Notes 1.4 and

3.1.4.1.3.2 Acquisitions and sales of investment securities

Acquisitions and sales of investment securities (1) (at December 31, in millions of euros, net of cash acquired or transferred)	2019	2018 data on a historical basis	2017 data on a historical basis
Acquisitions of investment securities (net of cash acquired)	(599)	(380)	(84)
Acquisition of 100% of SecureLink ⁽²⁾	(371)	-	-
Acquisition of 100% of SecureData ⁽²⁾	(95)	-	-
Acquisition of 100% of BKM	(34)	-	-
Acquisition of 100% of BlueSoft	(28)	-	-
Acquisition of 100% of Basefarm	-	(230)	-
Acquisition of 88.2% in Business & Decision	-	(36)	-
Acquisition of 100% of Enovacom	-	(29)	-
Acquisition of 100% of Airtel in Burkina Faso	-	21	(10)
Acquisition of 100% of Airtel in Sierra Leone	-	19	-
Acquisition of 100% of Oasis (Tigo) in the Democratic Republic of the Congo (DRC)	-	-	-
Acquisition of 100% of Cellcom Telecommunication in Liberia	-	(3)	-
Other acquisitions	(72)	(122)	(74)
Sales of investment securities (net of cash transferred)	529	110	515
Sales of BT shares (2) (3)	543	53	433
Sales of EE shares	-	-	50
Sale of 10% of Dailymotion	-	-	26
Other sales	(14)	57	6
Telecoms activities total	(71)	(270)	431

See Note 3.2 to the consolidated financial statements

^{8.5} to the consolidated financial statements).

(2) Elimination of proceeds from sales of property, plant and equipment included in Economic CAPEX (eCAPEX).

Including investing donations received in advance

⁽⁴⁾ Net of change in receivables and advance on disposal of assets.

⁽²⁾ See Section 1.3 Significant events.

⁽³⁾ See Note 12.7 to the consolidated financial statements.

3.1.4.1.3.3 Other changes in securities and other financial assets

Other decreases (increases) in securities and other financial assets (at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Investments at fair value, excluding cash equivalents Other	(2,019) (63)	(31) (470)	(1,074) (8)
Telecoms activities total	(2,082)	(501)	(1,082)

3.1.4.1.4 Net cash used in financing activities (telecoms activities)

The net cash used in financing activities of telecoms activities was a negative 247 million euros in 2019, versus a negative 1,499 million euros in 2018 and a negative 2,834 million euros in 2017.

Net cash used in financing activities	2019	2018	2017
(at December 31, in millions of euros)		data on a	data on a
		historical basis	historical basis
Change in medium- and long-term debt ⁽¹⁾	3,701	1,119	(278)
Medium and long-term debt issuances	8,351	5,214	2,450
Medium and long-term debt redemptions and repayments	(4,650)	(4,095)	(2,728)
Repayments of lease liabilities (2)	(1,395)	-	-
Increase (decrease) of bank overdrafts and short-term borrowings (1)	(1,082)	(251)	964
Decrease (increase) of cash collateral deposits (1)	609	203	(1,138)
Exchange rate effects on derivatives, net	26	7	(66)
Issuances (purchases) of subordinated notes (3) (4)	500	-	-
Coupons and other fees on subordinated notes (3) (4)	(357)	(280)	(282)
Sale (purchases) of treasury shares (3)	(34)	(98)	(4)
Purchases of treasury shares - Orange Vision 2020 free share award plan	(27)	(101)	-
Other proceeds (purchases) from treasury shares	(7)	3	(4)
Capital increase (decrease) (3)	(108)	(87)	(66)
Capital increase (decrease) of owners of the parent company	-	-	-
Capital increase (decrease) of non-controlling interests	(108)	(87)	(66)
Changes in ownership interests with no gain or loss of control in subsidiaries	(7)	(6)	1
Dividends paid (3)	(2,100)	(2,106)	(1,965)
Dividends paid to owners of the parent company (4)	(1,857)	(1,860)	(1,729)
Dividends paid to non-controlling interests	(243)	(246)	(236)
Telecoms activities total	(247)	(1,499)	(2,834)

- See Note 12 to the consolidated financial statements.

 The effects of IFRS 16 are described in Note 2.3 to the consolidated financial statements.
- See Note 14 to the consolidated financial statements.
- (4) See Section 3.1.4.3 Equity.

→ 2019 vs 2018

Between 2018 and 2019, the 1,252 million euros increase in net cash related to the financing of telecoms activities was largely attributable to:

- (i) the 3,137 million euros increase in medium- and long-term debt issuances (see Notes 12.5 and 12.6 to the consolidated financial statements), (ii) by the issuance (net of purchases) of 500 million euros in subordinated notes in 2019, (see Note 14.4 to the consolidated financial statements), and (iii) by the net change in cash collateral deposits for 406 million euros;
- partially offset (i) by the recognition, in the first half of 2019, of 1,395 million euros in lease liability repayments related to the application of IFRS 16 on January 1, 2019 (see Section 3.1.4.1.2 Net operating cash flows from activities (telecom activities) and Note 2.3 to the consolidated financial statements), (ii) by the 555 million euros increase in medium- and long-term loan repayments (see Notes 12.5 and 12.6 to the consolidated financial $\,$ statements) and (ii) by changes in bank overdrafts and short-term borrowings for 831 million euros.

→ 2018 vs 2017

Between 2017 and 2018, the 1,335 million euros decrease in net cash related to the financing of telecoms activities was largely attributable to:

- the 2,764 million euros increase in medium- and long-term debt issuance (see Notes 12.5 and 12.6 to the consolidated financial statements);
- and the net change in cash collateral (with an increase of 203 million euros in 2018 compared with a decrease of 1,138 million euros in 2017), reflecting the change in the fair value of derivatives used mainly for hedging bond loans denominated in the Group's currencies (with an improvement in 2018 compared with a deterioration in 2017), see Note 13.5 to the consolidated financial statements);
- partly offset (i) by the 1,367 million euros increase in medium- and long-term loan repayments, and (ii) changes in bank overdrafts and short-term borrowings (with a decrease of 251 million euros in 2018 compared to an increase of 964 million euros in 2017).

3.1.4.2 Financial debt and liquidity position of telecoms activities

For further information on the risks relating to the Orange Group's financial debt, see Section 2.1.3 Financial risks.

3.1.4.2.1 Net financial debt

Net financial debt (see Note 12.3 to the consolidated financial statements) and the ratio of net financial debt to EBITDAaL of telecoms activities (as well as, until December 31, 2018, the ratio of net financial debt to adjusted EBITDA of telecoms activities) are financial indicators not defined by IFRS. For further information on the calculation of these indicators and the reasons why the Orange Group uses them, see Section 3.1.5 Financial indicators not defined by IFRS and Section 7.2.1 Financial glossary. Net financial debt as defined and used by Orange does not include Orange Bank activities, for which this concept is not relevant.

Compared to December 31, 2018, net financial debt at December 31, 2019 excludes lease liabilities within the scope of IFRS 16 (see the heading of Section 3.1.5 Financial indicators not defined by IFRS and Note 2.3 to the consolidated financial statements) and includes liabilities on financed assets.

(at December 31)	2019	2018 data on a historical basis	2017 data on a historical basis
Net financial debt (1) (2) Ratio of Net financial debt/Adjusted EBITDA of telecoms activities	25,466	25,441	23,843
(until December 31, 2018) ⁽¹⁾ Ratio of Net financial debt/EBITDAaL of telecoms activities ⁽¹⁾	NA 1.96	1.93 NA	1.87 NA

⁽¹⁾ See Section 3.1.5 Financial indicators not defined by IFRS.

→ 2019 vs 2018

Between December 31, 2018 and December 31, 2019, net financial debt was stable with a limited increase of 25 million euros.

Change in net financial debt – 2019 vs 2018	Decrease/(Increase)
(at December 31, in millions of euros)	
Net financial debt at 31 December 2018	(25,441)
Organic cash flow from telecoms activities (1)	2,345
Telecommunication licenses paid	(334)
Significant litigations paid (and received)	5
Acquisitions and proceeds from sales of investment securities (net of cash acquired or sold)	
and changes in ownership interests with no gain or loss of control	(77)
Coupon and other fees on subordinated notes (2)	(357)
Dividends paid to owners of the parent company (2)	(1,857)
Dividends paid to non-controlling interests	(243)
Exclusion of finance lease liabilities from net financial debt (3)	584
Other financial items	(91)
Orange Bank capital increase subscribed by the Group (4)	(122)
Other ⁽⁵⁾	31
Decrease (increase) in net financial debt	(25)
Net financial debt at December 31, 2019	(25,466)

⁽¹⁾ See Section 3.1.4.1 Organic cash flow (telecoms activities) and Note 1.7 to the consolidated financial statements.

⁽²⁾ In millions of euros. Compared to December 31, 2018, net financial debt at December 31, 2019 excludes lease liabilities within the scope of IFRS 16 (see the heading of Section 3.1.5 Financial indicators not defined by IFRS and Note 2.3 to the consolidated financial statements) and includes liabilities on financed assets.

 ⁽²⁾ See Section 3.1.4.3 Equity and Note 14.4 to the consolidated financial statements.
 (3) Compared to December 31, 2018, net financial debt at December 31, 2019 excludes lease liabilities within the scope of IFRS 16 (see the heading of Section 3.1.5 Financial indicators not defined by IFRS and Note 2.3 to the consolidated financial statements) and includes liabilities on financed assets.

⁽⁴⁾ See Note 1.7 to the consolidated financial statements.

See Note 1.7 to the Consolinated intancial statements of the Consolinated intancial statements. Including (i) the effects of changes in scope, corresponding primarily to the acquisitions of SecureLink and SecureData, partially offset by the disposal of Orange Niger (see Section 1.3 Significant events), and (ii) the effect of recognizing debts from financed assets.

→ 2018 vs 2017

Between December 31, 2017 and December 31, 2018, net financial debt rose 1,598 million euros.

Change in net financial debt – 2018 vs 2017	Decrease/(Increase)
(at December 31, in millions of euros)	
Net financial debt at December 31, 2017	(23,843)
Adjusted EBITDA of telecoms activities	13,151
CAPEX of telecoms activities	(7,406)
Telecommunication licenses paid	(422)
Decrease (increase) of CAPEX suppliers (1)	(19)
Increase (decrease) in working capital requirement	(199)
Interest paid and interest rate effects on derivatives, net (net of dividends received)	(1,208)
Cash tax payments	(928)
Other operating items (2)	(954)
Acquisitions and proceeds from sales of investment securities (net of cash acquired or sold)	
and changes in ownership interests with no gain or loss of control	(276)
Coupons and other fees on subordinated notes (3)	(280)
Dividends paid to owners of the parent company ⁽³⁾	(1,860)
Dividends paid to non-controlling interests	(246)
Other financial items	(951)
Provision for the Digicel litigation (4)	(346)
Purchases of treasury shares – Orange Vision 2020 free share award plan (5)	(101)
Orange Bank capital increase subscribed by the Group ⁽⁶⁾	(101)
Other ⁽⁷⁾	(403)
Decrease (increase) in net financial debt	(1,598)
Net financial debt at 31 December 2018	(25,441)

- Including investing donations received in advance.
- Primarily (i) the disbursements relating to restructuring and integration costs, and (ii) elimination of non-monetary effects included in adjusted EBITDA. See Section 3.1.4.3 Equity and Note 14 to the consolidated financial statements.
- See Notes 12.7 and $1\overline{7}$ to the consolidated financial statements. See Notes 6.3 and 14.2 to the consolidated financial statements
- See Note 1.7 to the consolidated financial statements
- (7) Mainly the effect of changes in the scope of consolidation, primarily corresponding to acquisitions of Basefarm and Business & Decision in 2018.

3.1.4.2.2 Management of financial debt and liquidity

The assets, liabilities and net finance costs excluding the Orange Bank activities along with the information on market risks and the fair value of financial assets and liabilities excluding the Orange Bank activities are respectively described in Notes 12 and 13 to the consolidated financial statements.

As of December 31, 2019, the liquidity position of telecoms activities stood at 17,027 million euros and exceeded the repayment obligations of its gross financial debt in 2020 (see Note 12.3 to the consolidated financial statements). The liquidity position of telecoms activities includes 6,112 million euros in cash and cash equivalents and 4,696 million euros in investments at fair value.

3.1.4.2.3 Exposure to market risks and financial Instruments

The management of interest rate risk, foreign exchange risk, liquidity risk, credit risk and counterparty risk, financial covenants and equity market risk, is described in Note 13 to the consolidated financial statements.

For further information on risks relating to financial markets, see Section 2.1.3 Financial risks.

Changes in Orange's credit rating 3.1.4.2.4

Orange's credit rating is an additional performance indicator used to assess the Group's financial policy and risk management policy and, in particular, its solvency and liquidity risk, and is not a substitute for an analysis carried out by investors. Rating agencies regularly review the ratings they award. Any change in the rating could produce an effect on the cost of future financing or restrict access to liquidity.

In addition, a change in Orange's credit rating will, for certain outstanding financing, affect the compensation paid to investors via a Step-up clause (Step-up: a clause that triggers an increase in interest payments in the event of a downgrading of Orange's long-term credit rating by the rating agencies, according to contractually defined rules - this clause may also stipulate a downward revision of the coupon interest rate in the event of an improvement in the rating, as long as the interest rate does not drop below the initial interest rate on the loan – see Note 13.3 to the consolidated financial statements).

Orange's credit rating at December 31, 2019 is as follows:

Orange's debt ratings (at December 31, 2019)	Standard & Poor's	Moody's	Fitch Ratings	Japan Credit Rating
Long-term debt	BBB+	Baa1	BBB+	A
Outlook	Stable	Stable	Stable	Stable
Short-term debt	A2	P2	F2	Not applicable

For further information on risks related to the financial markets and a history of the Company's credit ratings, see Section 2.1.3 Financial risks.

3.1.4.3 Shareholders' equity

As of December 31, 2019, the French State held 22.95% of the capital of Orange SA and 29.54% of the voting rights, directly or jointly with Bpifrance Participations (see Note 14 to the consolidated financial statements).

The payment of dividends by Orange took place as follows (see Note 14.3 to the consolidated financial statements):

- in 2019, payment of (i) the balance of the dividend of 0.40 euro per share in respect of the 2018 fiscal year, and (ii) the interim dividend of 0.30 euro per share in respect of the 2019 fiscal year;
- in 2018, payment of (i) the balance of the dividend of 0.40 euro per share in respect of the 2017 fiscal year, and (ii) the interim dividend of 0.30 euro per share in respect of the 2018 fiscal year;
- and in 2017, payment of (i) the balance of the dividend of 0.40 euro per share in respect of the 2016 fiscal year, and (ii) the interim dividend of 0.25 euro per share in respect of the 2017 fiscal year.

Additionally, Orange has not exercised its right to defer the coupon related to the deeply subordinated notes since their issuance and, accordingly, it paid the noteholders 276 million euros, in 2019,

280 million euros in 2018, and 282 million euros in 2017 (see Note 14.4 to the consolidated financial statements).

In terms of changes to subordinated notes, on December 12, 2019 the Group announced its intention, in accordance with contractual terms, to exercise its purchase option on February 7, 2020, on the outstanding 500 million euros in an initial notional tranche of 1 billion euros already partially purchased in April 2019. Due to Orange's commitment to purchase this tranche, it was reclassified as a debt instrument and as such included in net financial debt as of December 31, 2019 (see Note 14.4 to the consolidated financial statements).

Given the issuance of 500 million euros in subordinated notes on September 19, 2019 as part of its EMTN plan (see Note 14.4 to the consolidated financial statements), as of December 31, 2019, the Group's outstanding subordinated notes remain unchanged from December 31, 2018.

Capital management is described in Note 13.7 to the consolidated financial statements. Changes in equity are described in the *Consolidated statement of changes in shareholders' equity* in the consolidated financial statements, as well as in Note 14 to the consolidated financial statements.

3.1.5 Financial indicators not defined by IFRS

In this document, in addition to the financial indicators reported in accordance with the IFRS (International Financial Reporting Standards), Orange publishes financial indicators that are not defined by IFRS. As described below, these figures are presented as additional information and are not meant to be substitutes for or to be confused with financial indicators as defined by IFRS.

Changes in operating performance indicators used in 2019

Since January 1, 2019, the Group has applied IFRS 16 "Leases" using the simplified retrospective method without restatement of comparative periods (see Note 2.3 to the consolidated financial statements). This change in accounting standard led the Group to adapt its key operational performance indicators and to define new ones. Since January 1, 2019:

- the EBITDAaL indicator (or "EBITDA after leases", see Section 3.1.5.2 EBITDAaL) replaces the adjusted EBITDA indicator: the operational performance indicator changed as a result of the immediate effects of the standard, excluding operating lease expenses from the calculation of this indicator. In order to maintain consistency with the adjusted EBITDA indicator used in segment information until December 31, 2018, Orange is using, as of January 1, 2019, the EBITDAaL indicator, which includes depreciation and amortization of right-of-use assets and interest on lease liabilities in its calculation. Moreover, owing to changes to the resource allocation indicator, and in order to ensure the continued relevance of the "EBITDAaL"

eCAPEX" indicator, EBITDAaL excludes proceeds from the sale of fixed assets (see Notes 3.1 and 8.1 to the consolidated financial statements);

- the eCAPEX indicator (or "Economic CAPEX", see Section 3.1.5.3 eCAPEX) replaces the CAPEX indicator: the resource allocation indicator has changed to better reflect the asset rotation strategic choices, associated in particular with sales of fiber optics. eCAPEX includes the effects of fixed asset disposals and shows the amount of property, plant and equipment and intangible investments (excluding telecommunications licenses and excluding financed assets) net of the proceeds from sales of property, plant and equipment and intangible assets (see Note 8.1 to the consolidated financial statements);
- the indicator "EBITDAaL eCAPEX" (see Section 3.1.5.4 EBITDAaL eCAPEX) replaces the "adjusted EBITDA – CAPEX" indicator;
- net financial debt excludes lease liabilities falling within the scope of application of IFRS 16;
- and the ratio of net financial debt to EBITDAaL of telecoms activities (see Section 3.1.5.7 Ratio of net financial debt to EBITDAaL of telecoms activities) replaces the ratio of net financial debt to adjusted EBITDA of telecoms activities.

Nonetheless, adjusted EBITDA, reported EBITDA, CAPEX, the "Adjusted EBITDA – CAPEX" indicator and the ratio of net financial debt to adjusted EBITDA of telecoms activities remain the benchmark indicators for prior periods.

Moreover, in the Engage 2025 Strategic Plan (see Section 1.3 Significant events), Orange has used organic cash flow from telecoms activities as a key operational performance indicator for telecoms activities (see Section 3.1.5.5 Organic cash flow from telecoms activities).

3.1.5.1 Data on a comparable basis

In order to allow investors to track the annual changes in the Group's operations, data on a comparable basis are presented for the previous period. The transition from data on a historical basis to data on a comparable basis consists of keeping the results for the year ended and restating the previous year in order to present financial data with comparable methods, scope of consolidation and exchange rates over comparable periods. Orange provides the details of the effect of changes in method, scope of consolidation and exchange rates on its key operating indicators in order to isolate the intrinsic business effect.

The method used is to apply to the data of the corresponding period of the preceding year the methods and the scope of consolidation for the period ended, as well as the average exchange rates used for the Consolidated income statement for the period ended.

Orange's management believes that the presentation of these indicators on a comparable basis is pertinent, as these are indicators used internally by the Group for monitoring its operating activities. Changes in data on a comparable basis better reflect organic business

Data on a comparable basis are not financial indicators defined by IFRS and may not be comparable to similarly titled indicators used by other companies. It is provided as additional information only and should not be considered as a substitute for an analysis of the Group's historical data for the past year or previous periods.

3.1.5.1.1 Data on a comparable basis for 2018

The data on a comparable basis for 2018 is comparable in terms of method, scope and exchange rates to the data on a historical basis for 2019.

3.1.5.1.1.1 2018 fiscal year - Group

The following table presents, for the Orange Group, the transition from data on a historical basis to data on a comparable basis for the 2018 fiscal year for the key operating data.

2018 fiscal year – Group (at December 31, 2018, in millions of euros) Historical data	Revenue	Adjusted EBITDA/ EBITDAaL (2)	CAPEX/ eCAPEX ⁽²⁾	Average number of employees
	41,381	13,005	7,442	135,943
Foreign exchange fluctuations (1)	175	59	26	_
US dollar (USD)	86	29	5	-
Egyptian pound (EGP)	76	23	18	-
Jordanian dinar (JOD)	22	7	4	-
Polish zloty (PLN)	(22)	(5)	(4)	-
Moroccan dirham (MAD)	16	6	3	-
Other	(3)	(1)	(O)	-
Changes in the scope of consolidation and other changes	430	35	12	1,955
Acquisition of SecureLink	156	14	1	234
Acquisition of Business & Decision	102	(1)	-	1,065
Acquisition of Basefarm	87	14	9	444
Acquisition of SecureData	46	5	-	160
Acquisition of BlueSoft	20	1	-	21
Acquisition of BKM	18	-	-	49
Acquisition of Republica De Comunicaciones Moviles	10	4	-	26
Sale of Orange Niger	(8)	(1)	(1)	(36)
Other	(1)	(1)	3	(8)
Effects of IFRS 16 and changes in indicators (2)	-	(337)	(232)	-
Data on a comparable basis	41,986	12,762	7,248	137,898

Foreign exchange fluctuations between the average exchange rates for the 2018 fiscal year and average rates for the 2019 fiscal year.

Change in indicators: transition from adjusted EBITDA and CAPEX using historical data to EBITDAAL and eCAPEX on a comparable basis (see Change in operational performance indicators in 2019 as the heading to Section 3.1.5 Financial indicators not defined by IFRS).

The changes included in the transition from data on a historical basis to data on a comparable basis for the 2018 fiscal year include:

- the foreign exchange fluctuations between the average exchange rates for the 2018 fiscal year and for the 2019 fiscal year;
- changes in the scope of consolidation (see Section 1.3 Significant events and Note 3.2 to the consolidated financial statements) and other changes, with mainly:
 - the acquisition of SecureLink (Enterprise) on July 8, 2019, taking effect on September 1, 2018, on a comparable basis,
 - the takeover of Business & Decision (Enterprise) on June 5, 2018, taking effect on January 1, 2018, on a comparable basis,
 - the acquisition of Basefarm (Enterprise) on August 14, 2018, taking effect on January 1, 2018, on a comparable basis,
 - the acquisition of SecureData (Enterprise) on January 31, 2019, taking effect on April 1, 2018, on a comparable basis,
 - the acquisition of BlueSoft (Europe) on June 12, 2019, taking effect on June 1, 2018 on a comparable basis,
 - the acquisition of BKM (Europe) on July 30, 2019, taking effect on September 1, 2018, on a comparable basis,
 - the acquisition of Republica De Comunicaciones Moviles (Spain) on November 7, 2018, taking effect on January 1, 2018, on a comparable basis,
 - and the sale of Orange Niger (Africa & Middle East) on November 22, 2019, taking effect on December 1, 2018 on a comparable basis;

- the effects of the application of IFRS 16 (see Note 2.3 to the consolidated financial statements), which mainly correspond, in the transition from data on a historical basis to data on a comparable basis:
 - to the reclassification of finance lease expenses in the income statement, which were previously included in depreciation and amortization and in financial result, and which are now shown in depreciation and amortization of rights-of-use assets and in interest on lease liabilities, and
 - to the effects of the application of IFRS 16 on operating lease expenses (this information is not derived from the consolidated financial statements); and
- in the context of the change in standard related to leases, the effects of the changes in the Group's key operational performance indicators (see the heading of Section 3.1.5 Financial indicators not defined by IFRS), with:
 - the replacement of adjusted EBITDA by EBITDAaL (see below).
 EBITDAaL now excludes the gains (losses) from disposal of fixed assets, previously included in adjusted EBITDA (see Notes 3.1 and 8.1 to the consolidated financial statements),
 - and the replacement of CAPEX by eCAPEX (see below). eCAPEX includes the effects of fixed asset disposals and now shows the amount of property, plant and equipment and intangible investments (excluding telecommunications licenses and excluding financed assets) net of the proceeds from sales of property, plant and equipment and intangible assets (see Note 8.1 to the consolidated financial statements).

3.1.5.1.1.2 2018 fiscal year - Segments

The following table presents, for each segment of the Orange Group, the transition from data on a historical basis to data on a comparable basis for the 2018 fiscal year for the key operating data.

2018 fiscal year – Segments (at December 31, 2018 in millions of euros)	Revenue	Adjusted EBITDA/ EBITDAaL (2)	CAPEX/ eCAPEX ⁽²⁾	Average number of employees
France				
Historical data	18,211	7,076	3,656	56,102
Foreign exchange fluctuations ⁽¹⁾ Changes in the scope of consolidation and other changes ⁽²⁾	(7)	- 60	- 0	- 0
Effects of IFRS 16 and changes in indicators (3)	-	(5)	(1)	-
Data on a comparable basis Spain	18,204	7,130	3,655	56,102
Historical data	5,349	1,700	1,120	6,695
Foreign exchange fluctuations (1)	-	-	-	- 07
Changes in the scope of consolidation and other changes (2) Acquisition of Republica De Communicaciones Moviles	11 10	5 4	1 -	27 26
Other changes (2)	1	1	1	1
Effects of IFRS 16 and changes in indicators (3)	-	(63)	(53)	-
Data on a comparable basis Europe	5,360	1,642	1,068	6,722
Data on a historical basis	5,687	1,508	953	21,823
Foreign exchange fluctuations (1)	(21)	(5)	(4)	-
Changes in the scope of consolidation and other changes (2) Acquisition of BlueSoft	35 20	2	(7)	33 21
Acquisition of BKM	18	-	-	49
Other changes (2)	(3)	1	(7)	(37)
Effects of IFRS 16 and changes in indicators (3)	- - 701	(63)	(59)	- 01.056
Data on a comparable basis Africa & Middle East	5,701	1,443	884	21,856
Data on a historical basis	5,190	1,667	1,008	14,956
Foreign exchange fluctuations ⁽¹⁾ Changes in the scope of consolidation and other changes ⁽²⁾	133 (8)	43 (1)	26 1	(29)
Sale of Orange Niger	(8)	(1)	(1)	(36)
Other changes (2)	(O)	1	1	7
Effects of IFRS 16 and changes in indicators (3)	- 5.014	(50)	(28)	14.007
Data on a comparable basis Enterprise	5,314	1,659	1,007	14,927
Data on a historical basis	7,292	1,245	353	22,963
Foreign exchange fluctuations ⁽¹⁾ Changes in the scope of consolidation and other changes ⁽²⁾	69 384	23 (27)	3 11	1,907
Acquisition of SecureLink	156	14	1	234
Acquisition of Business & Decision	102	(1)	-	1,065
Acquisition of Basefarm	87	14	9	444
Acquisition of SecureData Other changes ⁽²⁾	46 (7)	5 (59)	- 1	160 4
Effects of IFRS 16 and changes in indicators (3)	-	(29)	(O)	-
Data on a comparable basis	7,745	1,212	366	24,870
International Carriers & Shared Services				
Data on a historical basis	1,534	(45)	316	12,621
Foreign exchange fluctuations ⁽¹⁾ Changes in the scope of consolidation and other changes ⁽²⁾	(4) 53	(2) (4)	0 7	- 17
Effects of IFRS 16 and changes in indicators (3)	-	(127)	(91)	-
Data on a comparable basis Orange Bank	1,584	(178)	232	12,638
Data on a historical basis	_	(147)	36	783
Foreign exchange fluctuations (1)	-	-	-	-
Changes in the scope of consolidation and other changes (2)	-	(O)	0	(1)
Effects of IFRS 16 and changes in indicators (3)		(O)		. ,

Foreign exchange fluctuations between the average exchange rates for the 2018 fiscal year and average rates for the 2019 fiscal year.
 Including the effect of internal reorganizations between segments which have no effect at Group level.
 Change in indicators: transition from adjusted EBITDA and CAPEX using historical data to EBITDAaL and eCAPEX on a comparable basis (see Change in operational performance indicators in 2019 as the heading to Section 3.1.5 Financial indicators not defined by IFRS).

3.1.5.1.2 Data on a comparable basis for 2017

The data on a comparable basis for 2017 is comparable in terms of method, scope and exchange rates to the data on a historical basis for 2018.

3.1.5.1.2.1 2017 fiscal year - Group

The following table presents, for the Orange Group, the transition from data on a historical basis to data on a comparable basis for the 2017 fiscal year for the key operating data.

2017 fiscal year – Group (at December 31, 2017, in millions of euros)	Revenue	Adjusted EBITDA	Reported EBITDA	CAPEX	Average number of employees
Data on a historical basis	40,859	12,680	11,863	7,209	138,038
Foreign exchange fluctuations (1)	(189)	(28)	(27)	(26)	_
US dollar (USD)	(84)	(28)	(27)	(6)	-
Egyptian pound (EGP)	(27)	(8)	(8)	(9)	-
Jordanian dinar (JOD)	(18)	(6)	(6)	(3)	-
Argentine Peso (ARS)	(10)	-	1	-	-
Russian ruble (RUB)	(9)	-	-	(1)	-
Guinean franc (GNF)	(8)	(3)	(3)	(1)	-
Malagasy Ariary (MGA)	(7)	(1)	(1)	(1)	-
Others	(26)	18	17	(5)	-
Changes in the scope of consolidation and other changes	167	8	13	8	1,438
Acquisition of Business & Decision	109	4	3	1	1,080
Acquisition of Basefarm	30	6	6	6	143
Acquisition of Enovacom	13	(2)	(2)	1	134
Others	15	-	6	-	81
Data on a comparable basis	40,837	12,660	11,849	7,191	139,476

⁽¹⁾ Foreign exchange fluctuations between the average exchange rates for the 2017 fiscal year and average rates for the 2018 fiscal year.

The changes included in the transition from data on a historical basis to data on a comparable basis for the 2017 fiscal year include:

- the foreign exchange fluctuations between the average exchange rates for the 2017 fiscal year and for the 2018 fiscal year;
- and the changes in the scope of consolidation (see Note 3.2 to the consolidated financial statements) and other changes, with mainly:
- the takeover of Business & Decision (Enterprise) on June 5, 2018, taking effect from July 1, 2018, on a comparable basis,
- the acquisition of Basefarm (Enterprise) on August 14, 2018, taking effect on October 1, 2018, on a comparable basis,
- and the acquisition of Enovacom (Enterprise) on February 21, 2018, taking effect from March 1, 2018, on a comparable basis.

3.1.5.1.2.2 2017 fiscal year - Segments

The following table presents, for each segment of the Orange Group, the transition from data on a historical basis to data on a comparable basis for the 2017 fiscal year for the key operating data.

2017 fiscal year – Segments (at December 31, 2017, in millions of euros)	Revenue	Adjusted EBITDA	Reported EBITDA	CAPEX	Average number of employees
France					
Data on a historical basis Foreign exchange fluctuations (1)	18,046 -	6,878 -	6,444	3,451 -	59,622 -
Changes in the scope of consolidation and other changes (2) Data on a comparable basis Spain	2 18,048	1 6,879	2 6,446	- 3,451	58 59,680
Data on a historical basis Foreign exchange fluctuations ⁽¹⁾	5,231	1,567	1,563	1,115	6,565
Changes in the scope of consolidation and other changes (2) Data on a comparable basis Europe	1 5,232	1 1,568	1 1,564	- 1,115	4 6,569
Data on a historical basis Foreign exchange fluctuations ⁽¹⁾	5,578 4	1,456 2	1,417 2	897 1	22,636
Changes in the scope of consolidation and other changes (2) Data on a comparable basis Africa & Middle East	11 5,593	2 1,460	3 1,422	1 899	70 22,706
Data on a historical basis Foreign exchange fluctuations ⁽¹⁾ Changes in the scope of consolidation and other changes ⁽²⁾ Data on a comparable basis Enterprise	5,030 (90) - 4,940	1,612 (24) (3) 1,585	1,591 (23) (3) 1,565	1,021 (22) - 999	15,210 - - 15,210
Data on a historical basis Foreign exchange fluctuations (1) Changes in the scope of consolidation and other changes (2) Acquisition of Business & Decision Acquisition of Basefarm	7,251 (94) 151 109 30	1,306 (10) 10 4 6	1,258 (10) 10 3 6	382 (5) 8 1 6	20,807 - 1,356 1,080 143
Acquisition of Enovacom Other changes (2) Data on a comparable basis International Carriers & Shared Services	13 (1) 7,308	(2) 2 1,306	(2) 3 1,258	1 - 385	134 (1) 22,163
Data on a historical basis Foreign exchange fluctuations ⁽¹⁾ Changes in the scope of consolidation and other changes ⁽²⁾ Data on a comparable basis Orange Bank	1,651 (13) (5) 1,633	(78) 3 (2) (77)	(349) 4 - (345)	282 - - 282	12,535 - (50) 12,485
Data on a historical basis Foreign exchange fluctuations (1) Changes in the scope of consolidation and other changes (2) Data on a comparable basis	- - -	(62) - - (62)	(62) - - (62)	61 - (1) 60	663 - - 663

⁽¹⁾ Foreign exchange fluctuations between the average exchange rates for the 2017 fiscal year and average rates for the 2018 fiscal year.

3.1.5.2 EBITDAaL

Since January 1, 2019, EBITDAaL (or "EBITDA after leases") has replaced adjusted EBITDA (see the heading of Section 3.1.5 Financial indicators not defined by IFRS).

EBITDAaL (or "EBITDA after leases") relates to operating income (i) before depreciation and amortization of fixed assets, effects resulting from business combinations, reclassification of translation adjustment from liquidated entities, impairment of goodwill and fixed assets, share

of profits (losses) of associates and joint ventures, (ii) after interest on lease liabilities and interest on debts related to financed assets, and (iii) adjusted for significant litigation, specific labor expenses, fixed assets, investments and businesses portfolio review, restructuring programs costs, acquisition and integration costs and, where appropriate, other specific items that are systematically specified in relation to income and/or expenses (see Note 1.8 to the consolidated financial statements).

⁽²⁾ Including the effect of internal reorganizations between segments which have no effect at Group level.

The reconciliation between EBITDAaL and consolidated net income is shown below.

(at December 31, in millions of euros)	2019			
	Adjusted data	Presentation adjustments (1)	Consolidated income statement	
Revenue	42,238	-	42,238	
External purchases	(17,897)	-	(17,897)	
Other operating income	720	-	720	
Other operating expenses	(527)	(72)	(599)	
Labor expenses	(8,470)	(24)	(8,494)	
Operating taxes and levies payables	(1,827)	-	(1,827)	
Gains (losses) on disposal of fixed assets, investments and activities	-	277	277	
Restructuring costs	-	(132)	(132)	
Depreciation and amortization of financed assets	(14)	-	(14)	
Depreciation and amortization of right-of-use assets	(1,239)	-	(1,239)	
Impairment of financed assets	=	-	-	
Impairment of right-of-use assets	(0)	(33)	(33)	
Interests on debts related to financed assets	(1)	1	-	
Interest on lease liabilities	(122)	122	_	
EBITDAaL	12,860	138	-	
Significant litigations	(49)	49	-	
Specific labor expenses	(23)	23	-	
Fixed assets, investments and businesses portfolio review	277	(277)	-	
Restructuring programs costs	(165)	165	-	
Acquisition and integration costs	(24)	24	-	
Depreciation and amortization of fixed assets	(7,110)	-	(7,110)	
Depreciation and amortization of financed assets	-	-	-	
Depreciation and amortization of right-of-use assets	_	-	-	
Remeasurement to fair value of previously held equity interests	_	_	_	
Reclassification of translation adjustment from liquidated entities	12	_	12	
Impairment of goodwill	(54)	_	(54)	
Impairment of fixed assets	73	_	73	
Impairment of financed assets	-	_	-	
Impairment of right-of-use assets	_	_	_	
Share of profits (losses) of associates and joint ventures	8	_	8	
Elimination of interest on debts relating to financed assets (2)	1	(1)	-	
Elimination of interest on debte relating to inhanced assets.	122	(122)	_	
Operating Income	5,927	0	5,927	
Finance costs, net	_	_	(1,254)	
Income tax	_	-	(1,447)	
Consolidated net income	-	-	3,226	
Net income attributable to owners of the parent company	-	-	3,006	
Non-controlling interests	_	_	220	

⁽¹⁾ The presentation adjustments allow reassignment of specific line items identified in the segment information (see Note 1 to the consolidated financial statements) to the lines for operating income and expenses presented in the consolidated income statement.

Orange's management considers that the presentation of the indicator EBITDAAL is relevant because, by including lease expenses in its calculation, this indicator enables better reflection of the operational performance of operating segments, while retaining consistency with the adjusted EBITDA indicator used in segment information until December 31, 2018. This is the operational performance indicator used internally by the Group since January 1, 2019 to (i) manage and assess its operating results and segment results, and (ii) implement its investments and resource allocation strategy. EBITDAAL, or similar

management indicators used by Orange's competitors, are indicators that are often disclosed and widely used by analysts, investors and other players in the telecommunications industry.

EBITDAaL is not a financial indicator defined by IFRS and may not be comparable to similarly-titled indicators used by other companies. They are provided as additional information only and should not be considered as a substitute for operating income or cash provided by operating activities.

⁽²⁾ Items recognized in the financial result.

3.1.5.3 eCAPEX

Since January 1, 2019, eCAPEX (or "economic CAPEX") has replaced CAPEX (see the heading of Section 3.1.5 Financial indicators not defined by IFRS).

eCAPEX (or "economic CAPEX") relates both to (i) investments in property, plant and equipment and intangible assets, excluding telecommunications licenses and financed assets sold, less the price of disposal of property, plant and equipment and intangible assets, and (ii) acquisitions of property, plant and equipment and intangible

assets excluding telecommunications licenses and changes in fixed asset payables, less the price of disposal of property, plant and equipment and intangible assets sold.

The table below shows the transition from eCAPEX to (i) investments in property, plant and equipment and intangible assets excluding trade payables as presented in Note 1.4 to the annual financial statements, (ii) acquisitions of property, plant and equipment and intangible assets, excluding trade payables, as presented in the *consolidated statement of cash flows*, (iii) to eCAPEX.

	2012
(at December 31, in millions of euros)	2019
Investments in property, plant and equipment and intangible assets	8,565
Financed assets	(144)
Purchases of property, plant and equipment and intangible assets (1)	8,422
Proceeds from sales of property, plant and equipment and intangible assets	(610)
Telecommunications licenses	(519)
eCAPEX	7,293

(1) See Consolidated statement of cash flows. Excluded changes in fixed assets trade payables. Investments financed through finance leases have no effect on cash flow upon acquisition.

Orange's management considers that presenting economic CAPEX is relevant because this indicator (i) does not include investments in telecommunications licenses (the acquisition of these licenses is not part of the daily monitoring of operating investments) and financed assets (no effect on cash flow upon acquisition), and (ii) allows, in a context of asset rotation primarily linked to the fiber-optic economic model, to measure more accurately the actual amount of investments by excluding the proceeds from sales of property, plant and equipment and intangible assets that have been sold. It is the indicator used internally by the Group from January 1, 2019 in allocating resources, in order to measure the operating efficiency of the use of investments for each of its operating segments.

eCAPEX is not a financial indicator defined by IFRS and may not be comparable to similarly-titled indicators used by other companies. It is provided as additional information only and should not be considered as a substitute for purchases of or investments in property, plant and equipment and intangible assets.

3.1.5.4 EBITDAaL – eCAPEX

Since January 1, 2019, the "EBITDAaL – eCAPEX" indicator has replaced the "Adjusted EBITDA – CAPEX" indicator (see the heading of Section 3.1.5 Financial indicators not defined by IFRS).

The indicator "EBITDAaL - eCAPEX" is equivalent to l'EBITDAaL (see Section 3.1.5.2 EBITDAaL) minus eCAPEX (see Section 3.1.5.3 eCAPEX).

Orange's management considers that presenting the "EBITDAaL – eCAPEX" indicator is relevant because it is the operational performance indicator used internally by the Group from January 1, 2019 to (i) manage and assess its operating results and segment results, and (ii) implement its investments and resource allocation strategy.

"EBITDAaL – eCAPEX" indicator is not a financial indicator defined by IFRS and may not be comparable to similarly-titled indicators used by other companies. It is provided as additional information only and should not be considered as a substitute for analysis of net cash provided by operating activities and net cash allocated to the Group's investing activities.

3.1.5.5 Organic cash flow from telecoms activities

Organic cash flow from telecoms activities refers to net cash flow generated by the activity, minus (i) repayments of lease liabilities and debts related to financial assets, and (ii) purchases and sales of property plant and equipment and intangible assets, net in the fixed asset trade payables, (iii) excluding telecommunications licenses paid and the effect of the main litigations paid (and received).

The following table presents, for telecoms activities, the transition from net cash provided by operating activities to organic cash flow from telecoms activities as presented in Note 1.7 to the consolidated financial statements.

Organic cash flow from telecoms activities (at December 31, in millions of euros)	2019	2018 data on a historical basis	2017 data on a historical basis
Net cash provided by operating activities (telecoms activities)	10,983	9,672	9,902
Purchases and sales of property, plant and equipment and intangible assets	(7,555)	(7,655)	(7,311)
Repayments of lease liabilities (1)	(1,395)	-	-
Repayments of lease liabilities – finance ⁽¹⁾	-	(123)	(96)
Repayment of debt relating to financed assets	(17)	-	-
Elimination of telecommunication licenses paid	334	422	617
Elimination of significant litigations paid (and received)	(5)	174	30
Organic cash flow from telecoms activities	2,345	2,490	3,142

⁽¹⁾ The effects of IFRS 16 are described in Note 2.3 to the consolidated financial statements.

Orange's management believes that the presentation of organic cash flow from telecoms activities is relevant for measuring the Groups' capacity to free up cash through its telecoms activities taken as a whole, excluding the main elements which are not under its control and which may vary from one year to the next, which is the case of these disbursements (and receipts) relating to the main litigations and disbursements related to telecommunications license acquisitions. It is a more comprehensive indicator than "EBITDAAL – eCAPEX" (used internally to manage and assess operating and segment results and to implement its investment and resource allocation strategy), since it includes the effects of financial costs, income tax and changes in working capital. It is for this reason that this indicator has been chosen by Orange for its Engage 2025 Strategic Plan as a key performance indicator for telecoms activities. This indicator is commonly used by companies in the telecommunications sector.

Organic cash flow from telecoms activities is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 Financial indicators not defined by IFRS). It is not a replacement for cash generated by operating activities or allocated to investing activities.

3.1.5.6 Net financial debt

Net financial debt as defined and used by Orange does not include Orange Bank activities, for which this concept is not relevant. It consists of (i) financial liabilities excluding operating payables (translated into euros at the year-end closing rate) including derivative instruments (assets and liabilities), (ii) less cash collateral paid, cash, cash equivalents and financial assets at fair value. Furthermore, financial instruments designated as cash flow hedges included in net financial debt are set up to hedge in particular items that are not included therein, such as future cash flows. Effects of these hedges are carried in other comprehensive income. As a consequence, the portion of these components related to unmatured hedging instruments is added to gross financial debt to offset this temporary difference.

Compared to December 31, 2018, net financial debt at December 31, 2019 excludes lease liabilities within the scope of IFRS 16 (see the heading of Section 3.1.5 *Financial indicators not defined by IFRS* and Note 2.3 to the consolidated financial statements) and includes liabilities on financed assets.

The breakdown of net financial debt is shown in Note 12.3 to the consolidated financial statements.

Net financial debt is an indicator of financial position used by the Group. Net financial debt is a frequently disclosed indicator. It is widely used by analysts, investors, rating agencies and most Groups in all business sectors in Europe.

Net financial debt is not a financial indicator defined by IFRS and may not be comparable to similarly-titled indicators used by other companies. It is provided as additional information only and should not be considered as a substitute for an analysis of all the Group's assets and liabilities.

3.1.5.7 Ratio of net financial debt to EBITDAaL of telecoms activities

Since January 1, 2019, the ratio of net financial debt to EBITDAaL of telecoms activities has replaced the ratio of net financial debt to adjusted EBITDA of telecoms activities (see the heading of Section 3.1.5 Financial indicators not defined by IFRS).

The ratio of net financial debt to the EBITDAaL of telecoms activities is calculated as the ratio of the Group's net financial debt (see Section 3.1.5.6 Net financial debt) to the EBITDAaL of telecoms activities (see Section 3.1.5.2 EBITDAaL) calculated over the previous 12 months. As the net financial debt (as defined and used by Orange) does not include Orange Bank activities, for which this concept is not relevant, the net financial debt is divided by the EBITDAaL of telecoms activities. In addition, when changes in scope significantly affect the Group's net financial debt at the end of the period, the calculation of the ratio of net financial debt to EBITDAaL of telecoms activities is adjusted to take into account the EBITDAaL of those entities over the previous 12 months.

(at December 31, in millions of euros)	2019
Net financial debt (a)	25,466
EBITDAaL of telecoms activities (b)	13,019
Ratio of net financial debt/EBITDAaL of telecoms activities (a/b)	1.96

The ratio of net financial debt to EBITDAaL of telecoms activities is used by Orange to measure the Group's ability to repay its debt, and more broadly to measure its financial strength. This ratio is commonly used by companies in the telecommunications sector.

Ratio of net financial debt to EBITDAaL of telecoms activities is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies.

3.1.5.8 Financial indicators used until December 31, 2018

3.1.5.8.1 Adjusted EBITDA and reported EBITDA

From January 1, 2019, adjusted EBITDA and reported EBITDA are no longer used by the Group. Adjusted EBITDA has been replaced by EBITDAAL (or "EBITDA after leases", see the heading of Section 3.1.5. Financial indicators not defined by IFRS and Section 3.1.5.2 EBITDAAL).

However, adjusted EBITDA and reported EBITDA continue to be the benchmarks for previous reporting periods.

Reported EBITDA, as used until December 31, 2018, is operating income before depreciation and amortization, before effects resulting from business combinations, before reclassification of translation adjustment from liquidated entities, before impairment of goodwill and fixed assets and before share of profits (losses) of associates and joint ventures.

Adjusted EBITDA, as used until December 31, 2018, is reported EBITDA adjusted for the effects of significant litigations, specific labor expenses, review of the investment and business portfolio, restructuring and integration costs and, where appropriate, other specific items that are systematically specified in relation to income and/or expenses (see Note 1.8 to the consolidated financial statements).

The reconciliation between adjusted EBITDA, reported EBITDA and consolidated net income is shown below.

(at December 31, in millions of euros)		2018		2017		
	data on a historical basis			data on a historical basis		
	Adjusted data	Presentation adjust- ments (1)	Consolidated income statement	Adjusted data	Presentation adjust- ments (1)	income
Revenue	41,381	-	41,381	40,859	-	40,859
External purchases	(18,563)	-	(18,563)	(18,381)	-	(18,381)
Other operating income	580	-	580	599	14	613
Other operating expenses	(496)	(9)	(505)	(434)	(290)	(724)
Labor expenses	(8,268)	(806)	(9,074)	(8,200)	(374)	(8,574)
Operating taxes and levies payables	(1,809)	(31)	(1,840)	(1,851)	5	(1,846)
Gains (losses) on disposal of fixed assets,						
investments and activities	180	17	197	88	(5)	83
Restructuring and integration costs	-	(199)	(199)	-	(167)	(167)
Adjusted EBITDA	13,005	(1,028)	-	12,680	(817)	-
Significant litigations	(33)	33	-	(271)	271	-
Specific labor expenses	(812)	812	-	(374)	374	-
Investments and businesses portfolio review	17	(17)	-	(5)	5	-
Restructuring and integration costs	(200)	200	-	(167)	167	-
Reported EBITDA	11,977	-	11,977	11,863	-	11,863
Depreciation and amortization of fixed assets	-	-	(7,047)	-	-	(6,846)
Remeasurement to fair value of previously held equity interests	-	-	-	-	-	(27)
Reclassification of translation adjustment from liquidated entities	-	-	1	-	-	(8)
Impairment of goodwill	-	-	(56)	-	-	(20)
Impairment of fixed assets	-	-	(49)	-	-	(190)
Share of profits (losses) of associates and joint ventures	-	-	3	-	-	6
Operating Income	-	-	4,829	-	-	4,778
Finance costs, net	-	-	(1,362)	-	-	(1,715)
Income tax	-	-	(1,309)	-	-	(1,052)
Net income of continuing operations	-	-	2,158	-	-	2,011
Consolidated net income of discontinued operations (EE)	-	-	-	-	-	29
Consolidated net income	-	-	2,158	-	-	2,040
Net income attributable to owners of the parent company	-	-	1,954	-	-	1,843
Non-controlling interests	-	-	204	-	-	197

⁽¹⁾ The presentation adjustments allow reassignment of specific line items identified in the segment information (see Note 1 to the consolidated financial statements) to the lines for operating income and expenses presented in the consolidated income statement.

Adjusted EBITDA and reported EBITDA are not financial indicators defined by IFRS and may not be comparable to similarly titled indicators used by other companies. They are provided as additional information only and should not be considered as a substitute for operating income or cash provided by operating activities.

CAPEX 3.1.5.8.2

From January 1, 2019, CAPEX is no longer used by the Group. CAPEX has been replaced by eCAPEX (or "economic CAPEX", see the heading of Section 3.1.5 Financial indicators not defined by IFRS and Section 3.1.5.3 eCAPEX). However, CAPEX continues to be the benchmark for previous reporting periods.

CAPEX, as used until December 31, 2018, relates to (i) investments in property, plant and equipment and intangible assets, excluding telecommunications licenses and investments financed through finance leases, and (ii) acquisitions of property, plant and equipment and intangible assets excluding telecommunications licenses and changes in fixed asset payables.

The calculation below shows the transition from eCAPEX to (i) acquisitions of property, plant and equipment and intangible assets, excluding changes in the fixed asset payables, as presented in the Consolidated statement of cash flows, and (ii) investments in property, plant and equipment and intangible assets as presented in Note 1.4 to the consolidated financial statements.

(at December 31, in millions of euros)	2018 data on a historical basis	2017 data on a historical basis
Investments in property, plant and equipment and intangible assets	7,778	7,570
Investments financed through finance leases	(136)	(43)
Purchases of property, plant and equipment and intangible assets ⁽¹⁾	7,642	7,527
Telecommunications licenses	(200)	(318)
CAPEX	7,442	7,209

⁽¹⁾ See Consolidated statement of cash flows. Excluded changes in fixed assets trade payables. Investments financed through finance leases have no effect on cash flow upon acquisition.

CAPEX does not include investments financed through finance leases (no effect on cash flow upon acquisition) and investments in telecommunication licenses, the acquisition of these licenses not being part of the daily monitoring of operating investments.

CAPEX is not a financial indicator defined by IFRS and may not be comparable to similarly-titled indicators used by other companies. It is provided as additional information only and should not be considered as a substitute for purchases of or investments in property, plant and equipment and intangible assets.

3.1.5.8.3 Adjusted EBITDA – CAPEX

From January 1, 2019, the "Adjusted EBITDA – CAPEX" indicator is no longer used by the Group. It has been replaced by the "EBITDAaL – eCAPEX" indicator (see the heading of Section 3.1.5. Financial indicators not defined by IFRS and Section 3.1.5.4 EBITDAaL – eCAPEX). However, the "Adjusted EBITDA – CAPEX" indicator continues to be the benchmark for previous reporting periods.

The "Adjusted EBITDA – CAPEX" indicator, as used until December 31, 2018, is the adjusted EBITDA (see Section 3.1.5.8.1 *Adjusted EBITDA* and reported *EBITDA*) less CAPEX (see Section 3.1.5.8.2 *CAPEX*).

"Adjusted EBITDA - CAPEX" is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies. It is provided as additional information only and

should not be considered as a substitute for analysis of net cash provided by operating activities and net cash allocated to the Group's investing activities.

3.1.5.8.4 Ratio of net financial debt to adjusted EBITDA of telecoms activities

From January 1, 2019, the ratio of net financial debt to adjusted EBITDA of telecoms activities is no longer used by the Group. It has been replaced by the ratio of net financial debt to EBITDAaL of telecoms activities (see the heading of Section 3.1.5 Financial indicators not defined by IFRS and Section 3.1.5.7 Ratio of net financial debt to EBITDAaL of telecoms activities). However, the ratio of net financial debt to adjusted EBITDA of telecoms activities continues to be the benchmark for previous reporting periods.

The ratio of net financial debt to adjusted EBITDA of telecoms activities, as used until December 31, 2018, is calculated as the ratio of the Group's net financial debt (see Section 3.1.5.6 Net financial debt) to adjusted EBITDA of telecoms activities (see Section 3.1.5.8.1 Adjusted EBITDA and reported EBITDA) calculated over the previous 12 months. As the net financial debt (as defined and used by Orange) does not include the Orange Bank activities, for which this concept is not relevant, the net financial debt is divided by the adjusted EBITDA of telecoms activities.

(at December 31, in millions of euros)	2018 data on a historical basis	2017 data on a historical basis
Net financial debt (a)	25,441	23,843
Adjusted EBITDA of telecoms activities (b)	13,151	12,741
Ratio of Net financial debt/Adjusted EBITDA of telecoms activities (a/b)	1.93	1.87

Ratio of net financial debt to adjusted EBITDA of telecoms activities is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies.

3.1.6 Additional information

Unrecognized contractual commitments

Unrecognized contractual commitments are described in Notes 15 and 16.3 to the consolidated financial statements.

3.2 Recent events and Outlook

3.2.1 Recent events

The COVID-19 pandemic is affecting human health, in particular that of the employees, suppliers, subcontractors and customers of Orange, as well as the Group's business activities and financial position.

On the date of this Universal Registration Document, Orange has identified the following key points of focus:

- business continuity: in countries that have been severely affected by the pandemic, Orange must, as a provider of services essential to businesses, ensure the continuity of its electronic communications services, in particular its critical activities. In accordance with government requirements, Orange has implemented, in particular in France, a business continuity plan, which essentially covers network and information system supervision and operation teams, security teams, technical support, Data center employees and field-work teams.

In addition, the significant increase in traffic on Orange networks runs the risk of congestion, which could lead to a deterioration in or even the interruption of services. To avoid such deterioration or interruptions, Orange has strengthened its network capacity and may decide, if necessary, to prioritize certain services in agreement with the regulatory authorities.

human health and safety: Orange is closely monitoring the developments of the pandemic and is prioritizing the health and safety of its employees. Orange has appointed a global coordinator who reports directly to the Chairman and Chief Executive Officer, as well as correspondents in the Group's geographical areas, and Orange has adapted its activity in the different countries where it operates to comply with the health guidelines given by each national authority, while ensuring conditions for business continuity. The Group has implemented preventive measures by resorting to teleworking for its employees, whenever the activity can be carried out remotely and the necessary equipment is available. In the other cases, Orange has also promoted barrier actions, as soon as possible, in its instructions to employees and provided suitable hygiene equipment.

The long-term effects of the containment measures taken by the public authorities and relayed by the Group are uncertain, especially the psychological effects that isolation may cause on its employees.

- the consequences of the pandemic on Orange's business and financial situation are, at this stage, difficult to quantify; however, as of the publication date of this document, we can note:
 - likely effects on revenue, mainly resulting from:
 - a slowdown of activities with certain business customers,
 - the shutdown of Orange stores,
 - a decrease in international roaming;
 - a probable slowdown in investments and related projects, particularly on the networks,
 - an increased risk of default or late payment with some customers,
 - uncertainties about the schedule for the launch of 5G in France, subject to an auction procedure which was to take place from April 21, 2020, but has been postponed indefinitely due to the pandemic.

Depending on how the situation develops, there could be other effects that are not known at this time.

In addition, on March 31, 2020, Orange issued new bonds for a total notional of 1.5 billion across two tranches: a 7-year 1.250% 750 million euros bond and a 12-year 1.625% 750 million euros bond.

Finally, on February 19, 2020, Orange and Free Mobile signed an amendment extending until December 31, 2022 the termination period for Free Mobile's national roaming on Orange's 2G and 3G networks. This amendment is currently under review by Arcep which informed the market players on April 3, 2020.

3.2.2 Outlook

Based on the information available on the date of this document, Orange does not expect a significant deviation from its financial objectives for the 2020 fiscal year but will closely monitor the situation and its developments. The important role played by the telecoms sector during this crisis to ensure the continued functioning of the economy and society as a whole confirms the strategic character of Orange's activities. Beyond this, the collective commitment of its employees, the solidity of its financial situation and the relevance of its strategic action plans will allow Orange to face the unprecedented crisis caused by the COVID-19 pandemic.

As a reminder, the objectives announced for 2020 are as follows:

- EBITDAaL (see Section 3.1.5.2 EBITDAaL) "flat positive";
- economic CAPEX (see Section 3.1.5.3 eCAPEX), which includes the impact of network sharing agreements in Spain and Belgium, up 200 million euros;
- organic cash flow from telecoms activities (see Section 3.1.5.5
 Organic cash flow from telecoms activities) over 2.3 billion euros.

These objectives are based on the assumptions stated in the presentation of the global digital services market and the Group strategy (see Section 1.2 Market, strategy and business model) as well as in the presentation of the Group's operating activities, which

include a description of the various business segments' markets (see Section 1.4 Operating activities). They take into account the events known on the date of this document mentioned in Section 3.2.1 above. They were compiled and prepared on a basis comparable with the historical financial information and consistent with the Group's accounting policies.

Moreover, the ambition, announced on December 4, 2019, to implement an additional net savings plan of 1 billion euros by 2023, on a defined indirect cost base of 14 billion euros in 2019, has become a commitment.

Finally, the target ratio of net financial debt to EBITDAaL of telecoms activities (see Section 3.1.5.7 *Ratio of net financial debt to EBITDAaL of telecoms activities*) is maintained at 2x in the medium-term.

For more information on the outlook beyond 2020, see Section 1.2.2 The *Orange Group strategy*.

These forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from the results anticipated in the forward-looking statements. The most significant risks are described in Section 2.1 *Risk factors* and in Section 3.2.1 *Recent events*.

Consolidated financial statements 3.3

Significant events 2019

IFRS

Application of IFRS 16 "Leases"

IFRS 16 has been applied since January 1, 2019. Information on the first-time adoption of IFRS 16 "Leases" on January 1, 2019, is presented in Note 2.3 "New standards and interpretations applied from January 1, 2019".

Note 2.3.1

Changes in consolidation scope

Acquisition of SecureData and SecureLink

In January 2019, Orange took control of SecureData.

In July 2019, Orange took control of SecureLink.



Note 3.2

BT shares

Sale of BT **Group Plc shares**

In June 2019, the Group sold its remaining 2.49% equity interest in BT Group Plc for a net amount of 486 million pounds sterling (543 million euros).

Note 12.7

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Consolidated income statement

(in millions of euros, except for per share data)	Note	2019 (1)	2018	2017
Revenue	4.1	42,238	41,381	40,859
External purchases	5.1	(17,897)	(18,563)	(18,381)
Other operating income	4.2	720	580	613
Other operating expenses	5.2	(599)	(505)	(724)
Labor expenses	6.1	(8,494)	(9,074)	(8,574)
Operating taxes and levies	10.1.1	(1,827)	(1,840)	(1,846)
Gains (losses) on disposal of fixed assets, investments and activities	3.1	277	197	83
Restructuring costs	5.3	(132)	(199)	(167)
Depreciation and amortization of fixed assets	8.2	(7,110)	(7,047)	(6,846)
Depreciation and amortization of financed assets	8.5	(14)	-	-
Depreciation and amortization of right-of-use assets	9.2	(1,239)	-	-
Effects resulting from business combinations		-	-	(27)
Reclassification of translation adjustment from liquidated entities		12	1	(8)
Impairment of goodwill	7.1	(54)	(56)	(20)
Impairment of fixed assets	8.3	73	(49)	(190)
Impairment of right-of-use assets	9.2	(33)	-	-
Share of profits (losses) of associates and joint ventures	11	8	3	6
Operating income		5,927	4,829	4,778
Cost of gross financial debt excluding financed assets		(1,108)	(1,341)	(1,274)
Interests on debts related to financed assets		(1)	-	-
Gains (losses) on assets contributing to net financial debt		5	9	11
Foreign exchange gain (loss)		76	(4)	(63)
Interests on lease liabilities		(122)	-	(00)
Other net financial expenses		15	25	(17)
Effects resulting from BT stake	12.7	(119)	(51)	(372)
Finance costs, net	12.2	(1,254)	(1,362)	(1,715)
Income tax	10.2.1	(1,447)	(1,309)	(1,052)
Consolidated net income of continuing operations		3,226	2,158	2,011
Consolidated net income of discontinued operations (EE)		-	-	29
Consolidated net income		3,226	2,158	2,040
Net income attributable to owners of the parent company		3,006	1,954	1,843
Non-controlling interests	14.6	220	204	197
Earnings per share (in euros) attributable to parent company	14.7			
Net income of continuing operations				
- basic		1.03	0.63	0.58
- diluted		1.02	0.62	0.58
Net income of discontinued operations		1.02	3.32	3.00
- basic		_	0.00	0.01
- diluted		_	0.00	0.01
Net income			0.00	0.01
- basic		1.03	0.63	0.59
- diluted		1.02	0.62	0.59
		1.02	0.02	0.09

⁽¹⁾ The effects of IFRS 16 application are described in Note 2.3.1.

Consolidated statement of comprehensive income

(in millions of euros)	Note	2019	2018	2017
Consolidated net income		3,226	2,158	2,040
Remeasurements of the net defined benefit liability	6.2	(109)	45	16
Assets at fair value	12.7-16.1	(25)	(22)	-
Income tax relating to items that will not be reclassified	10.2.2	30	(6)	(23)
Share of other comprehensive income in associates				
and joint ventures that will not be reclassified	11	-	-	(9)
Items that will not be reclassified to profit or loss (a)		(104)	17	(16)
Assets at fair value	12.7-16.1	9	(8)	-
Assets available for sale	12.7-16.1	-	-	23
Cash flow hedges	12.8.2	144	(67)	49
Translation adjustment gains and losses	14.5	78	(7)	(176)
Income tax relating to items that are or may be reclassified	10.2.2	(47)	18	6
Share of other comprehensive income in associates				
and joint ventures that are or may be reclassified		-	-	-
Items that are or may be reclassified subsequently to profit or loss (b)		184	(64)	(98)
Other comprehensive income from continuing operations (a) + (b)		80	(47)	(114)
Items that will not be reclassified to profit or loss (c)		-	-	-
Items that are or may be reclassified to profit or loss (d)		-	-	-
Other comprehensive income of discontinued operations (c) + (d)		-	-	
Other consolidated comprehensive income (a) + (b) + (c) + (d)		80	(47)	(114)
Consolidated comprehensive income		3,307	2,111	1,926
Comprehensive income attributable to the owners of the parent company		3,075	1,898	1,770
Comprehensive income attributable to non-controlling interests		232	213	156

Consolidated statement of financial position

(in millions of euros)	Note	December 31, 2019 ⁽¹⁾	December 31, 2018	December 31, 2017
Assets				
Goodwill	7.2	27,644	27,174	26,911
Other intangible assets	8.4	14,737	14,073	14,339
Property, plant and equipment	8.5	28,423	27,693	26,665
Right-of-use assets	9.2	6,263	-	-
Interests in associates and joint ventures	11	103	104	77
Non-current financial assets related to Orange Bank activities	16.1	1,259	1,617	1,464
Non-current financial assets	12.1	1,208	2,282	2,247
Non-current derivatives assets	12.1	562	263	213
Other non-current assets	4.6	125	129	110
Deferred tax assets	10.2.3	992	1,366	1,586
Total non-current assets		81,316	74,701	73,612
Inventories	5.4	906	965	827
Trade receivables	4.3	5,320	5,295	5,175
Other customer contract assets	4.4	1,209	1,166	1,204
Current financial assets related to Orange Bank activities	16.1	3,095	3,075	3,275
Current financial assets	12.1	4,766	2,748	2,686
Current derivatives assets	12.1	12	139	34
Other current assets	4.6	1,258	1,152	1,094
Operating taxes and levies receivables	10.1.2	1,090	1,027	1,045
Current tax assets	10.2.3	120	119	132
Prepaid expenses	5.5	730	571	455
Cash and cash equivalents	12.1	6,481	5,634	5,810
Total current assets		24,987	21,891	21,737
Assets held for sale		-	-	-
Total assets		106,303	96,592	95,349

⁽¹⁾ The effects of IFRS 16 application are described in Note 2.3.1.

Share premiums and statutory reserve 16,859 20,855 16,255 26,255 26,250 26,250 26,250 26,250 26,250 26,250 26,250 26,255 26,255 26,255 26,255 26,255 26,255 26,255 26,255 26,255 26,255 26,255 2	(in millions of euros)	Note	December 31, 2019 ⁽¹⁾	December 31, 2018	December 31, 2017
Share premiums and statutory reserve 16,859 16,859 16,859 Subordinated notes 5,803 5,803 5,803 Retained earnings (1,575) (2,633) (2,325) Equity attributable to the owners of the parent company 31,727 30,669 30,97 Non-controlling interests 2,688 2,580 2,550 Total equity 14 33,148 26,749 26,25 Non-current financial liabilities 12.1 487 775 1,00 Non-current derivatives liabilities 12.1 487 775 1,00 Non-current derivatives liabilities 9.1 5,225 - 66,22 Non-current financial liabilities related to Orange Bank activities 16.1 - - - Non-current financial liabilities related to Orange Bank activities 16.1 - - - Non-current dismantling provision 5.3 96 230 25 2,67 Non-current disabilities 1.2 3,33 462 2,554 2,823 2,67 <tr< th=""><th>Equity and liabilities</th><th></th><th></th><th></th><th></th></tr<>	Equity and liabilities				
Subordinated notes 5,803 5,803 5,803 2,803 2,623 2,032 2,032 2,033 2,032 2,033 2,032 2,033 30,093 30,097 30,069 30,097 30,069 30,097 30,069 30,097 30,069 30,097 30,069 30,097 30,051<	Share capital		10,640	10,640	10,640
Petained earnings	Share premiums and statutory reserve		16,859	16,859	16,859
Squity attributable to the owners of the parent company 1,727 30,669 30,97 Non-controlling interests 2,688 2,580 2,55 Total equity 14 34,416 33,249 33,51 Non-current financial liabilities 12.1 33,148 26,749 26,25 Non-current derivatives liabilities 12.1 487 775 1,00 Non-current lease liabilities 9.1 5,225 -			,		5,803
Non-controlling interests	S .		, , ,	. , ,	(2,327)
Total equity 14 34,416 33,249 33,51 Non-current financial liabilities 12.1 33,148 26,749 26,28 Non-current derivatives liabilities 12.1 487 775 1,00 Non-current flease liabilities 9.1 5,225 - Non-current financial liabilities related to Orange Bank activities 8.6 817 612 61 Non-current employee benefits 6.2 2,554 2,823 2,67 Non-current dismantling provision 8.7 810 765 77 Non-current liabilities 5.3 96 230 25 Other non-current liabilities 5.7 353 462 2554 Deferred tax liabilities 10.2.3 703 631 66 Total non-current liabilities 12.1 3,925 7,270 6,03 Current financial liabilities 12.1 3,925 7,270 6,03 Current financial liabilities 12.1 3,925 7,270 6,03 Current fixed assets payables			,	,	,
Non-current financial liabilities	9	1.4	,		,
Non-current derivatives liabilities	lotal equity	14	34,416	33,249	33,512
Non-current lease liabilities 9.1 5,225 - Non-current fixed assets payables 8.6 817 612 61 Non-current financial liabilities related to Orange Bank activities 16.1 - - - Non-current employee benefits 6.2 2,554 2,823 2,67 Non-current dismantling provision 8.7 810 765 77 Non-current liabilities 5.3 96 230 25 Other non-current liabilities 5.7 353 462 52 Deferred tax liabilities 10.2.3 703 631 66 Total non-current liabilities 12.1 3,925 7,270 6,03 Current financial liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current fixed assets payables 8.6 2,848 2,835 3,0 Current fixed assets payables 5.6 6,682 6,736 6,52 Customer contract liabilities			,	,	26,293
Non-current fixed assets payables 8.6 817 612 61 Non-current financial liabilities related to Orange Bank activities 16.1 - - Non-current employee benefits 6.2 2,554 2,823 2,67 Non-current dismantling provision 8.7 810 765 77 Non-current liabilities 5.3 96 230 25 Other non-current liabilities 10.23 703 631 66 Deferred tax liabilities 10.23 703 631 66 Total non-current liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current derivatives liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Current derivatives liabilities 9.1 1,267 - - Current fixed assets payables 8.6 2,848 2,835 3,04 Current fixed assets payables 16.1		. —		775	1,002
Non-current financial liabilities related to Orange Bank activities 16.1 - - Non-current employee benefits 6.2 2,554 2,823 2,67 Non-current immedial liabilities provision 8.7 810 765 77 Non-current restructuring provision 5.3 96 230 22 Other non-current liabilities 5.7 353 462 52 Deferred tax liabilities 10.2.3 703 631 66 Total non-current liabilities 12.1 3,925 7,270 6,03 Current financial liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 2,25 133 3 Current dese liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current financial l			,	-	-
Non-current employee benefits 6.2 2,554 2,823 2,67 Non-current dismantling provision 8.7 810 765 77 Non-current restructuring provision 5.3 96 230 25 Other non-current liabilities 5.7 353 462 52 Deferred tax liabilities 10.2.3 703 631 68 Total non-current liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current lease liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities 4.4 2,093 2,002 2,00 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current restructuring provision	1 3		817	612	610
Non-current dismantling provision 8.7 810 765 77 Non-current restructuring provision 5.3 96 230 26 Other non-current liabilities 5.7 353 462 52 Deferred tax liabilities 10.2.3 703 631 65 Total non-current liabilities 44,192 33,047 32,76 Current financial liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities 4.4 2,093 2,002 2,002 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current isabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables	8		0.554	- 0.000	- 0.074
Non-current restructuring provision 5.3 96 230 25 Other non-current liabilities 5.7 353 462 52 Deferred tax liabilities 10.2.3 703 631 65 Total non-current liabilities 44,192 33,047 32,78 Current financial liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current lease liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current dismantling provision 8.7 15 11 1 1 1 1 1 1 1 1 1 1 1 1			,	,	2,674 774
Other non-current liabilities 5.7 353 462 52 Deferred tax liabilities 10.2.3 703 631 65 Total non-current liabilities 44,192 33,047 32,78 Current financial liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current lease liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities related to Orange Bank activities 4.4 2,093 2,002 2,02 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,9 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities	9.				251
Deferred tax liabilities					521
Total non-current liabilities 44,192 33,047 32,78 Current financial liabilities 12.1 3,925 7,270 6,03 Current derivatives liabilities 12.1 22 133 3 Current lease liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities related to Orange Bank activities 4.4 2,093 2,002 2,02 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51					655
Current derivatives liabilities 12.1 22 133 3 Current lease liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities 4.4 2,093 2,002 2,02 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 58 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,08 Liabilities related to assets held for sale -		10.2.0			32,780
Current derivatives liabilities 12.1 22 133 3 Current lease liabilities 9.1 1,267 - Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities 4.4 2,093 2,002 2,02 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 58 Deferred income 4.5 51 58 7 Total current liabilities - - - - Liabilities related to assets held for sale - </td <td>Current financial liabilities</td> <td>12.1</td> <td>3.925</td> <td>7.270</td> <td>6.030</td>	Current financial liabilities	12.1	3.925	7.270	6.030
Current fixed assets payables 8.6 2,848 2,835 3,04 Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities 4.4 2,093 2,002 2,02 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,08 Liabilities related to assets held for sale - - -	Current derivatives liabilities	12.1	,	,	34
Trade payables 5.6 6,682 6,736 6,52 Customer contract liabilities 4.4 2,093 2,002 2,02 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,08 Liabilities related to assets held for sale - - -	Current lease liabilities	9.1	1,267	-	-
Customer contract liabilities 4.4 2,093 2,002 2,002 Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,08 Liabilities related to assets held for sale - - -	Current fixed assets payables	8.6	2,848	2,835	3,046
Current financial liabilities related to Orange Bank activities 16.1 4,279 4,835 4,94 Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 58 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,08 Liabilities related to assets held for sale - - -	Trade payables	5.6	6,682	6,736	6,527
Current employee benefits 6.2 2,261 2,392 2,44 Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 77 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale - - -		4.4	2,093	2,002	2,021
Current dismantling provision 8.7 15 11 1 Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale - - -	Current financial liabilities related to Orange Bank activities		4,279		4,941
Current restructuring provision 5.3 120 159 12 Other current liabilities 5.7 2,095 1,788 1,93 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale - - -	• •		,	2,392	2,448
Other current liabilities 5.7 2,095 1,788 1,932 Operating taxes and levies payables 10.1.2 1,287 1,322 1,26 Current tax payables 10.2.3 748 755 55 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale - - -					15
Operating taxes and levies payables 10.1.2 1,287 1,322 1,22 Current tax payables 10.2.3 748 755 58 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale - - -	3 ·				126
Current tax payables 10.2.3 748 755 58 Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale - - -			,		1,935
Deferred income 4.5 51 58 7 Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale	. •		,		1,262
Total current liabilities 27,695 30,296 29,05 Liabilities related to assets held for sale	1 7				596
Liabilities related to assets held for sale		4.5			76
			27,695	30,296	29,057
Total equity and liabilities 106,303 96,592 95,34	Liabilities related to assets held for sale		-	-	-
	Total equity and liabilities		106,303	96,592	95,349

⁽¹⁾ The effects of IFRS 16 application are described in Note 2.3.1.

Consolidated statements of changes in shareholders' equity

(in millions of euros) Note			
	Number of issued shares	Share capital	
Balance as of January 1, 2017	2,660,056,599	10,640	
Consolidated comprehensive income	-	-	
Capital increase Share-based compensation 6.3 Purchase of treasury shares 14.2 Dividends 14.3 Subordinated notes remuneration 14.4 Changes in ownership interests with no gain/loss of control 3.2 Other movements Balance as of December 31, 2017	- - -	- - - - - - 10,640	
Effect of IFRS 9 application	-	-	
Balance as of January 1, 2018 after effect of IFRS 9 application	2,660,056,599	10,640	
Consolidated comprehensive income	-	-	
Share-based compensation Purchase of treasury shares Dividends Subordinated notes remuneration Changes in ownership interests with no gain/loss of control Changes in ownership interests with gain/loss of control Other movements	- - - -	- - - - - -	
Balance as of December 31, 2018	2,660,056,599	10,640	
Effect of IFRS 16 application (1)	-	-	
Balance as of January 1, 2019 after effect of IFRS 16 application	2,660,056,599	10,640	
Consolidated comprehensive income	-	-	
Share-based compensation Purchase of treasury shares Dividends Subordinated notes remuneration (2) Changes in ownership interests with no gain/loss of control Changes in ownership interests with gain/loss of control Other movements (3)	- - - -	- - - - - -	
Balance as of December 31, 2019	2,660,056,599	10,640	

Analysis of changes in shareholders' equity related to components of the other comprehensive income

(in millions of euros) Attributable to owners of the parent co						arent company		
	Assets available for sale	Assets at fair value	Hedging instruments	Translation adjustment	Actuarial gains and losses	of	Other compre- nensive income associates and joint ventures ⁽²⁾	Total
Balance as of January 1, 2017	34	-	(249)	164	(557)	236	(31)	(403)
Variation Balance as of December 31, 2017	22 56	- -	53 (196)	(137) 27	16 (541)	(18) 218	(9) (40)	(73) (476)
Effect of IFRS 9 application Balance as of January 1, 2018 after effect of IFRS 9 application	(56)	17 17	(196)	- 27	(541)	218	(40)	(39) (515)
Variation Balance as of December 31, 2018	-	(27) (10)	(68) (264)	(12) 15	37 (504)	14 232	- (40)	(56) (571)
Effect of IFRS 16 application (1)	=	-	-	-	-	-	-	-
Balance as of January 1, 2019 after effect of IFRS 16 application	-	(10)	(264)	15	(504)	232	(40)	(571)
Variation	-	(18)	147	64	(107)	(16)	-	69
Balance as of December 31, 2019	-	(28)	(117)	78	(611)	216	(40)	(502)

⁽¹⁾ The effects of IFRS 16 application are described in Note 2.3.1. (2) Amounts excluding translation adjustment.

The effects of IFRS 16 application are described in Note 2.3.1.
 The subordinated note remuneration includes (276) MEUR of coupons paid to the holders and (21) MEUR linked to the application of the call option on February 7, 2020.
 Including the effect of the annulment of the promise to buy (put option), granted to Groupama on 20% of the Orange Bank equity (see in Note 15.2).

Total equity	controlling interests	ttributable to non-	А	Attributable to owners of the parent company				
	Total	Other comprehensive income	Reserves	Total	Other comprehensive income	Reserves	Subor- dinated notes	Share premiums and statutory reserve
33,845	2,604	255	2,349	31,241	(403)	(1,658)	5,803	16,859
1,926	156	(41)	197	1,770	(73)	1,843	-	-
5 (5) (1,963) (282)	(3) - (234) - 2	- - - - -	(3) - (234) - 2	- 8 (5) (1,729) (282) (2)	- - - - -	8 (5) (1,729) (282) (2)	- - - - -	-
(14) 33,512	12 2,537	214	12 2,323	(26) 30,975	(476)	(26) (1,851)	5,803	- 16,859
(23)	(4)		(4)	(19)	(39)	20	-	-
33,489	2,533	214	2,319	30,956	(515)	(1,831)	5,803	16,859
2,111	213	9	204	1,898	(56)	1,954	-	<u> </u>
50 (98) (2,106) (280) (12) 11 84	4 - (246) - (9) 11 74	- - - - - - -	4 - (246) - (9) 11 74	46 (98) (1,860) (280) (3) - 10	- - - - - -	46 (98) (1,860) (280) (3) - 10	- - - - - -	- - - - - - -
33,249	2,580	223	2,357	30,669	(571)	(2,062)	5,803	16,859
2	-	-	-	2	-	2	-	-
33,251	2,580	223	2,357	30,671	(571)	(2,060)	5,803	16,859
3,307	232	11	220	3,075	69	3,006	-	-
55 (34) (2,105) (297) 5 2 233	3 - (248) - 1 2 119	- - - - - -	3 - (248) - 1 2 119	52 (34) (1,857) (297) 4 - 114	- - - - - -	52 (34) (1,857) (297) 4 - 114	- - - - - -	-
34,416	2,688	234	2,454	31,727	(502)	(1,073)	5,803	16,859

					Attributable to non-cor	Total other	
Assets available for sale	Assets at fair value	Hedging instruments	Translation Actuarial Deferred Total adjustment gains and tax losses	Total	compre- hensive income		
(2)	-	_	271	(16)	2	255	(148)
1 (1)	-	(4) (4)	(39) 232	(16)	1 3	(41) 214	(114) (262)
1	(1)	-	-	-	-	-	(39)
-	(1)	(4)	232	(16)	3	214	(301)
- -	(3) (4)	1 (3)	5 237	8 (8)	(2) 1	9 223	(47) (348)
-	-	-	-	-	-	-	-
-	(4)	(3)	237	(8)	1	223	(348)
-	3	(3)	14	(2)	(1)	11	80
-	(2)	(6)	251	(10)	1	234	(268)

Consolidated statement of cash flows

(in millions of euros)	Note	2019(1)	2018	2017
Operating activities				
Consolidated net income		3,226	2,158	2,040
Non-monetary items and reclassified items for presentation				
Operating taxes and levies	10.1	1,827	1,840	1,846
Gains (losses) on disposal of fixed assets, investments and activities	3.1	(277)	(197)	(83)
Other gains and losses		(9)		
Depreciation and amortization of fixed assets	8.2	7,110	7,047	6,846
Depreciation and amortization of financed assets	8.5	14	-	-
Depreciation and amortization of right-of-use assets	9.2	1,239	(4.7)	- (00)
Changes in provisions	4-5-6-8	(484)	(17)	(80)
Remeasurement to fair value of previously held equity interests Reclassification of cumulative translation adjustment from liquidated entities	3.2	(12)	(1)	27 8
Impairment of goodwill	7.1	54	56	20
Impairment of goodwiii Impairment of fixed assets	8.3	(73)	49	190
Impairment of fixed assets	9.2	33	-	-
Share of profits (losses) of associates and joint ventures	11	(8)	(3)	(6)
Net income after tax of discontinued operations (EE)	3.2	(0)	(O)	(29)
Operational net foreign exchange and derivatives	0.2	9	2	2
Finance costs, net	12.2	1,254	1,362	1,715
Income tax	10.2	1,447	1,309	1,052
Share-based compensation	6.3	55	50	5
Changes in working capital				
Decrease (increase) in inventories, gross		69	(152)	(14)
Decrease (increase) in trade receivables, gross		(45)	(97)	(262)
Increase (decrease) in trade payables		(85)	177	412
Changes in other customer contract assets and liabilities		(60)	12	112
Changes in other assets and liabilities (2)		(813)	(176)	164
Other net cash out				
Operating taxes and levies paid	10.1	(1,939)	(1,777)	(1,934)
Dividends received		17	51	55
Interest paid and interest rates effects on derivatives, net (3)		(1,312)	(1,259)	(1,329)
Income tax paid	10.2.3	(1,079)	(928)	(583)
Net cash provided by operating activities (a)		10,159	9,506	10,174
o/w discontinued operations (EE)		-	-	
Investing activities				
Purchases (sales) of property, plant and equipment and intangible assets				
Purchases of property, plant and equipment and intangible assets (4)	8.4-8.5	(8,422)	(7,642)	(7,527)
Increase (decrease) in fixed assets payables		179	(289)	(69)
Investing donations received in advance		32	47	71
Sales of property, plant and equipment and intangible assets (5)		628	192	147
Cash paid for investment securities, net of cash acquired	0.0	(074)		
SecureLink	3.2	(371)	-	-
SecureData Basefarm	3.2 3.2	(95)	(220)	-
Business & Decision	3.2	-	(230)	-
Liberia	3.2	-	(36) (3)	-
Burkina Faso		-	(3)	(10)
Sierra Leone			19	(10)
Others		(93)	(55)	(24)
Investments in associates and joint ventures		(2)	(6)	(27)
Other purchases of assets available for sale		(2)	(0)	(43)
Purchases of equity securities measured at fair value		(44)	(104)	(7)
Sales of EE		-	-	50
Sales of BT	12.7	543	53	433
Sales of other investment securities, net of cash transferred		(14)	57	32
		-	-	-
Decrease (increase) in securities and other financial assets		(2,025)	55	(1,013)
Decrease (increase) in securities and other financial assets Investments at fair value, excluding cash equivalents				
		314	(631)	19
Investments at fair value, excluding cash equivalents		314 (9,370)	(631) (8,552)	19 (7,941)

(in millions of euros)	Note	2019(1)	2018	2017
Financing activities				
Medium and long-term debt issuances	12.5-12.6	8,351	5,214	2,450
Medium and long-term debt redemptions and repayments ⁽⁷⁾	12.5-12.6	(4,650)	(4,095)	(2,728)
Repayments of lease liabilities		(1,398)	_	-
Increase (decrease) of bank overdrafts and short-term borrowings		(945)	(43)	949
Decrease (increase) of cash collateral deposits		590	208	(1,127)
Exchange rates effects on derivatives, net		26	7	(66)
Coupon on subordinated notes	14.4	500	-	-
Coupon and other fees on subordinated notes issuance	14.4	(357)	(280)	(282)
Purchases of treasury shares – Orange Vision 2020 free share award plan	14.2	(27)	(101)	-
Other proceeds (purchases) from treasury shares	14.2	(7)	3	(4)
Capital increase (decrease) – non-controlling interests		79	68	34
Changes in ownership interests with no gain/loss of control		(7)	(6)	1
Dividends paid to owners of the parent company	14.3	(1,857)	(1,860)	(1,729)
Dividends paid to non-controlling interests	14.6	(243)	(246)	(236)
Net cash used in financing activities (c)		55	(1,131)	(2,738)
o/w discontinued operations (EE)		-	-	-
Net change in cash and cash equivalents (a) + (b) + (c)		844	(177)	(505)
Net change in cash and cash equivalents				
Cash and cash equivalents in the opening balance		5,634	5,810	6,355
o/w continuing operations		5,634	5,810	6,355
o/w discontinued operations		-	-	-
Cash change in cash and cash equivalents		844	(177)	(505)
Non-cash change in cash and cash equivalents		3	1	(40)
Effect of exchange rates changes on cash and cash equivalents				
and other non-monetary effects		3	1	(40)
Cash and cash equivalents in the closing balance		6,481	5,634	5,810

⁽¹⁾ The effects of IFRS 16 application are described in Note 2.3.1.
(2) Including flows from operating activities related to Orange Bank and excluding operating tax receivables and payables.
(3) Including interests paid on lease liabilities for (98) million euros in 2019.
(4) In 2019, acquisitions of financed assets for 144 million euros have no effect to the net cash used in investing activities.
In 2018 and 2017, acquisitions of property, plant, equipment and intangible assets financed through finance leases in the amount of respectively 136 million euros and 43 million euros had no effect to the net cash used in investing activities.
(5) Including proceeds from sale and lease-back transactions for 381 million euros in 2019.
(6) In 2019, mainly including net repayments of debt securities of Orange Bank for 277 million euros (net acquisitions for (154) million euros in 2018, see Note 16.1.1). In 2018, included escrowed amount of (346) million euros relating to the Digicel litigation.
(7) Including TDIRA buy-backs (see Note 12.4).

Note 1 Segment information

1.1 Segment revenue

Revenue Reve	(in millions of euros)	France	Spain	Europe	
Revenue Reve					
Convergence services 4,397 2,092 623 Mobile services only 1,386** 1,161 2,143 Fixed services only 4,086** 501 644 IT & integration services - 6 232 Wholesale 5,487 901 1,071 Equipment sales 1,351 620 898 Other revenue 509 0 173 External 17,492 5,230 5,695 Inter-operating segments 66 250 88 December 31, 2018 8 2,143 467 Mobile services services 4,458 2,143 467 Mobile services only 4,168** 4,96 697 Till Fixed services only 4,168** 4,96 697 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 888 Other revenue 485 - 153 External 17,615 5,299 5,601	December 31, 2019				
Mobile services only 2,324 1,161 2,143 Fixed services only 4,086 ¹⁶ 501 644 IT & integration services - 6 232 Wholesale 5,487 901 1,071 Equipment sales 1,351 620 898 Other revenue 509 0 173 External 17,492 5,230 5,695 Inter-operating segments 662 50 88 December 31, 2018 8 2,143 467 Mobile services only 2,348 2,143 467 Mobile services only 4,458 2,143 467 Mobile services only 4,168 ⁴⁰ 496 697 TE & integration services 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 50 86 December	Revenue ⁽³⁾	18,154	5,280	5,783	
Fixed services only 4,086 ⁽⁶⁾ 501 644 11 6 232 232 Wholesale 5,487 901 1,071	Convergence services	4,397	2,092	623	
IT & Integration services - 6 232 Wholesale 5,487 901 1,071 Equipment sales 1,351 620 898 Other revenue 509 0 0 173 External 17,492 5230 5,695 Inter-operating segments 662 50 88 December 31, 2018 8 Revenue ⁽⁵⁾ 18,211 5,349 5,887 Convergence services 4,458 2,143 467 Mobile services only 2,348 1,215 2,194 Evit It & Integration services 1 153 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 8 Revenue (%) 18,046 5,231 5,78 Convergence services only 2,409 1,229 2,254 Inter-operating segments 4,045 2,078 305 Mobile services only 4,344 501 757 T & Integration services 1,29 2,254 External 1,346 69 840 Other revenue 4,344 501 757 T & Integration services only 1,346 69 840 T &	Mobile services only	2,324	1,161	2,143	
Wholesale 5,487 901 1,071 Equipment sales 1,351 620 898 Other revenue 509 0 173 External 17,492 5,230 5,695 Inter-operating segments 662 50 88 December 31, 2018 Revenue ⁽⁸⁾ 18,211 5,349 5,687 Convergence services 4,458 2,143 467 Mobile services only 2,348 1,215 2,194 Fixed services only 4,168 697 15 IT & integration services 5,42 810 1,150 Equipment sales 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue ⁽⁹⁾ 18,046 5,231 5,578	Fixed services only	4,086 (4)	501	644	
Equipment sales 1,351 620 898 Other revenue 509 0 173 External 17,492 5,230 5,695 Inter-operating segments 662 50 88 December 31, 2018 8 5,849 5,887 Convergence services 4,458 2,143 467 Mobile services only 2,348 1,215 2,194 Fixed services only risk integration services - 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 8 2,078 305 Revenue ⁶⁰ 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 <t< td=""><td>IT & integration services</td><td>-</td><td>6</td><td>232</td><td></td></t<>	IT & integration services	-	6	232	
Other revenue 509 0 173 External 17,492 5,230 5,695 Inter-operating segments 662 50 88 December 31, 2018 Revenue ® 18,211 5,349 5,687 Convergence services 4,458 2,143 467 Mobile services only 2,348 1,215 2,194 Fixed services only 4,168 % 496 697 IT & integration services 5,42 810 1,150 Equipment sales 5,342 810 1,150 Equipment sales 1,410 684 88 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 8 5,778 305 Revenue (®) 18,046 5,231 5,578 Convergence services only 2,409 1,229 2,254 Eixel services only 4,041<	Wholesale	5,487	901	1,071	
Transpage	Equipment sales	1,351	620	898	
Inter-operating segments 662 50 88 10 10 10 10 10 10	Other revenue		0	173	
Packenter Pack	External	17,492	5,230	5,695	
Revenue (®) 18,211 5,349 5,687 Convergence services 4,458 2,143 467 Mobile services only 2,348 1,215 2,194 Fixed services only 4,168 (®) 496 697 IT & integration services - 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 8 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (%) 501 757 IT & integration services 5,388 754 1,133 Equipment sales 5,388 754 1,133 Equipment sales 13,386 669 840	Inter-operating segments	662	50	88	
Convergence services 4,458 2,143 467 Mobile services only 2,348 1,215 2,194 Fixed services only 4,168(4) 496 697 IT & integration services 1 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 8 5 2 1 5,578 Convergence services 4,045 5,231 5,578 5,578 6 305 6 60 86 60	December 31, 2018				
Mobile services only 2,348 1,215 2,194 Fixed services only 4,168 (%) 496 697 IT & integration services - 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue (%) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (%) 501 757 IT & integration services - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177	Revenue (3)	18,211	5,349	5,687	
Fixed services only 4,168 ⁽⁴⁾ 496 697 IT & integration services - 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue (8) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344(4) 501 757 IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Convergence services	4,458	2,143	467	
IT & integration services - 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue (®) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (%) 501 757 IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Mobile services only	2,348	1,215	2,194	
IT & integration services - 1 158 Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue (9) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (9) 501 757 IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Fixed services only			697	
Wholesale 5,342 810 1,150 Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue® 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 ® 501 757 IT & integration services - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496		· -	1	158	
Equipment sales 1,410 684 868 Other revenue 485 - 153 External 17,615 5,299 5,601 Inter-operating segments 596 50 86 December 31, 2017 Revenue ^(a) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 ^(a) 501 757 IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Wholesale	5.342	810	1.150	
Other revenue 485 - 153 External Inter-operating segments 17,615 5,299 5,601 December 31, 2017 596 50 86 Revenue (9) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Equipment sales	· · · · · · · · · · · · · · · · · · ·	684		
Second	Other revenue	· · · · · · · · · · · · · · · · · · ·			
December 31, 2017 Revenue (3) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (4) 501 757 IT & integration services - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	External	17,615	5,299	5,601	
Revenue (3) 18,046 5,231 5,578 Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only IT & integration services - - - 129 Wholesale 5,388 754 1,133 540 1,133 540 669 840 669 840 669 840 669 840 669 840 669 840 660 840	Inter-operating segments	596	50	86	
Convergence services 4,045 2,078 305 Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (4) 501 757 IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	December 31, 2017				
Mobile services only 2,409 1,229 2,254 Fixed services only 4,344 (4) 501 757 IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Revenue ⁽³⁾	18,046	5,231	5,578	
Fixed services only 4,344 (4) 501 757 IT & integration services - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Convergence services	4,045	2,078	305	
Fixed services only 4,344 (4) 501 757 IT & integration services - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Mobile services only	2,409	1,229	2,254	
IT & integration services - - - 129 Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Fixed services only	4,344 (4)		757	
Wholesale 5,388 754 1,133 Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496		- · · · · · · · · · · · · · · · · · · ·	-	129	
Equipment sales 1,386 669 840 Other revenue 474 - 160 External 17,463 5,177 5,496	Wholesale	5,388	754	1,133	
Other revenue 474 - 160 External 17,463 5,177 5,496	Equipment sales		669	,	
	Other revenue		-	160	
	External	17,463	5,177	5,496	
	Inter-operating segments	583			

Including, in 2019, revenue of 5,233 million euros in France, 21 million euros in Spain, 1,077 million euros in other European countries and 1,489 million euros in other countries. Including, in 2018, revenue of 5,235 million euros in France, 21 million euros in Spain, 665 million euros in other European countries and 1,399 million euros in other countries. Including, in 2017, revenue of 5,235 million euros in France, 34 million euros in Spain, 654 million euros in other European countries and 1,399 million euros in other countries.
 Including revenue of 1,374 million euros in France in 2019, 1,412 million euros in 2018 and 1,530 million euros in 2017.
 The description of different sources of revenue is presented in Note 4.1.
 Including, in 2019, fixed only broadband revenue of 2,699 million euros and fixed only narrowband revenue of 1,387 million euros. Including, in 2018, fixed only broadband revenue of 2,565 million euros and fixed only narrowband revenue of 1,809 million euros. Including, in 2017, fixed only broadband revenue of 2,535 million euros and fixed only narrowband revenue of 1,809 million euros.
 Including, in 2017, revenue of 1,389 million euros from voice services and revenue of 2,612 million from data services. Including, in 2018, revenue of 1,385 million euros from voice services and revenue of 2,612 million euros from data services. Including, in 2017, revenue of 1,452 million euros from voice services and revenue of 2,700 million euros from data services.

Orange consoli- dated financial statements	Eliminations telecom activities/ bank	Orange Bank	Total telecom activities	Elimination	International Carriers & Shared Services (2)	Enterprise (1)	Africa & Middle East
42,238	(4)	-	42,242	(1,939)	1,498	7,820	5,646
7,111	- (0)	-	7,111	(40)	-	707	4.000
10,544	(0)	-	10,545	(40)	-	727	4,230
9,508 3,004	(0)	-	9,509 3,006	(178) (155)	-	3,963 ⁽⁵⁾ 2,909	493 14
7,933	(3)	-	7,933	(1,416)	- 1,077	2,909	780
3,146	(O)	-	3,146	(6)	1,077	187	96
991	(1)	-	992	(142)	421	-	32
42,238	-	_	42,238	-	955	7,437	5,430
	(4)	-	4	(1,939)	543	383	216
44.004	(0)		44.004	(4.070)	1.504	7 000	5.100
41,381 7,068	(3)	-	41,384 7,068	(1,879)	1,534	7,292	5,190
10,272	_	_	10,272	(37)	_	743	3,809
9,604	-	_	9,604	(189)	-	3,997 (5)	435
2,349	(2)	_	2,351	(141)	-	2,312	21
7,931	-	_	7,931	(1,367)	1,150	35	811
3,245	-	-	3,245	(7)	-	205	85
912	(1)	-	913	(138)	384	-	29
41,381	-	-	41,381	-	972	6,914	4,980
-	(3)	-	3	(1,879)	562	378	210
40,859	(2)	-	40,861	(1,926)	1,651	7,251	5,030
6,427	-	-	6,427	(1)	-	-	-
10,202	-	-	10,202	(41)	-	751	3,600
9,994	-	-	9,994	(191)	-	4,152 (5)	431
2,077	(1)	-	2,078	(150)	-	2,092	7
8,065	-	-	8,065	(1,411)	1,275	32	894
3,185	-	-	3,185	-	-	224	66
909	(1)	-	910	(132)	376	-	32
40,859	-	-	40,859	-	1,084	6,860	4,779
-	(2)	-	2	(1,926)	567	391	251

1.2 Segment revenue to consolidated net income in 2019

(in millions of euros)	France	Spain	Europe	Africa & Middle East	
Revenue	18,154	5,280	5,783	5,646	
External purchases	(7,036)	(2,907)	(3,341)	(2,465)	
Other operating income	1,392	221	148	72	
Other operating expenses	(553)	(207)	(173)	(245)	
Labor expenses	(3,730)	(271)	(678)	(507)	
Operating taxes and levies	(893)	(160)	(84)	(495)	
Gains (losses) on disposal of fixed assets, investments and activities	-	-	-	-	
Restructuring costs	-	-	-	-	
Depreciation and amortization of financed assets	(14)	-	-	-	
Depreciation and amortization of right-of-use assets	(175)	(298)	(147)	(121)	
Impairment of right-of-use assets	-	-	_	_	
Interests on debts related to financed assets (3)	(1)	-	-	-	
Interests on lease liabilities (3)	(9)	(12)	(17)	(70)	
EBITDAaL ⁽¹⁾	7,135	1,646	1,492	1,815	
Significant litigations (1)	_	_	_	_	
Specific labor expenses (1)	(32)	_	2	_	
Fixed assets, investments and businesses portfolio review (1)	4	56	63	(19)	
Restructuring programs costs (1)	(45)	(12)	(55)	(4)	
Acquisition and integration costs (1)	(+0)	(0)	(5)	(¬)	
Depreciation and amortization of fixed assets	(3,179)	(1,076)	(1,119)	(972)	
Reclassification of translation adjustment from liquidated entities	(0,179)	(1,070)	(1,119)	(972)	
· · · · · · · · · · · · · · · · · · ·	-	-	U		
Impairment of goodwill	- (4)	-	(4.5)	(54)	
Impairment of fixed assets	(1)	-	(15)	89 12	
Share of profits (losses) of associates and joint ventures	0	-	I	12	
Elimination of interests on debts related to financed assets (3)	I	-	-	-	
Elimination of interests on lease liabilities (3)	9	12	17	70	
Operating Income	3,892	626	382	939	

Cost of gross financial debt except financed assets

Interests on debts related to financed assets (3)

Gains (losses) on assets contributing to net financial debt

Foreign exchange gain (loss)

Interests on lease liabilities (3)

Other net financial expenses

Effects resulting from BT sale

Finance costs, net

Income Tax

Consolidated net income of continuing operations

Consolidated net income of discontinued operations

Consolidated net income

⁽¹⁾ See Note 1.8. for EBITDAaL adjustments.

⁽²⁾ Orange Bank's net banking income is recognized in other operating income and amounts to 40 million euros in 2019. The cost of risk is included in other operating expenses and amounts to (10) million euros in 2019.

⁽³⁾ Presentation adjustments allow the reallocation of the lines of specific items identified in the segment information to the operating revenue and expense lines presented in the consolidated income statement. Interests on debts related to financed assets and interests on lease liabilities are included in segment EBITDAaL. They are excluded from segment operating income and included in net finance costs presented in the consolided income statement.

Enterprise	International Carriers & Shared Services	Elimination telecom activities	Total telecom activities	Orange Bank ⁽²⁾	Eliminations telecom activites/ bank	Total	Presentation adjust- ments (3)	Orange consoli- dated financial
7,820 (3,991) 169 (634) (1,949) (115) (104)	1,498 (2,041) 2,088 (63) (1,261) (80)	(1,939) 3,974 (3,396) 1,361 - - - -	42,242 (17,806) 694 (515) (8,397) (1,827) - (14) (1,237)	(96) 43 (29) (73) (1) - - (3)	(4) 5 (17) 17 - - -	42,238 (17,897) 720 (527) (8,470) (1,827) - (14) (1,239)	(72) (24) - 277 (132) - (33)	\$\text{42,238}\$ (17,897) 720 (599) (8,494) (1,827) 277 (132) (14) (1,239) (33)
(4)	(10)	-	(1) (122)	(O)	-	(1) (122)	1 122	-
1,191	(261)	0	13,019	(160)	1	12,860	138	
- 1 0 (16) (11) (399) 0 - 1 1 1	(49) 6 172 (31) (8) (340) 10 - (1) (7) -	- - - - - - - - -	(49) (23) 277 (163) (24) (7,086) 12 (54) 73 8 1	(0) - (2) - (24) - - - - 0	- - - - - - - -	(49) (23) 277 (165) (24) (7,110) 12 (54) 73 8 1	49 23 (277) 165 24 - - - (1) (122)	- - - (7,110) 12 (54) 73 8 -
772	(499)	(0)	6,112	(186)	1	5,927	-	5,927
								(1,108) (1) 5 76 (122) 15 (119) (1,254) (1,447)
								-
								3,226

Segment revenue to segment operating income in 2018 and 2017

(in millions of euros)	France	Spain	Europe	Africa & Middle East	
Revenue	18,211	5,349	5,687	5,190	
External purchases	(7,167)	(3,204)	(3,412)	(2,521)	
Other operating income	1,377	155	130	68	
Other operating expenses	(535)	(211)	(168)	(231)	
Labor expenses	(3,833)	(263)	(681)	(468)	
Operating taxes and levies	(977)	(161)	(93)	(391)	
Gains (losses) on disposal of fixed assets, investments and activities	-	35	45	20	
Restructuring and integration costs	-	-	-	-	
Adjusted EBITDA ⁽¹⁾	7,076	1,700	1,508	1,667	
Significant litigations	_	(31)	_	_	
Specific labor expenses	(614)	(01)	_	_	
Investments and businesses portfolio review	(0 1 1)	_	_	_	
Restructuring and integration costs	(114)	(9)	(6)	(12)	
Reported EBITDA ⁽¹⁾	6,348	1,660	1,502	1,655	
	,- , ,-)			()	
Depreciation and amortization	(3,148)	(1,105)	(1,164)	(906)	
Reclassification of cumulative translation adjustment from liquidated entities	-	-	-	-	
Impairment of goodwill	- (0)	-	-	(56)	
Impairment of fixed assets	(2)	-	1	(46)	
Share of profits (losses) of associates and joint ventures	-	-	-	12	
Operating income	3,198	555	339	659	
December 31, 2017					
Revenue	18,046	5,231	5,578	5,030	
	(= +00)		(0.000)	(2,444)	
External purchases	(7,123)	(3,157)	(3,368)	(2,444)	
•	(7,123) 1,453	(3,157) 110	(3,368) 146	73	
Other operating income	,		,		
Other operating income Other operating expenses	1,453	110	146	73	
Other operating income Other operating expenses Labor expenses	1,453 (553)	110 (202)	146 (149)	73 (209)	
External purchases Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities	1,453 (553) (3,987)	110 (202) (255)	146 (149) (690)	73 (209) (426)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities	1,453 (553) (3,987) (965)	110 (202) (255)	146 (149) (690) (88)	73 (209) (426) (418)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs	1,453 (553) (3,987) (965)	110 (202) (255)	146 (149) (690) (88)	73 (209) (426) (418)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1)	1,453 (553) (3,987) (965) 7 -	110 (202) (255) (160)	146 (149) (690) (88) 27	73 (209) (426) (418) 6	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1) Significant litigations	1,453 (553) (3,987) (965) 7 - 6,878	110 (202) (255) (160)	146 (149) (690) (88) 27 - - 1,456	73 (209) (426) (418) 6	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1) Significant litigations Specific labor expenses	1,453 (553) (3,987) (965) 7 -	110 (202) (255) (160)	146 (149) (690) (88) 27 - - 1,456	73 (209) (426) (418) 6	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1) Significant litigations Specific labor expenses Investments and businesses portfolio review	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307)	110 (202) (255) (160) - - - 1,567	146 (149) (690) (88) 27 - - 1,456	73 (209) (426) (418) 6 - 1,612	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1) Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs	1,453 (553) (3,987) (965) 7 - 6,878	110 (202) (255) (160)	146 (149) (690) (88) 27 - - 1,456	73 (209) (426) (418) 6	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1) Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12)	110 (202) (255) (160) - - - 1,567	146 (149) (690) (88) 27 - - 1,456	73 (209) (426) (418) 6 - 1,612 - (21)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA ⁽¹⁾ Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items Reported EBITDA ⁽¹⁾	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12) -	110 (202) (255) (160) - - - 1,567 - (4) - 1,563	146 (149) (690) (88) 27 - 1,456 - 1 (1) (39) - 1,417	73 (209) (426) (418) 6 - 1,612 - (21) - 1,591	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA ⁽¹⁾ Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items Reported EBITDA ⁽¹⁾ Depreciation and amortization	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12)	110 (202) (255) (160) - - - 1,567	146 (149) (690) (88) 27 - - 1,456	73 (209) (426) (418) 6 - 1,612 - (21)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA ⁽¹⁾ Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items Reported EBITDA ⁽¹⁾ Depreciation and amortization Effects resulting from business combinations	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12) -	110 (202) (255) (160) - - - 1,567 - (4) - 1,563	146 (149) (690) (88) 27 - 1,456 - 1 (1) (39) - 1,417	73 (209) (426) (418) 6 - 1,612 - (21) - 1,591	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA ⁽¹⁾ Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items Reported EBITDA ⁽¹⁾ Depreciation and amortization Effects resulting from business combinations Reclassification of cumulative translation adjustment from liquidated entities	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12) -	110 (202) (255) (160) - - - 1,567 - (4) - 1,563	146 (149) (690) (88) 27 - 1,456 - 1 (1) (39) - 1,417	73 (209) (426) (418) 6 - 1,612 - (21) - 1,591 (902)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA ⁽¹⁾ Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items Reported EBITDA ⁽¹⁾ Depreciation and amortization Effects resulting from business combinations Reclassification of cumulative translation adjustment from liquidated entities Impairment of goodwill	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12) - 6,444 (3,073)	110 (202) (255) (160) - - - 1,567 - (4) - 1,563	146 (149) (690) (88) 27 - 1,456 - 1 (1) (39) - 1,417 (1,157) - (19)	73 (209) (426) (418) 6 - 1,612 - (21) - 1,591 (902) - (1)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA ⁽¹⁾ Significant litigations Specific labor expenses Investments and businesses portfolio review Restructuring and integration costs Other special items Reported EBITDA ⁽¹⁾ Depreciation and amortization Effects resulting from business combinations Reclassification of cumulative translation adjustment from liquidated entities Impairment of goodwill Impairment of fixed assets	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12) -	110 (202) (255) (160) - - - 1,567 - (4) - 1,563	146 (149) (690) (88) 27 - 1,456 - 1 (1) (39) - 1,417	73 (209) (426) (418) 6 - 1,612 - (21) - 1,591 (902) - (1) (180)	
Other operating income Other operating expenses Labor expenses Operating taxes and levies Gains (losses) on disposal of fixed assets, investments and activities Restructuring and integration costs Adjusted EBITDA (1) Significant litigations Specific labor expenses Investments and businesses portfolio review	1,453 (553) (3,987) (965) 7 - 6,878 (115) (307) - (12) - 6,444 (3,073)	110 (202) (255) (160) - - - 1,567 - (4) - 1,563	146 (149) (690) (88) 27 - 1,456 - 1 (1) (39) - 1,417 (1,157) - (19)	73 (209) (426) (418) 6 - 1,612 - (21) - 1,591 (902) - (1)	

⁽¹⁾ See Note 1.8. for EBITDA adjustments.
(2) Orange Bank's net banking income is recognized in other operating income and amounts to 43 million euros in 2018. The cost of risk is included in other operating expenses and amounts to (7) million euros in 2018.

Orange Bank's net banking income is recognized in other operating income and amounts to 73 million euros in 2017. The cost of risk is included in other operating expenses and amounts to (6) million euros in 2017.

(3) Presentation adjustments allow the reallocation of the lines of specific items identified in the segment information to the operating revenue and expense lines presented in the consolidated income statement.

income statement.

(4) In 2018, mainly related to the effect of the three-year extension of the 2015 French part-time for seniors plans (see Note 6.2).

Enterprise	International Carriers & Shared Services	Elimination telecom activities	Total telecom activities	Orange Bank ⁽²⁾	Eliminations telecom activites/ bank	Total	Presentation adjust- ments (3)	Orange conso- lidated financial statements
7,292 (3,696) 148 (661) (1,718) (120)	1,534 (2,469) 2,146 (35) (1,235) (66)	(1,879) 3,990 (3,468) 1,357	41,384 (18,479) 556 (484) (8,198) (1,808)	(87) 44 (33) (70) (1)	(3) 3 (20) 21 -	41,381 (18,563) 580 (496) (8,268) (1,809)	- - (9) (806) (31)	41,381 (18,563) 580 (505) (9,074) (1,840)
	80	-	180	-	-	180	17 (199)	197 (199)
1,245	(45)		13,151	(147)	1	13,005	(1,028)	(100)
1,240			10,101	(147)	· ·	10,000	(1,020)	
- (68) -	(2) (129) 17	- - -	(33) (811) 17	(1)	-	(33) (812) ⁽⁴⁾ 17	33 812 (17)	-
(24)	(35)	-	(200)	-	-	(200)	200	-
1,153	(194)	-	12,124	(148)	1	11,977	-	11,977
(387)	(316)	-	(7,026)	(21)	-	(7,047) 1	-	(7,047)
_	-	-	(56)	-	-	(56)	-	(56)
(1)	(2) (8)	-	(49)	-	-	(49)	-	(49)
765	(519)	-	4,997	(169)	1	4,829	-	4,829
7,251 (3,735) 169 (652) (1,588) (139)	1,651 (2,771) 2,318 (52) (1,192) (80) 48	(1,926) 4,278 (3,741) 1,389 - - -	40,861 (18,320) 528 (428) (8,138) (1,850) 88	(63) 78 (14) (62) (1)	(2) 2 (7) 8 - - -	40,859 (18,381) 599 (434) (8,200) (1,851) 88	- 14 (290) (374) 5 (5) (167)	40,859 (18,381) 613 (724) (8,574) (1,846) 83 (167)
1,306	(78)	-	12,741	(62)	1	12,680	(817)	
(15) - (33)	(156) (53) (4) (58)	- - - -	(271) (374) (5) (167)	- - - -	- - - -	(271) (374) (5) (167)	271 374 5 167	-
1,258	(349)	-	11,924	(62)	1	11,863	-	11,863
(371) - - - 1	(331) - (8) - (7)	- - - -	(6,842) - (8) (20) (190)	(4) (27) - -	- - - -	(6,846) (27) (8) (20) (190)		(6,846) (27) (8) (20) (190)
1	(9)		6	-	_	6	-	6
889	(704)	-	4,870	(93)	1	4,778	-	4,778

1.4 Segment investments

(in millions of euros)	France	Spain	Europe	
December 31, 2019				
eCapex ⁽¹⁾	4,052	812	869	
Elimination of proceeds from sales of property, plant and equipment and intangible assets	95	185	103	
Telecommunications licenses	0	298	9	
Financed assets	144	-	-	
Total investments (5)	4,291	1,296	982	
December 31, 2018				
CAPEX (2)	3,656	1,120	953	
Telecommunications licenses	(1)	149	10	
Finance leases	1	70	32	
Total investments (6)	3,656	1,339	995	
December 31, 2017				
CAPEX ⁽²⁾	3,451	1,115	897	
Telecommunications licenses	11	10	<u>-</u>	
Finance leases	1	4	11	
Total investments ⁽⁷⁾	3,463	1,129	908	

⁽¹⁾ See Note 1.8. for eCapex definition.
(2) See Note 1.8. for CAPEX definition.
(3) Including investments in tangible and intangible assets in France for 254 million euros in 2019, 275 million euros in 2018 and 285 million euros in 2017.
(4) Including investments in tangible and intangible assets in France for 336 million euros in 2019, 312 million euros in 2018 and 280 million euros in 2017.
(5) Including 2,385 million euros for other intangible assets and 6,181 million euros for tangible assets.
(6) Including 1,895 million euros for other intangible assets and 5,883 million euros for tangible assets.
(7) Including 1,893 million euros for other intangible assets and 5,677 million euros for tangible assets.

Africa & Middle East	Enterprise (3)	International Carriers & Shared Services (4)	Eliminations telecom activities and unallocated items	Total telecom activities	Orange Bank	Eliminations telecom activities/ bank	Orange consolidated financial statements
987	404	141	-	7,265	28	-	7,293
13	5	208	-	610	-	-	610
212	0	0	-	519	-	-	519
-	-	-	-	144	-	-	144
1,211	410	348	-	8,538	28	-	8,565
1,008	353	316	_	7,406	36	_	7,442
42	-	-	-	200	-	-	200
2	31	-	-	136	-	-	136
1,052	384	316	-	7,742	36	-	7,778
1,021	382	282	-	7,148	61	-	7,209
297	-	-	-	318	-	-	318
1	24	2	-	43	-	-	43
1,319	406	284	-	7,509	61	-	7,570

1.5 Segment assets

(in millions of euros)	France	Spain	Europe	
December 31, 2019				
Goodwill	14,364	6,872	2,665	
Other intangible assets	3,968	1,961	1,941	
Property, plant and equipment	15,308	3,673	4,109	
Right-of-use assets	1,174	1,123	930	
Interests in associates and joint ventures	3	-	5	
Non-current assets included in the calculation of net financial debt	-	-	-	
Other	10	17	22	
Total non-current assets	34,827	13,645	9,673	
nventories	463	61	149	
Trade receivables	1,477	667	1,210	
Other customer contract assets	432	150	380	
Prepaid expenses	41	401	43	
Current assets included in the calculation of net financial debt	-	-	-	
Other	699	62	74	
Total current assets	3,113	1,341	1,855	
Assets held for sale	<u> </u>	<u> </u>	-	
Total assets	37,940	14,986	11,529	
December 31, 2018				
Goodwill	14,364	6,840	2,581	
Other intangible assets	3,921	1,778	2,015	
Property, plant and equipment	14,306	3,730	4,150	
Interests in associates and joint ventures	-	1	4	
Non-current assets included in the calculation of net financial debt	-	-	-	
Other	11	17	15	
Total non-current assets	32,602	12,366	8,765	
Inventories	505	79	171	
Trade receivables	1,506	699	1,227	
Other customer contract assets	443	140	363	
Prepaid expenses	68	241	35	
Current assets included in the calculation of net financial debt	-	-	-	
Other	776	60	75	
Total current assets	3,298	1,219	1,871	
Assets held for sale	-	-	-	
Total assets	35,900	13,585	10,636	
December 31, 2017				
Goodwill	14,364	6,818	2,589	
Other intangible assets	4,099	1,742	2,204	
Property, plant and equipment	13,637	3,542	4,236	
Interests in associates and joint ventures	-	1	4	
Non-current assets included in the calculation of net financial debt	-	-	-	
Other	4	17	16	
Total non-current assets	32,104	12,120	9,049	
Inventories	402	79	149	
Trade receivables	1,590	686	1,143	
Other customer contract assets	451	132	411	
Prepaid expenses	76	152	37	
Current assets included in the calculation of net financial debt	-	-	-	
Other	828	64	45	
Total current assets	3,347	1,113	1,785	
Assets held for sale	<u> </u>			
	35,451	13,233	10,834	

Including tangible and intangible assets for 642 million euros in France in 2019, 632 million euros in 2018 and 565 million euros in 2017.
 Including tangible and intangible assets for 1,736 million euros in France in 2019, 2,151 million euros in 2018 and 2,144 million euros in 2017. Intangible assets also include the Orange brand for 3,133 million euros.
 Including BT shares in the amount of 659 million euros in 2018 and 814 million euros in 2017. All BT shares have been sold in June 2019. (see Note 12.7).
 Including 1,259 million euros of non-current financial assets related to Orange Bank activities in 2019, 1,617 million euros in 2018 and 1,464 million euros in 2017 (see Note 16.1.1).
 Including 3,098 million euros of current financial assets related to Orange Bank activities in 2019, 3,075 million euros in 2018 and 3,275 million euros in 2017 (see Note 16.1.1).

Africa & Middle East	Enterprise (1)	International Carriers & Shared Services (2)	Elimination telecom activities and unallocated items	Total telecom activities	Orange Bank	Eliminations telecom activities/ bank	Orange consolidated financial statements
1,481	2,245	18	-	27,644	-	-	27,644
2,318	695	3,766	-	14,649	88	-	14,737
3,674	526	1,128	-	28,418	5	-	28,423
881 84	314 1	1,815 10	0	6,237 103	26	-	6,263 103
-	-	-	685	685	-	-	685
22	25	19	2,104	2,219	1,268 (4)	(27)	3,460
8,461	3,805	6,757	2,789	79,956	1,387	(27)	81,316
76	60	96	(774)	906	-	- (0.4)	906
720 11	1,067 237	974	(771)	5,343 1,209	1	(24)	5,320 1,209
87	143	26	(16)	725	5	(0)	730
-	-	-	10,820	10,820	-	-	10,820
968	216	330	145	2,494	3,511 (5)	(3)	6,002
1,862	1,723	1,426	10,178	21,498	3,517	(28)	24,987
10,323	5,527	8,182	12,967	101,454	4,904	(55)	106,303
1,542	1,830	17	-	27,174	-	-	27,174
2,106	388	3,780	1	13,989	84	-	14,073
3,443	540	1,519	-	27,688	5	-	27,693
82	-	17	- 016	104 816	-	-	104 816
23	23	19	816 3,123 ⁽³⁾	3,231	1,637 (4)	(27)	4,841
7,196	2,781	5,352	3,940	73,002	1,726	(27)	74,701
82	49	79	-	965	-	-	965
761	821	946	(631)	5,329	-	(34)	5,295
8	212	-	(17)	1,166	-	-	1,166
89	71	82	(17) 7,886	569 7,886	2	-	571 7,886
811	174	374	51	2,321	3,687 (5)	_	6,008
1,751	1,327	1,481	7,289	18,236	3,689	(34)	21,891
8,947	4,108	6,833	11,229	91,238	5,415	(61)	96,592
1,629	1,493	18	-	26,911	_	-	26,911
2,160	342	3,720	1	14,268	71	-	14,339
3,193	479	1,575	-	26,662	3	-	26,665
70	1	1	-	77	-	-	77
- 13	- 22	- 18	895 3,166 ⁽³⁾	895 3,256	1,496 ⁽⁴⁾	(27)	895 4,725
7,065	2,337	5,332	4,062	72,069	1,490 (*)	(27)	73,612
78	45	74	-	827	-	-	827
690	807	881	(613)	5,184	-	(9)	5,175
-	210	-	- (4.0)	1,204	-	-	1,204
67	48	93	(19)	454 8,014	1	-	455 8,014
- 757	165	268	8,014 146	2,273	3,941 ⁽⁵⁾	(152)	6,062
1,592	1,275	1,316	7,528	17,956	3,942	(161)	21,737
- 	-	-	-	-	-	-	-
8,657	3,612	6,648	11,590	90,025	5,512	(188)	95,349

1.6 Segment equity and liabilities

in millions of euros)	France	Spain	Europe	
December 31, 2019				
Equity	_	_	_	
Non-current lease liabilities	961	945	788	
Fixed assets payables	35	366	251	
Non-current employee benefits	1,461	17	34	
Non-current liabilities included in the calculation of net financial debt	-	-	_	
Other	574	80	301	
Total non-current liabilities	3,030	1,409	1,373	
Current lease liabilities	170	284	166	
Fixed assets payables	1,144	563	407	
Trade payables	2,682	1,051	935	
Customer contracts liabilities	1,015	98	335	
Current employee benefits	1,224	33	110	
Deferred income	2	-	6	
Current liabilities included in the calculation of net financial debt	-	-	-	
Other	781	178	268	
Total current liabilities	7,017	2,207	2,226	
Liabilities related to assets held for sale	-	-	-	
Total equity and liabilities	10,047	3,616	3,599	
December 31, 2018				
Equity	-	-	-	
Fixed assets payables	48	119	291	
Non-current employee benefits	1,726	11	33	
Non-current liabilities included in the calculation of net financial debt	-	-	-	
Other	635	126	243	
Total non-current liabilities	2,409	256	567	
Fixed assets payables	1,116	598	398	
Trade payables	2,598	1,055	926	
Customer contracts liabilities	1,091	66	322	
Current employee benefits	1,307	38	102	
Deferred income	2	-	3	
Current liabilities included in the calculation of net financial debt	-	-	-	
Other	846	148	253	
Total current liabilities	6,960	1,905	2,004	
Liabilities related to assets held for sale	-	-		
Total equity and liabilities	9,369	2,161	2,571	
December 31, 2017				
Equity	<u>-</u>	-	-	
Fixed assets payables	75	-	327	
Non-current employee benefits	1,601	5	33	
Non-current liabilities included in the calculation of net financial debt	-	-	-	
Other	663	134	263	
Total non-current liabilities	2,339	139	623	
Fixed assets payables	1,438	532	392	
Trade payables	2,487	985	843	
Customer contracts liabilities	1,162	78	280	
Current employee benefits	1,451	38	109	
Deferred income	3	-	3	
Current liabilities included in the calculation of net financial debt	-	-	-	
Other	699	126	467	
Total current liabilities	7,240	1,759	2,094	
and the second s				
Liabilities related to assets held for sale				

Including in 2019, 101 million euros of non-current financial liabilities, 90 million euros in 2018 and 100 million euros in 2017.
 Including in 2019, 4,280 million euros of current financial liabilities related to Orange Bank activities (See Note 16.1). Including in 2018, 4,835 million euros of current financial liabilities related to Orange Bank activities. Including in 2017, 4,941 million euros of current financial liabilities related to Orange Bank activities.

Afri Middle	ca & East	Enterprise	International Carriers & Shared Services	Elimination telecom activities and unallocated items	Total telecom activities	Orange Bank	Eliminations telecom activities/ bank	Orange consolidated financial statements
				34,432	24 420	(16)		24.416
	- 785	227	1,490	34,432	34,432 5,196	29	-	34,416 5,225
	166	-	1,490	_	817	-		817
	68	264	702	_	2,544	9	_	2,554
	-	-	-	33,562	33,562	-	_	33,562
	55	39	55	849	1,954	109(1)	(27)	2,035
1	,074	530	2,247	34,411	44,073	147	(27)	44,192
	124	97	422	-	1,263	4		1,267
	529	72	135	(1)	2,848	-	-	2,848
1	,136	784	763	(771)	6,581	125	(24)	6,682
	123	412	126	(15)	2,094	-	(O)	2,093
	71	407	411	-	2,254	6	-	2,261
	36	1	7	(O)	51	-	-	51
	-	-	-	3,950	3,950	-	(3)	3,947
	,211	283	846	341	3,908	4,638 (2)	(O)	8,545
3	,231	2,055	2,710	3,503	22,950	4,773	(28)	27,695
4	,305	2,586	4,957	72,346	101,454	4,904	(55)	106,303
	-	-	-	33,151	33,151	98	-	33,249
	154	-	-	-	612	-	-	612
	64	264	717	-	2,815	8	-	2,823
	-	-	-	27,461	27,461	-	-	27,461
	59	46	180	791	2,080	98 (1)	(27)	2,151
	277	310	897	28,252	32,968	106	(27)	33,047
	528	58	138	(1)	2,835	-		2,835
1	,081	689	917	(631)	6,635	135	(34)	6,736
	127	283	129	(16)	2,002	-	-	2,002
	68	398	471	-	2,384	8	-	2,392
	44	2	7	7 400	58	-	-	58
4	-	- 070	-	7,403	7,403	F 067(2)	-	7,403
	,069 ,917	273 1,703	833 2,495	381 7,136	3,803 25,120	5,067 ⁽²⁾ 5,210	(34)	8,870 30,296
	-	-	-	-	-	-	-	-
3	,194	2,013	3,392	68,539	91,239	5,414	(61)	96,592
				00.005	00.005	007		00.510
	- 208	-	-	33,285	33,285 610	227	-	33,512 610
	208 77	259	693	-	2,668	- 6	-	2,674
	-	208	-	27,221	27,221	-	-	27,221
	50	31	218	836	2,195	107 (1)	(27)	2,275
	335	290	911	28,057	32,694	113	(27)	32,780
	530	52	102	(1)	3,045	1	(21)	3,046
1	,072	694	977	(614)	6,444	92	(9)	6,527
·	130	271	120	(20)	2,021	-	-	2,021
	69	348	426	(= 5)	2,441	7	-	2,448
	87		5	(22)	76	-	-	76
	-	-	-	6,216	6,216	-	-	6,216
	905	252	897	457	3,803	5,072 (2)	(152)	8,723
2	,793	1,617	2,527	6,016	24,046	5,172	(161)	29,057
	-	-			-		-	
2	,128	1,907	3,438	67,358	90,025	5,512	(188)	95,349

1.7 Simplified statement of cash flows on telecommunication and Orange Bank activities

(in millions of euros)		20	19	
	Telecom activities	Orange Bank	Eliminations telecom activities/ Orange Bank	Orange consolidated financial statements
Operating activities				
Consolidated net income	3,411	(185)	-	3,226
Non-monetary items and reclassified items for presentation	12,087	91	1	12,180
Changes in working capital	00			00
Decrease (increase) in inventories, gross Decrease (increase) in trade receivables, gross	69 (34)	(1)	(10)	69 (45)
Increase (increase) in trade receivables, gross	(92)	(3)	10	(85)
Changes in other customer contract assets and liabilities	(59)	(0)	-	(60)
Changes in other assets and liabilities	(87)	(726)	-	(813)
Other net cash out	,	,		,
Operating taxes and levies paid	(1,939)	(O)	-	(1,939)
Dividends received	17	-	-	17
Interest paid and interest rates effects on derivatives, net	(1,310)(1)	(0)	(1)	(1,312)
Income tax paid	(1,079)	0	-	(1,079)
Net cash provided by operating activities (a)	10,983 (2)	(824)	-	10,159
Investing activities				
Purchases (sales) of property, plant and equipment and intangible assets	(7,555) ⁽³⁾	(28)	-	(7,582)
Cash paid for investment securities, net of cash acquired	(559)	-	-	(559)
Investments in associates and joint ventures	(2)	-	-	(2)
Purchases of equity securities measured at fair value	(39)	(5)	-	(44)
Proceeds from sales of investment securities, net of cash transferred Decrease (increase) in securities and other financial assets	529 (2,082)	-	3	529 (1,711)
Net cash used in investing activities (b)	(9,707)	368 335	3	(9,370)
Financing activities				
Cash flows from financing activities				
Medium and long-term debt issuances	8,351	_	_	8,351
Medium and long-term debt redemptions and repayments	(4,650) ⁽⁴⁾	-	-	(4,650)
Lease liabilities repayment	(1,082)	140	(3)	(945)
Increase (decrease) of bank overdrafts and short-term borrowings	609	(19)	-	590
Decrease (increase) of cash collateral deposits Other cash flows	26	-	-	26
Lease liabilities repayment	(1,395)	(4)	_	(1,398)
Issuances (purchases) of subordinated notes	500	()	_	500
Coupon on subordinated notes	(357)	-	-	(357)
Purchases of treasury shares - Orange Vision 2020 free share award plan	(27)	-	-	(27)
Other proceeds (purchases) from treasury shares	(7)	-	-	(7)
Capital increase (decrease) – non-controlling interests	(108) (5)	187 (5)	-	79
Changes in ownership interests with no gain/loss of control	(7)	-	-	(7)
Dividends paid to owners of the parent company	(1,857)	-	-	(1,857)
Dividends paid to non-controlling interests Net cash used in financing activities (c)	(243) (247)	305	(3)	(243) 55
Cosh and each equivalents in the opening belones	5,081	EEO		E 604
Cash and cash equivalents in the opening balance Cash change in cash and cash equivalents (a) + (b) + (c)	1,029	553 (185)	-	5,634 844
Effect of exchange rates changes on cash	1,029	(100)	-	044
and cash equivalents and other non-monetary effects	3	-	-	3
Cash and cash equivalents in the closing balance	6,112	369	-	6,481

Including interests paid on lease liabilities for (97) million euros.
 Including significant litigations paid and received for 5 million euros.
 Including telecommunication licenses paid for (334) million euros.
 Including repayments of debts relating to financed assets for (17) million euros.
 Including 122 million euros in Orange Bank share capital invested by Orange.

(in millions of euros)		201	18	
	Telecom activities	Orange Bank	Eliminations telecom activities/ Orange Bank	Orange consolidated financial statements
Operating activities				
Consolidated net income Non-monetary items and reclassified items for presentation	2,326 11,457	(168) 40	-	2,158 11,497
Changes in working capital Decrease (increase) in inventories, gross Decrease (increase) in trade receivables, gross	(152) (122)	-	- 25	(152) (97)
Increase (decrease) in trade payables Changes in other customer contract assets and liabilities	158 12	44	(25)	177 12
Changes in other assets and liabilities Other net cash out	(95)	(81)	-	(176)
Operating taxes and levies paid Dividends received Interest paid and interest rates effects on derivatives, net	(1,776) 51 (1,259)	(1) - -	-	(1,777) 51 (1,259)
Income tax paid Net cash provided by operating activities (a)	(928) 9,672 ⁽¹⁾	(166)	-	(928) 9,506
Investing activities				
Purchases (sales) of property, plant and equipment and intangible assets Cash paid for investment securities, net of cash acquired	(7,655) ⁽²⁾ (284)	(37)	-	(7,692) (284)
Investments in associates and joint ventures Others purchases of assets available for sale	(6)	-	-	(6)
Purchases of equity securities measured at fair value Sales of investment securities, net of cash transferred	(90) 110	(14)	- (4.50)	(104) 110
Decrease (increase) in securities and other financial assets Net cash used in investing activities (b)	(501) (8,426)	77 26	(152) (152)	(576) (8,552)
Financing activities				
Cash flows from financing activities Medium and long-term debt issuances Medium and long-term debt redemptions and repayments	5,214 (4,095) ⁽³⁾	-	-	5,214 (4,095)
Increase (decrease) of bank overdrafts and short-term borrowings Decrease (increase) of cash collateral deposits	(251)	56 5	152	(43) 208
Exchange rates effects on derivatives, net Other cash flows	7	-	-	7
Coupon on subordinated notes Purchases of treasury shares – Orange Vision 2020 free share award plan Other proceeds (purchases) from treasury shares	(280) (101) 3	-	-	(280) (101) 3
Capital increase (decrease) – non-controlling interests Changes in ownership interests with no gain/loss of control	(87) ⁽⁴⁾ (6)	155 ⁽⁴⁾	-	68 (6)
Dividends paid to owners of the parent company Dividends paid to non-controlling interests	(1,860) (246)	-	-	(1,860) (246)
Net cash used in financing activities (c)	(1,499)	216	152	(1,131)
Cash and cash equivalents in the opening balance Cash change in cash and cash equivalents (a) + (b) + (c) Effect of exchange rates changes on cash	5,333 (253)	477 76	-	5,810 (177)
and cash equivalents and other non-monetary effects Cash and cash equivalents in the closing balance	5,08 1	- 553	-	1 5,634

Including significant litigations paid and received for (174) million euros.
 Including telecommunication licenses paid for (422) million euros.
 Including finance leases liabilities repayments for (123) million euros.
 Including 101 million euros in Orange Bank share capital invested by Orange.

(in millions of euros)	2017			
	Telecom activities	Orange Bank	Eliminations telecom activities/ Orange Bank	Orange consolidated financial statements
Operating activities				
Consolidated net income	2,134	(94)	-	2,040
Non-monetary items and reclassified items for presentation	11,474	38	-	11,512
Changes in working capital				
Decrease (increase) in inventories, gross	(14)	-	-	(14)
Decrease (increase) in trade receivables, gross	(271)	-	9	(262)
Increase (decrease) in trade payables	375	46	(9)	412
Changes in other customer contract assets and liabilities	112	-	-	112
Changes in other assets and liabilities	(120)	284	-	164
Other net cash out	(4.004)	(0)		(1.004)
Operating taxes and levies paid Dividends received	(1,931) 55	(3)	-	(1,934) 55
Interest paid and interest rates effects on derivatives, net	(1,328)	-	-	(1,328)
Income tax paid	(584)	1	_	(583)
Net cash provided by operating activities (a)	9,902(1)	272	-	10,174
Investing activities				
Purchases (sales) of property, plant and equipment and intangible assets	(7,311)(2)	(67)	_	(7,378)
Cash paid for investment securities, net of cash acquired	(34)	(01)	_	(34)
Others purchases of assets available for sale	(43)	_	_	(43)
Purchases of equity securities measured at fair value	(7)	-	-	(7)
Sales of investment securities, net of cash transferred	515	-	-	515
Decrease (increase) in securities and other financial assets	(1,082)	(63)	151	(994)
Net cash used in investing activities (b)	(7,962)	(130)	151	(7,941)
Financing activities				
Cash flows from financing activities				
Medium and long-term debt issuances	2,450	-	-	2,450
Medium and long-term debt redemptions and repayments	(2,728) (3)	-	-	(2,728)
Increase (decrease) of bank overdrafts and short-term borrowings	964	136	(151)	949
Decrease (increase) of cash collateral deposits	(1,138)	11	-	(1,127)
Exchange rates effects on derivatives, net	(66)	-	-	(66)
Other cash flows Coupon on subordinated notes	(282)			(202)
Other proceeds (purchases) from treasury shares	(4)	_	-	(282)
Capital increase (decrease) – non-controlling interests	(66) ⁽⁴⁾	100 (4)	_	34
Changes in ownership interests with no gain/loss of control	1	-	_	1
Dividends paid to owners of the parent company	(1,729)	-	-	(1,729)
Dividends paid to non-controlling interests	(236)	_	-	(236)
Net cash used in financing activities (c)	(2,834)	247	(151)	(2,738)
Cash and cash equivalents in the opening balance	6,267	88	_	6,355
Cash change in cash and cash equivalents (a) + (b) + (c)	(894)	389	-	(505)
Effect of exchange rates changes on cash and cash equivalents	(551)	230		(000)
and other non-monetary effects	(40)	-	-	(40)
Cash and cash equivalents in the closing balance	5,333	477	-	5,810

Including significant litigations paid and received for (30) million euros.
 Including telecommunication licenses paid for (617) million euros.
 Including finance leases liabilities repayments for (96) million euros.
 Including 65 million euros in Orange Bank share capital invested by Orange.

The table below shows the reconciliation between net cash provided by operating activities (telecom activities), as shown in the simplified statement of cash flows, and organic cash flow from telecom activities.

	2019	2018	2017
Net cash provided by operating activities (telecom activities)	10,983	9,672	9,902
Purchases (sales) of property, plant and equipment and intangible assets	(7,555)	(7,655)	(7,311)
Lease liabilities repayments ⁽¹⁾	(1,395)	-	-
Finance lease liabilities repayments (1)	-	(123)	(96)
Debts relating to financed assets repayments	(17)	_	-
Elimination of telecommunication licenses paid	334	422	617
Elimination of significant litigation paid (and received)	(5)	174	30
Organic cash flow from telecom activities	2,345	2,490	3,142

⁽¹⁾ The effects of IFRS 16 application are described in Note 2.3.1.

1.8 Definition of operating segments and performance indicators

Accounting policies

Segment information

The decisions regarding the allocation of resources and the performance assessment of the component parts of Orange (hereinafter referred to as "the Group") are made by the Chairman and Chief Executive Officer (main operational decision-maker) at operating segment level, mainly consisting of the geographical establishments. The operating segments are:

- France (Enterprise excluded);
- Spain:
- Poland, Belgium and Luxembourg and each Central European countries. The Europe aggregate combines the operating segments
 of this area;
- Sonatel subgroup (gathering Sonatel entities in Senegal, Orange Mali, Orange Bissau, Orange in Guinea and Orange in Sierra Leone), the Côte d'Ivoire subgroup (including Orange Côte d'Ivoire entities, Orange in Burkina Faso and Orange in Liberia) and each of the other countries in Africa and Middle East. The Africa and Middle East aggregate combines the operating segments of this area;
- Enterprise;
- the activities of International Carriers & Shared Services (IC&SS), which contain certain resources, mainly in the areas of networks, information systems, research and development and other shared Group activities, as well as the Orange brand;
- Orange Bank.

The use of shared resources, mainly provided by IC&SS, is taken into account in segment results based either on the terms of contractual agreements between legal entities, external benchmarks or by allocating costs among all the segments. The supply of shared resources is included in other revenues of the service provider, and the use of the resources is included in expenses of the service user. The cost of shared resources may be affected by changes in contractual relationships or organization and may therefore impact the segment results disclosed from one year to another.

Changes in operating performance indicators used in 2019

The Group applies the new standard IFRS 16 "Leases" prospectively from January 1, 2019.

The standard evolution has led the Group to change the key operating performance indicators used in 2019. EBITDAaL (for "EBITDA after Leases") and eCapex (for "economic CAPEX") are the new indicators used by Group's management.

Adjusted EBITDA, reported EBITDA and CAPEX remain the performance indicators used before 2019.

The new operating performance indicators are used by the Group:

- to manage and assess its operating and segment results; and
- to implement its investment and resource allocation strategy.

The Group's management believes that the presentation of these indicators is relevant as it provides readers with the same management indicators as those used internally.

EBITDAaL corresponds to operating income before depreciation and amortization of fixed assets, effects resulting from business combinations, reclassification of cumulative translation adjustment from liquidated entities, impairment of goodwill and fixed assets, share of profits (losses) of associates and joint ventures, and after interests on debts related to financed assets and on lease liabilities, adjusted for:

- significant litigation;
- specific labor expenses;

- fixed assets, investments, and businesses portfolio review;
- restructuring program costs;
- acquisition and integration costs;
- and, where appropriate, other specific elements.

The measurement indicator allows for the effects of certain specific factors to be isolated, irrespective of their recurrence and the type of income and expense, when they are linked to:

- significant litigation:

Significant litigation expenses correspond to risk reassessments regarding various litigations. Associated procedures are based on third-party decisions (regulatory authority, court, etc.) and occurring over a different period to the activities at the source of the litigation. By their very nature, costs are difficult to predict in terms of their source, amount and period.

- specific labor expenses:

Regardless of the departure plans included under restructuring costs, certain changes in the working hours of employees may have a negative impact on the period during which they are agreed and implemented. This primarily relates to the change in assumptions and the aging effect for the various part-time for seniors plans (TPS) in France.

- fixed assets, investments and businesses portfolio review:

The Group constantly reviews its fixed assets, investments and businesses portfolio: as part of this review, decisions to dispose of or to sell assets are implemented, which by their very nature have an impact on the period during which it takes place. Since January 1, 2019 the Group includes the gains and losses on disposal of fixed assets (see Note 8.1) under the "review of fixed assets, investments and businesses portfolio".

- restructuring programs costs:

The adjustment of Group activities in line with changes in the business environment may also incur other types of transformation costs. They include restructuring costs (see Note 5.3) and depreciation of right-of-use assets (see Note 9.2). These actions may have a negative effect on the period during which they are announced and implemented. For illustrative purposes, and not limited to, this could include some of the transformation plans approved by the internal governance bodies.

acquisition and integration costs:

The Group also incurs costs which are directly linked to the acquisition and integration of entities. These are primarily legal and advisory fees, registration fees and earn-outs.

- where applicable, other specific elements that are systematically specified in relation to income and/or expenses.

EBITDAaL is not a financial aggregate as defined by IFRS and is not comparable to similarly titled indicators used by other groups. It is provided as additional information only and should not be considered as a substitute for operating income or cash flow provided by operating activities.

eCapex relate to acquisitions of property, plant and equipment and intangible assets excluding telecommunications licenses and financed assets minus the price of disposal of fixed assets. They are used internally as an indicator to allocate resources. eCapex are not a financial aggregate defined by IFRS and may not be comparable to similarly-titled indicators used by other companies.

The Group uses organic cash flow from telecom activities as an operating performance measure for telecom activities as a whole. Organic cash flow from telecom activities corresponds to net cash provided by operating activities minus (i) lease liabilities repayments and debts related to financed assets repayments, (ii) purchases and sales of property, plant and equipment and intangible assets net of the change in fixed assets payables, (iii) excluding effect of telecommunications licenses paid and excluding effect of significant litigations paid (and received). Organic cash-flow from telecom activities is not a financial aggregate defined by IFRS and may not be comparable to similarly-titled indicators used by other companies.

Operating performance indicators used in 2018

Reported EBITDA corresponds to operating income before depreciation and amortization, effects resulting from business combinations, reclassification of cumulative translation adjustment from liquidated entities, impairment of goodwill and fixed assets and share of profits (losses) of associates and joint ventures.

Adjusted EBITDA corresponds to reported EBITDA, adjusted for significant litigation, specific labor expenses, review of the investments and business portfolio, restructuring and integration costs and, where appropriate, other specific elements.

This measurement indicator allows for the effects of certain specific factors to be isolated from reported EBITDA, irrespective of their recurrence and the type of income or expense, when they are linked to:

- significant litigation:

Significant litigation expenses correspond to risk reassessments regarding various litigations. Associated procedures are based on third- party decisions (regulatory authority, court, etc.) and occurring over a different period to the activities at the source of the litigation. By their very nature, costs are difficult to predict in terms of their source, amount and period.

- specific labor expenses:

Regardless of the departure plans included under restructuring costs, certain changes in the working hours of employees may have a negative impact on the period during which they are agreed and implemented. This primarily relates to the change in assumptions and the aging effect for the various part-time for seniors plans (TPS) in France.

- investments and businesses portfolio review:

The Group constantly reviews its investments and businesses portfolio: as part of this review, decisions to sell assets are implemented, which by their very nature have an impact on the period during which the sale takes place. The corresponding gains (losses) on disposal affect either reported EBITDA or the net income from discontinued operations.

- restructuring and integration costs:

The adjustment of Group activities in line with changes in the business environment may also incur other types of transformation costs. These actions may have a negative effect on the period during which they are announced and implemented. For illustrative purposes, and not limited to, this could include some of the transformation plans approved by the internal governance bodies.

- where applicable, other specific elements that are systematically specified in relation to income and/or expenses.

Adjusted EBITDA and reported EBITDA are not financial aggregates as defined by IFRS and are not comparable to similarly titled indicators used by other groups. They are provided as additional information only and should not be considered as a substitute for operating income or cash flow provided by operating activities.

CAPEX relate to the acquisition of tangible and intangible assets excluding telecommunications licenses and investments financed through finance leases and are used internally as an indicator to allocate resources. CAPEX are not a financial aggregate defined by IFRS and may not be comparable to similarly-titled indicators used by other companies.

Assets and Liabilities

Inter-segment assets and liabilities are reported in each operating segment.

Non-allocated assets and liabilities for the telecommunications business, mainly include external financial debt, external cash and cash equivalents, current and deferred tax assets and liabilities, as well as equity. Financial debt and investments between these segments are presented as non-allocated elements.

For Orange Bank, the line "Other" includes the assets and liabilities listed above, as well as the loans and receivables and debts related to the Bank's activity.

Note 2 Description of business and basis of preparation of the consolidated financial statements

2.1 Description of business

Orange provides consumers, businesses and other telecommunications operators with a wide range of services including fixed telephony and mobile telecommunications, data transmission and other value-added services, including mobile financial services, mainly in Europe, Africa and Middle East. In addition to its role as a supplier of connectivity, the Group provides services for businesses, primarily solutions in the fields of digital work, security and improving business line processes.

Telecommunications operator activities are regulated and dependent upon the granting of licenses, just as mobile financial service activities have their own regulations.

2.2 Basis of preparation of the financial statements

The consolidated financial statements were approved by the Board of Directors' Meeting on February 12, 2020 and will be submitted for approval at the Shareholders' Meeting on May 19, 2020.

The 2019 consolidated annual financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRSs) as endorsed by the European Union. Comparative figures are presented for 2018 and 2017 using the same basis of preparation.

The data are presented in millions of euros, without a decimal. Rounding to the nearest million may in some cases lead to non material discrepancies in the totals and subtotals shown in the tables.

For the reported periods, the accounting standards and interpretations endorsed by the European Union are similar to the compulsory standards and interpretations published by the International Accounting Standards Board (IASB) with the exception of the texts currently being endorsed, that have no effect on the Group accounts. Consequently, the Group financial statements are prepared in accordance with the IFRS standards and interpretations, as published by the IASB.

The principles applied to prepare the 2019 financial data are based on:

- all the standards and interpretations endorsed by the European Union compulsory as of December 31, 2019;
- options taken relating to date and methods of first application (see 2.3 below);
- the recognition and measurement alternatives allowed by the IFRSs:

Standard		Alternative used
IAS 1	Accretion expense on operating liabilities (employee benefits, environmental liabilities and licenses)	Classification as financial expenses
IAS 2	Inventories	Measurement of inventories determined by the weighted average unit cost method
IAS 7	Interest paid and received dividends	Classification as net operating cash flows
IAS 16	Property, plant and equipment	Measurement at amortized historical cost
IAS 38	Intangible assets	Measurement at amortized historical cost
IFRS 3R	Non-controlling interests	At the acquisition date, measurement either at fair value or at the portion of the net identifiable asset of the acquired entity

- accounting positions adopted by the Group in accordance with paragraphs 10 to 12 of IAS 8:

Topic	Note
Presentation of consolidated financial statements	Financial statements and segment information
Operating taxes and levies	10.1
Income taxes	10.2
Non-controlling interests - Change in ownership interest in a subsidiary - Transactions with owners	3 and 14.6

In the absence of any accounting standard or interpretation, management uses its judgment to define and apply an accounting policy that will result in relevant and reliable information, such that the financial statements:

- fairly present the Group's financial position, financial performance and cash flows:
- reflect the economic substance of transactions;
- are neutral;
- are prepared on a prudent basis; and
- are complete in all material respects.

New standards and interpretations applied from January 1, 2019

2.3.1 Initial application of IFRS 16 "Leases"

The new standard, IFRS 16 "Leases", is of mandatory application since January 1, 2019.

The main effects of implementation of IFRS 16, compared with previously applied principles, concern the accounting of leases by lessees. Indeed, IFRS 16, which defines a lease as a contract that conveys to the lessee the right to control the use of an identified asset, significantly changes the recognition of these contracts in the financial statements.

The standard introduces a single lessee model for the recognition of leases, comprising the recognition in assets of a right-of-use asset, and in liabilities of a lease liability equal to the present value of future lease payments. The distinction between finance leases and operating leases under the former standard, IAS 17, is removed and replaced with this new model from January 1, 2019.

In addition to the effect on the presentation of the consolidated statement of financial position, the consolidated income statement is also affected. The current operating expense is replaced by a depreciation expense as well as an interest expense. In the consolidated statement of cash flows, interests continue to be recorded in operating flows. Investment flows are not modified, while the repayment of the lease liability impacts financing flows.

Lease recognition rules for lessors are unchanged compared with IAS 17.

The Group has identified four major categories of lease contracts:

- lands and buildings: these contracts mainly concern commercial or service activity leases, as well as leases of technical buildings (leases of space or entire buildings depending on the circumstances) for "fixed" activities;
- networks and terminals: these contracts mainly concern the lease of land for mobile sites, some "TowerCos" contracts for mobile activities and local loop access contracts where Orange is the lessee or lessor depending on the country;
- IT equipment: these contracts primarily concern leases of routers and servers in datacenters;
- other: these contracts mainly concern leases of vehicles and technical equipment.

The Group elected to adopt the simplified retrospective method for first-time application and applies the following authorized practical expedients:

exclusion of leases with a residual term expiring within 12 months
of the first application date. This practical expedient is applied for
all contracts, including those with a tacit renewal clause at the
transition date. In applying this practical expedient, the Group calls

on its judgment and experience gained in the previous years to determine whether it is reasonably certain to exercise a renewal option, taking account of the relevant facts and circumstances;

- exclusion of leases of assets with a replacement value of less than approximately 5,000 euros;
- exclusion of initial direct costs from the measurement of the right-of-use asset at the date of first-time application;
- the identical classification of asset and liability balances for finance leases identified under IAS 17 in right-of-use assets and lease liabilities as provided for in the standard;
- the inclusion in the opening balance sheet of provisions for onerous contracts measured as of December 31, 2018 pursuant to IAS 37, as an alternative to impairment testing of right-of-use assets in the opening balance sheet. Rent expenses already provisioned are presented in impairment of right-of-use assets.

The weighted average incremental borrowing rate as of January 1, 2019 for all the lease liabilities amounted to 2.01% based on the residual duration of leases at the transition date.

In 2019, a number of questions were submitted to the IFRS IC seeking to clarify certain questions of interpretations of the standard. In November 2019, the Committee of IFRS IC decided to finalize the tentative agenda decision released in June 2019 regarding the determination of the lease term and the useful life of non-removable leasehold improvements, not considering useful to amend IFRS 16 standard in order to clarify the notion of enforceable period.

With this decision, the Committee considers clarifying how to determine the lease term, by excluding the legal approach consisting of only taking into account the legal form of the contract between the lessor and the lessee in order to determine the enforceable period of the contract. The Committee rather considers that the contract is enforceable as long as the lessee or the lessor would have to bear more than insignificant penalty in case of termination of the contract. Therefore, even in the absence of option for the lessee to extend the lease at its discretion, the reasonably certain lease term shall be assessed in order to determine the corresponding lease liability and therefore, the amount of the right-of-use. According to the Committee, the notion of "penalty" shall be considered broadly and should not be limited to contractual or monetary penalties.

In respect of the determination of the useful life of non-removable leasehold improvements, the Committee considers the following:

- the lease term of the contract shall be taken into account in the determination of the useful life of leasehold improvements; and
- the presence of leasehold improvements which are not fully depreciated and which should be abandoned and dismantled in

case of termination of the lease is an example of penalty to be taken into account in the assessment of the enforceable period of the lease contract.

In light of the final decision of the IFRS IC, the Group started the additional analysis of its leases in order to identify leases for which the treatment initially adopted during the implementation of IFRS 16 could be affected. At the date of approval of the consolidated financial statements by the Board of Directors, this analysis covering several thousands leases is still ongoing. Therefore, the accounting effect of the IFRS IC decision has not been recognized as of December 31, 2019 considering the non-finalized analysis of which the effect will lead to the recognition of an additional right-of-use and an additional lease liability.

At the date of preparation of these annual financial statements, the Group's accounting positions and the terms implemented with regard to these issues were as follows:

- regarding the assessment of the lease term, the Group adopted a legal approach in a number of cases. This is the case in quite a few countries where there are open-ended lease contracts with a notice period of less than 12 months for which the Group applied the short-term exemption, in particular for the lease of mobile sites;
- regarding the useful life of leasehold improvements, the Group analyzed the leases for which non-removable leasehold improvements were undertaken on the leased assets and considered that there were no economic benefits leading to reassessment of the enforceable lease term initially determined;
- the Group analyses the subsurface occupancy rights (subsurface servitudes) in order to determine if these contracts include a substantive substitution right of the lessor. If such a right exists, subsurface occupancy rights are not considered as leases. The IFRS IC final decision has not changed the Group position on this matter:
- the Group decided not to apply the deferred tax exemption from initial recognition provided in IAS 12 (paragraphs 15 and 24) to deferred tax generated by the recognition of a right-of-use asset and a lease liability.

The Group has chosen to apply IFRS 16 using the simplified retrospective method and accordingly the 2017 and 2018 comparative periods have not been restated.

This option leads to the recognition of the cumulative impact of the restatements required by the standard in equity as of January 1, 2019 and is reflected by an increase in consolidated reserves of 2 million euros in equity attributable to owners of the parent company, and mainly relating to the deferred taxes as presented in the table hereafter:

Effects on the consolidated financial statements

- Effects on the consolidated statement of financial position:

(in millions of euros)	December 31, 2018 historical data	Effect of IFRS 16 application	January 1, 2019 restated data
Property, plant and equipment	27,693	(574)	27,119
o/w finance leases	574	(574)	-
Right-of-use assets	-	6,349	6,349
o/w gross value	-	7,042	7,042
o/w accumulated depreciation and amortization	-	(550)	(550)
o/w accumulated impairment ⁽¹⁾	-	(143)	(143)
Deferred tax assets	1,366	1,527	2,893
Total non-current assets	74,701	7,303	82,004
Prepaid expenses	571	(36)	536
Total current assets	21,891	(36)	21,855
Total assets	96,592	7,267	103,859
Total equity (2)	33,249	2	33,251
Non-current financial liabilities	26,749	(427)	26,322
o/w finance lease liabilities	427	(427)	-
Non-current lease liabilities	-	5,239	5,239
Non-current restructuring provision ⁽¹⁾	230	(112)	118
Deferred tax liabilities	631	1,525	2,156
Total non-current liabilities	33,047	6,226	39,273
Current financial liabilities	7,270	(167)	7,103
o/w finance lease liabilities	158	(158)	-
Current lease liabilities	-	1,291	1,291
Trade payables	6,736	(39)	6,697
Current restructuring provision (1)	159	(31)	128
Other current liabilities	1,788	(15)	1,773
Total current liabilities	30,296	1,039	31,335
Total equity and liabilities	96,592	7,267	103,859

⁽¹⁾ Impairment losses on right-of-use assets concern real estate leases qualified as onerous contracts in France.
(2) The effect on opening equity as of January 1, 2019 is the result of timing differences between deferred tax assets and liabilities in countries where tax rates are expected to change in the coming years.

Reconciliation of operating lease off-balance sheet commitments presented according to IAS 17 as of December 31, 2018 and lease liabilities recognized according to IFRS 16 as of January 1, 2019

Reconciling items mainly concern the application scope, the lease payment measurement method and other impacts presented below:

(in millions of euros)	January 1, 2019
Operating lease commitments as of December 31, 2018 ⁽¹⁾	5,815
Commitments presented in other operating activities commitments as of December 31, 2018 (2) Commitments relating to leases covered by an exemption (3) Commitments relating to leases where the underlying asset is available after January 1, 2019 (4) Measurement differences due to the determination of the lease term (5) Lease payment measurement differences (6) Finance lease liabilities as of December 31, 2018 (7) Other effects (8) Lease liabilities as of January 1, 2019 – Before discounting	1,023 (124) (524) 167 (191) 584 513 7,264
Discounting effect	(734)
Lease liabilities as of January 1, 2019	6,530

- (1) Including Orange Bank off-balance sheet commitments in the amount of 37 million euros
- Including notably some site management contracts ("TowerCos") signed in Africa and local loop access contracts in Spain presented in other goods and services purchase commitments. The Group has excluded from lease liabilities, leases with a residual term expiring within 12 months of the application date and leases of assets with a replacement value of less than approximately 5,000 euros.
- (4) Including notably property lease contracts signed in 2018 of which date of effective occupancy is subsequent to January 1, 2019.
 (5) Off-balance sheet commitments are based on the minimum term of contracts whereas according to IFRS 16, the determination of the duration takes into account extension options that the lessee is reasonably certain to exercise.
- These measurement differences are relating to lease payments that depend on an index or a rate.
- Lease liabilities as of January 1, 2019 include the finance lease liabilities recognized as of December 31, 2018 according to IAS 17.

 Including minimum lease payments under real estate leases classified as onerous contracts in France recognized in restructuring provisions as of December 31, 2018 and excluded from the off-balance sheet commitments.

Disclosures regarding lease liabilities and right-of-use assets are presented in Note 9.

Application of IFRIC 23 "Uncertainty over Income 2.3.2 Tax Treatments'

The interpretation IFRIC 23 "Uncertainty over Income Tax Treatments" is of mandatory application since January 1, 2019 and clarifies the identification, valuation and accounting treatment of uncertain tax positions in relation with the income tax.

This interpretation had no effect on the measurement of income tax liabilities, nor on their presentation in the consolidation financial statements of the Group.

2.3.3 Early adoption of amendments to IFRS 9, IFRS 7 and IAS 39 relating to interest rate benchmark

The interest rate benchmark reform that will replace EONIA and IBOR rates from January 1, 2022, will affect some of the Group's financial instruments and hedges. This first amendment published by the IASB aims, in particular, to enable hedging relationships to be maintained before the interest rate benchmark reform is actually implemented.

The Group has begun discussions with the counterparties to negotiate the replacement of the old indexes with new ones. At December 31. 2019 the Group's exposure to financial instruments indexed to variable rates and maturing later than January 1, 2022 (when the amendments take effect) came down to the following items:

- perpetual bonds redeemable for shares (French acronym TDIRA) with a nominal value of 818 million euros (see Note 12.4);
- cross currency swaps with a nominal value of 348 million euros;
- interest rate swaps with a nominal value of 1,195 million euros.

Main standards and interpretations compulsory after December 31, 2019 with no early application elected by the Group

2.4.1 Amendment to IFRS 3 "Definition of a business"

This amendment clarifies the definition of a business and aims to help those preparing financial statements to determine whether an acquisition must be recognized as a business combination or an asset acquisition. This amendment will apply to all acquisitions made from January 1, 2020. The Group chose not to adopt this amendment early. These arrangements will be taken into consideration for future acquisitions to determine whether the transaction must be recognized as a business combination or an asset acquisition.

2.4.2 Amendments to IAS 1 and IAS 8 "Materiality"

Amendments to IAS 1 and IAS 8 specify that material information is "obscured" if the way in which it is reported has the same effect as if the information had not been reported. This may be the case if the information is scattered in various notes to the financial statements or in the event of information being inappropriately aggregated. These amendments apply to consolidated financial statements for reporting periods beginning on or after January 1, 2020. The Group believes that these amendments will have no effect on the presentation of its consolidated financial statements.

2.5 Accounting policies, use of judgment and estimates

The accounting policies are presented within each note to which they refer. In summary:

Note	Topic	Accounting policies	Judgments and estimates ⁽¹⁾
1	Segment information	X	
3	Changes in the scope of consolidation, takeovers (business combinations),		
	internal transfer of consolidated shares, assets held for sale	Χ	X
4.1	Revenue	Χ	
4.3	Trade receivables	Χ	
4.4	Customer contract net assets and liabilities, costs of obtaining a contract		
	and costs to fulfill a contract, unfulfilled performance obligations	X	
4.6	Submarine cable consortiums, Orange Money	Χ	
4.7	Related party transactions	Χ	
5.1	Advertising, promotion, sponsoring, communication and brand marketing costs	Χ	
5.2	Litigation, integration costs	Χ	×
5.3	Restructuring costs	Χ	X
5.4	Broadcasting rights and equipment inventories	Χ	
5.6	Trade payables (goods and services)	X	X
6.2	Employee benefits	Χ	
6.3	Employee share-based compensation	X	
7	Goodwill, impairment of goodwill	X	×
8.2	Depreciation and amortization	Χ	
8.3	Impairment of non-current assets	X	
8.4	Other intangible assets	X	
8.5	Property, plant and equipment financial liabilities	X	
8.6	Fixed assets payables	X	
8.7	Dismantling provision	X	
9	Leases	X	
9.1	Lease liabilities	X	
9.2	Right-of-use assets	X	
10.1	Operating taxes and levies	X	
10.2	Income taxes	X	
11	Interests in associates and joint ventures	X	
12.3	Net financial debt	X	
12.3	Cash and cash equivalents, bonds, bank loans	,	•
	and loans from multilateral lending institutions	X	
12.4	Perpetual bonds redeemable for shares (TDIRA)	X	
12.7	Financial assets (excluding Orange Bank activities)	X	
12.8	Derivatives (excluding Orange Bank activities)	X	
13.8	Fair value of financial assets and liabilities (excluding Orange Bank activities)	X	
14.2	Treasury shares	X	
14.4	Subordinated notes, equity component of perpetual bonds redeemable for shares (TDIRA)	X	
14.5	Translation adjustments	X	
14.6	Non-controlling interests	X	
14.7	Earnings per share	X	
16.1	Financial assets and liabilities of Orange Bank	X	
	Financial assets related to Orange Bank activities	X	
	Fair value of financial assets and liabilities of Orange Bank	^	X
17	Litigation		×
	Litigation		

⁽¹⁾ See Notes 2.5.1 and 2.5.2.

2.5.1 Use of judgment

In addition to the alternatives or accounting positions mentioned above in 2.2, Management exercises judgment in order to define the accounting policies for certain transactions:

Topic		Nature of accounting judgment)
Note 3	Control	Requiring judgment in certain circumstances with respect to the existence or not of the control Continuous control assessment which can affect the scope of consolidation, as for instance when a shareholders' agreement is revised or terminated, or when protective rights turn into substantive rights
Note 4	Revenue	Splitting transaction price between mobile and service Identification of distinct or non-distinct performance obligations
Notes 5, 10 and 17	Purchases and other expenses, tax and litigation	Litigation and tax: measurement of technical merits of the interpretations and legislative positions and qualification of the facts and circumstances Onerous supplier contracts: trigger event, nature of unavoidable costs
Notes 5 and 12	Purchases and other expenses, financial assets and liabilities, net finance costs	Reverse factoring: distinguishing operating debt and financial debt
Note 8	Fixed assets	Qualifying network, sites or equipment sharing among operators as joint operations
Note 9	Leases	Determination of the non cancellable lease term and assessment of the exercise or not of termination, extension and purchase option Separation of service and lease components of leases "TowerCos" arrangements: electing the unit of account (tower or used space) and analyzing the arrangements in order to determine whether they contain a lease
Notes 12 and 14	Financial assets and liabilities and net finance costs Equit	Distinguishing equity and debt: assessing specific contractual clauses

2.5.2 Use of estimates

In preparing the Group's consolidated annual financial statements, Orange's management makes estimates, insofar as many elements included in the financial statements cannot be measured precisely. Management revises these estimates if the underlying circumstances evolve or in light of new information or more experience. Consequently, the estimates made at December 31, 2019 may subsequently be changed.

Topic		Key sources of estimates on future income and/or cash flows
Note 4	Revenue	Deciding duration of legally binding rights and obligations
Notes 5, 10 and 17	Risk of resources outflow linked to claims and litigation and to tax legislation	Underlying assumptions of the assessment of legal and fiscal positions Identifying and releasing of uncertain legal and tax positions
	Onerous contracts	Underlying assumptions of the assessment
Notes 7.3, 7.4, 8.3, 8.4, 8.5 and 11	Measurement of the recoverable values for the impairment tests (goodwill, tangible and intangible assets, investments accounted for under the equity method)	Sensitivity to discount rates, perpetual growth rate and business plans' assumptions which affect the expected cash flows (revenues, reported EBITDA and investments) Assessing the competitive, economic and financial environment of the countries where the Group operates, taking into account the potential effects of Brexit on these assumptions
Note 10.2	Measurement of the recoverable value of deferred tax assets	Assessing the deferred tax assets' recovery timeline when a tax entity reverts to profitability or when the tax legislation limits the use of tax loss carryforward
Note 8	Fixed assets	Assessing assets' useful life according to the change in the technological, regulatory or economic environment (notably the migration from the copper local loop into fiber and other greater bandwidth technologies, radio technology migration) Provision for dismantling and restoring sites: dismantling timeframe, discount rate, expected cost
Note 9	Leases	Determination of the incremental borrowing rate of the lease when the implied interest rate is not identifiable in the lease
Note 6.2	Employee benefits	Sensitivity to discount rates Sensitivity to sign-up rate senior plans
Notes 13 and 16	Fair value of financial assets and liabilities	Models, selection of parameters, fair value hierarchy, evaluation of non-performance risks

Furthermore, aside from the elements linked to the level of activity, income and future cash flows are sensitive to changes in financial market risks, notably interest rate and foreign exchange risks.

Note 3 Gains and losses on disposal and main changes in scope of consolidation

3.1 Gains (losses) on disposal of fixed assets, investments and activities

(in millions of euros)	2019	2018	2017
Gains (losses) on disposal of fixed assets Gains (losses) on disposal of investments and activities	303 (26)	180 17	88 (5)
Gain (losses) on disposal of fixed assets, investments and activities	277	197	83

The loss on disposal associated with BT securities is presented under "Effects resulting from BT stake" in the consolidated income statement and detailed in Note 12.7.

3.2 Main changes in the scope of consolidation

Changes in the scope of consolidation during 2019

Acquisitions of SecureLink and SecureData

On January 31, 2019, Orange acquired a 100% equity interest in SecureData, a provider of cyber security solutions in the United Kingdom for 100 million euros.

On July 8, 2019, the Group acquired 100% of SecureLink, an independent cyber security operator in Europe, for 377 million euros.

At acquisition date (in millions of euros)	SecureLink	SecureData
Acquisition cost Cash acquired net of transaction costs	377 (6)	100 (5)
Cash paid for investment securities, net of cash acquired	371	95

Goodwill was recognized in the amount of 392 million euros as a result of the acquisition of Securelink and 97 million euros as a result of the acquisition of SecureData, after allocation of the purchase price to identifiable assets acquired and liabilities assumed.

At acquisition date (in millions of euros)	SecureLink	SecureData
Acquisition cost (a)	377	100
Net book value acquired	(153)	(32)
Effects of fair value measurement:	,	,
Customer relationship (1)	181	43
Trademark	-	-
Others intangibles	-	-
Net deferred tax	(43)	(8)
Net asset remeasured at fair value (b)	(15)	3
Goodwill (a)-(b)	392	97

⁽¹⁾ Depreciation between 12 and 16 years according to the type of clients.

Fair values were measured using the excess earnings method for the customer base. Goodwill primarily relates to the acquisition of future customers.

The SecureLink and SecureData acquisition effect on revenue, in 2019, amounts to 154 million euros and 47million euros, respectively.

Business & Decision

Since December 31, 2018, Orange has acquired 5.4% of the capital of Business & Decision for 3 million euros. At December 31, 2019, Orange owned 93.6% of the capital of Business & Decision. This change in the percentage share held by Orange with no gain, or loss,

of control, is shown in the financing flows in the statement of cash flows.

Sale of Orange Niger

On November 22, 2019, Orange sold its 95.5% holding in Orange Niger to Zamani Com S.A.S, a company that is wholly owned by Orange Niger minority shareholders. The company's services will continue to be sold under the Orange brand name during a transition period. This sale had no material impact on the Group's financial statements.

Changes in the scope of consolidation during 2018

Basefarm acquisition

On August 14, 2018, the Group acquired 100% of Basefarm for an amount of 234 million euros.

(in millions of euros)	At acquisition date
Acquisition cost Cash acquired net of transaction costs	234 (4)
Cash paid for investment securities, net of cash acquired	230

In accordance with IFRS 3R – Business Combinations, the fair value measurement of identifiable assets acquired and liabilities assumed was finalized during the first semester of 2019. The final allocation of the acquisition cost is as follow:

(in millions of euros)	At acquisition date
Acquisition cost (a)	234
Net book value acquired	(58)
Effects of fair value measurement:	
Customer relationship (1)	58
Trademark (2)	28
Others intangibles (3)	7
Net deferred tax	(25)
Net asset remeasured at fair value (b)	10
Goodwill (a)-(b)	224

- (1) Depreciation over 15 years
- (2) Depreciation over 5 years.
- (3) Depreciation over 7 years.

Fair value has been measured using the relief from royalty method for the brand and the excess earnings method for the customer base.

Goodwill primarily relates to future technologies and acquisition of future customers.

This acquisition has no significant impact on revenue in 2018.

Acquisition of Business & Decision

Following the acquisition of Business & Decision on June 5, 2018 and the purchase of additional securities as part of the friendly tender offer finalized on July 19, 2018, the Group acquired a stake of 81.8% of the capital of Business & Decision at a price of 50 million euros. Furthermore, Orange signed an agreement to acquire 4.9% more of the capital.

(in millions of euros)	At acquisition date
Acquisition cost 81.8% Cash acquired net of transaction costs	50 (18)
Cash paid for investment securities, net of cash acquired	32

Goodwill was recognized in the amount of 29 million euros, after allocation of the purchase price to identifiable assets acquired and liabilities assumed.

(in millions of euros)	At acquisition date
Acquisition cost 81.8%	50
Fair value of non-controlling interests	12
Acquisition cost (a)	62
Net book value acquired	7
Effects of fair value measurement:	
Customer relationship (1)	18
Trademark (2)	8
Others intangibles (3)	4
Net deferred tax	(4)
Net asset remeasured at fair value (b)	33
Goodwill (a)-(b)	29

- (1) Depreciation over 10 years.
- (2) Depreciation over 7 years.
- (3) Specific technology depreciated over 9 years.

The residual goodwill mainly relates to workforce skills that cannot be recognized separately.

The effect of the acquisition of Business & Decision on revenue in 2018 amounts to 108 million euros.

On July 19, 2018, Orange acquired 6.4% of the capital of Business & Decision for 4 million euros. As of December 31, 2018, Orange holds

88.2% of the capital of Business & Decision (93.1% including the shares under reciprocal promises).

Changes in the scope of consolidation during 2017

No significant change in consolidation scope occurred during 2017.

Accounting policies

Changes in the scope of consolidation

Entities are fully consolidated if the Group has the following:

- power over the investee; and
- exposure, or rights, to variable returns from its involvement with the investee; and
- the ability to use its power over the investee to affect the amount of the investor's returns.

When assessing control, IFRS 10 requires judgment and continuous assessment.

Clarifications of when the ownership interest does not imply a *de facto* presumption are provided in Note 19 which lists the main consolidated entities.

Joint ventures and companies over which the Group exercises significant influence (generally corresponding to an ownership interest of 20% to 50%) are accounted for using the equity method.

When assessing the level of control or significant influence exercised over a subsidiary or associate, the existence and effect of any exercisable or convertible potential voting rights at the closing date is taken into account.

Material intragroup transactions and balances are eliminated.

Takeovers (business combinations)

Business combinations are accounted for using the acquisition method:

- the acquisition cost is measured at the fair value of the consideration transferred, including all contingent consideration, at the
 acquisition date. Subsequent changes in the fair value of contingent consideration are accounted for either through profit or loss or
 through other comprehensive income, in accordance with the applicable standards;
- goodwill is the difference between the consideration transferred and the fair value of the identifiable assets and liabilities assumed at the acquisition date, and is recognized as an asset in the statement of financial position. Considering the Group's activity, the fair values of the identifiable assets relate mainly to licenses, to customer bases and to brands (which cannot be recognized as assets when internally developed), generating induced deferred taxes. The fair value of these assets, which cannot be observed, is established using commonly adopted methods, such as those based on revenues or costs (e.g.: the "Greenfield" method for the valuation of licenses, the "relief from royalty" method for the valuation of brands and the "excess earnings" method for customer bases).

For each business combination with an ownership interest below 100%, non-controlling interest is measured:

- either at its fair value: in which case, goodwill is recognized for the portion relating to non-controlling interests;
- or proportionate to its share of the acquiree's identifiable net assets: in which case, goodwill is only recognized for the share acquired.

Acquisition-related costs are directly recognized in operating income in the period in which they are incurred.

When a business combination is achieved in stages, the previously held equity interest is re-measured at fair value at the acquisition date through operating income. The related other comprehensive income, if any, is fully reclassified to profit or loss.

Internal transfer of consolidated shares

IFRS do not address the accounting treatment for the transfer of consolidated shares within the Group resulting in changes in ownership interest. The Group applies the following accounting policy:

- the transferred shares are carried at historical cost and the gain or loss on the transfer is fully eliminated in the acquirer's accounts;
- the non-controlling interests are adjusted to reflect the change in their share in the equity against Group retained earnings, with no impact on profit and loss and equity.

Assets held for sale

The Group qualifies an asset or group of assets as "held for sale" when:

- the management is committed to a plan to sell;
- the asset is available for immediate sale in its current state (subject to any conditions precedent that are usual in such disposals);
- the sale is highly probable, within 12 months.

Thus, when the Group is committed to a plan to sell involving the loss of control or significant influence over one of its assets, it classifies all assets and liabilities of the entities concerned under a separate line in the statement of financial position: "Assets/Liabilities held for sale", at a value equal to the lower of the net carrying value and the fair value net of disposal costs.

In addition, when the asset or group of assets held for sale represents a major line of business, its contribution to the income statement is presented separately (below "consolidated net income of continuing operations"); its cash flow contribution is presented in the statement of cash flows.

Note 4 Sales

4.1 Revenue

The presentation of revenue is disaggregated by category and segment in the Note "Segment information" (see Note 1.1). Breakdown of revenues by source is as follows:

- mobile services only: mobile services revenue is generated by incoming and outgoing calls (voice, SMS and data), excluding convergent services (see below);
- fixed services only: revenue from fixed services includes fixed broadband and narrowband services, excluding convergent services (see below) and fixed network business solutions, including voice and data:
- convergence packages: these include revenue from convergence packages for the Mass market (Internet + Mobile products);
- equipment sales: all equipment sales (mobile phones, broadband equipment, connected objects and accessories), excluding sales

- of equipment related to integration and information technology services and sales of equipment to external distributors and brokers, presented in "Other revenue";
- IT & integration services: IT & integration services revenue includes unified communication and collaboration services (LAN and telephony, consultancy, integration, project management), hosting and infrastructure services (including Cloud Computing), applications services (customer relations management and other applications services), security services, video conferencing offers as well as sales of equipment related to the above products and services;
- carrier services (Wholesale): roaming revenue from customers of other networks (national and international), revenue from Mobile Virtual Network Operators (MVNO) and from network sharing, among others;
- other revenue: equipment sales to external distributors and brokers.

Accounting policies

Most revenue falls within the application scope of IFRS 15 "Revenue from contracts with customers". Orange's products and services are offered to customers under service contracts only and contracts combining the equipment used to access services and/or other service offers. Revenue is recognized net of VAT and other taxes collected on behalf of governments.

Standalone service offers (mobile services only, fixed services only, convergent service)

Orange proposes to Mass market and Corporate markets customers a range of fixed and mobile telephone services, fixed and mobile Internet access services and content offers (TV, video, media, added-value audio service, etc.). Some contracts are for a fixed term (generally 12 or 24 months), while others may be terminated at short notice (i.e. monthly arrangements or portions of services).

Service revenue is recognized when the service is provided, based on use (e.g. minutes of traffic or bytes of data processed) or the period (e.g. monthly service costs).

Under some content offers, Orange may act solely as an agent enabling the supply by a third-party of goods or services to the customer and not as a principal in the supply of the content. In such cases, revenue is recognized net of amounts transferred to the third-party.

Contracts with customers generally do not include a material right, as the price invoiced for contracts and the services purchased and consumed by the customer beyond the specific scope (e.g. additional consumption, options, etc.) generally reflect their standalone selling prices. We have no significant impact related to contract modification for this type of contract. Service obligations transferred to the customer at the same pace are treated as a single obligation.

When contracts include contractual clauses covering commercial discounts (initial discount on signature of the contract or conditional on attaining a consumption threshold) or free offers (e.g. three months of subscription free of charge), the Group defers these discounts or free offers over the enforceable period of the contract (period during which the Group and the customer have a firm commitment).

Where applicable, the consideration payable to the customer is recognized as a deduction from revenue in accordance with the specific terms and conditions of each contract.

If the performance obligations are not classified as distinct, the offer revenue is recognized on a straight-line over the contract term. The initial service connection in the context of a service contract and communication offer, is a good example. It is not generally separable from the service contract and communication offer and is therefore recognized in income over the average term of the expected contractual relationship.

Separate equipment sales

Orange proposes to Mass market and Corporate market customers several ways to buy their equipment (primarily mobile phones): equipment sales may be separate from or bundled with a services offer. When separate from a services offer, the amount invoiced is recognized in revenue on delivery and receivable immediately or in instalments over a period of up to 24 months. Where payment is received in instalments, the offer comprises a financial component and interest is calculated and deducted from the amount invoiced and recognized over the payment period in net finance costs.

Where Orange purchases and sells equipment to indirect channels, the Group generally considers that Orange maintains control until final resale to the end-customer (the distributor acts as an agent), even where ownership is transferred to the distributor. Sales proceeds are therefore recognized when the end-customer takes possession of the equipment (on activation).

Bundled equipment and services offers

Orange proposes numerous offers to its Mass market and Corporate market customers comprising equipment (e.g. a mobile terminal) and services (e.g. a communications contract).

Equipment revenue is recognized separately if the two components are distinct (i.e. if the customer can receive the services separately). Where one of the components in the offer is not at its separate selling price, revenue is allocated to each component in proportion to their individual selling prices. This is notably the case in offers combining the sale of a mobile phone at a reduced price, where the individual selling price of the mobile phone is considered equal to its purchase cost and logistics expenses plus a commercial margin based on market practice. The amount allocated to equipment sales is recognized under revenue on delivery in exchange for an contract asset, spread over the term of the services contract.

The provision of a Livebox® (Internet proprietary box) is neither a separate component of the Internet access service nor a lease, as Orange maintains control of the box.

Services including a build and run phase

Some Corporate market contracts include two phases: a build phase followed by the management of the IT platforms. Revenue recognition requires an analysis of the facts and circumstances of each contract in order to determine whether distinct performance obligations exist. Depending on the contract, the Group recognizes build phase revenue at completion if this phase is qualified as distinct. These contracts are generally multi-year, with scalable offers. On each contract modification, we assess the scope modification or its impact on the contract price in order to determine whether the amendment must be treated as a distinct contract, as if the existing contract were terminated and a new contract signed, or whether the amendment must be considered as a change to the existing contract.

Service offers to carriers (wholesale)

Three types of commercial agreements are entered into with Operator customers for domestic wholesale activities and International carrier offers:

- pay-as-you-go model: contract generally applied to "legacy" regulated activities (bit stream call termination, local loop access, roaming and certain data solution contracts), where contract services are not covered by a firm volume commitment. Revenue is recognized as the services are provided (which corresponds to transfer of control) over the contractual term;
- send-or-pay model: contract where the price, volume and term are defined. The customer has a commitment to pay the amount
 indicated in the contract irrespective of actual traffic consumed over the commitment period. This contract category notably includes
 certain MVNO (Mobile Virtual Network Operator), IDD (International Direct Dialing) or hubbing (call free floating) contracts. Related
 revenue is recognized progressively based on actual traffic during the period, to reflect transfer of control to the customer;
- mixed model: hybrid contract combining the "Pay-as-you-go" and "Send-or-pay" models, comprising a fixed entry fee providing access to preferential pricing conditions for a given volume ("Send or pay" component) and invoicing of traffic consumption ("Pay-as-you-go" component). The entry fee invoiced under this type of commercial agreement is recognized progressively in revenue based on actual traffic over the period. The amount invoiced for the entry fee included in this type of commercial agreement is recognized progressively in revenue based on actual traffic over the period.

Agreements between major transit carriers are not billed (free peering) and therefore not recognized in revenue.

Service level commitment clause

The contracts entered into by Group and its customers include service level agreements regarding the processing of orders, deliveries and after sales support (delivery time, performance, service reinstatement time). If the Group fails to comply with one of these commitments, then it pays compensation to the end-customer, which is usually a tariff reduction. The projected amount of these penalties is deducted from revenue in the event that it is likely that the commitment is not or will not be fulfilled

Public-private service concession arrangements

The Group rolls- out and/or operates certain networks under service concessions, such as the public initiative networks implemented in France to roll-out optical fiber networks in less populated areas. Some contracts are analyzed in accordance with IFRIC 12, Service concession arrangements. When the Group builds a network, construction revenue is recognized in exchange for a right to receive consideration from either a public entity or users of the public service. This right is accounted for as:

- an intangible asset, if the Group has a right to charge users of the public service. This asset is measured at the infrastructure fair value and amortized over the agreement period;
- a financial receivable, if the Group has an unconditional right to receive payments from the public entity. This asset is measured at the infrastructure fair value and accounted for at amortized cost.

Leases

Orange lease revenue concerns either its regulatory obligation to lease technical sites to competitors, the supply of equipment under certain contracts with Enterprise markets, or occasionally, one-off leases to third-parties of excess space in certain buildings.

Lease revenues are recognized on a straight-line basis over the contract term, except for certain equipment leases to Enterprise market customers classified as finance leases; in such cases the equipment is considered sold on credit.

4.2 Other operating income

(in millions of euros)	2019	2018	2017
Net banking income	55	56	76
Tax credits and subsidies	33	42	40
Income from universal service	5	14	8
Brand & management fees (1)	2	6	14
Other income	625	462	475
Total	720	580	613

⁽¹⁾ Invoiced to certain uncontrolled entities

Net banking income (NBI) represents the net balance between banking products (fees charged to customers, interest from loans, banking activities retail commissions and other income from banking operations) and expenses from banking operations (interest paid in respect of bank loans, commissions paid and other expenses from banking operations).

It is prepared in accordance with accounting practices that are commonly used in France in the banking sector.

Other income is predominantly comprised of income on impaired trade receivables, rebilling of network sharing costs, income relating to line damages.

4.3 Trade receivables

(in millions of euros)	2019	2018	2017(1)
Net book value of trade receivables – in the opening balance	5,295	5,175	4,964
IFRS 9 transition impact	-	(22)	-
Net book value of trade receivables – including IFRS 9 transition impact	5,295	5,153	4,964
Business related variations	1	65	267
Changes in the scope of consolidation	50	90	6
Translation adjustment	28	(12)	(33)
Reclassifications and other items	(53)	(1)	(29)
Reclassification to assets held for sale	-	-	-
Net book value of trade receivables – in the closing balance	5,320	5,295	5,175

⁽¹⁾ As authorized by IFRS 9 (see Note 2.3). Group has chosen not to restate the comparative periods 2016 and 2017.

Orange established a program of non-recourse sales of its deferred payment receivables in several countries. These receivables are derecognized from the balance sheet. The trade receivables sold as of December 31, 2019 in France, Poland and Spain generated an early receipt of respectively approximately 98 million euros (approximately 110 as of December 31, 2018), 68 million euros (new program set up in 2019) and 17 million euros (approximately 40 million euros as of December 31, 2018 and 84 million euros as of December 31, 2017).

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017 (1)
Trade receivables depreciated according to their age Trade receivables depreciated according to other criteria Net trade receivables past due Not past due ⁽²⁾	1,233	1,050	1,078
	579	600	443
	1,812	1,650	1,521
	3,508	3,645	3,655
Net trade receivables	5,320	5,295	5,175
o/w short-term trade receivables	5,044	4,995	4,851
o/w long-term trade receivables (3)	276	300	324
o/w net trade receivables from telecom activities o/w net trade receivables from Orange Bank	5,320 -	5,295 -	5,175

(1) As authorized by IFRS 9 (see Note 2.3), the Group has chosen not to restate the comparative period 2017.

(2) 2018 not past due receivables are presented net of IFRS 9 provision for (23) millions of euros as of December 31, 2019 and (25) million euros as of December 31, 2018.

(3) Includes receivables from sales of handset with payment on instalments that are payable in more than 12 months and receivables from financial lease offers on firm's equipment (see accounting policies).

Shown below is the aging table of the net trade receivables which are past due and impaired according to their age:



The table below provides an analysis of the change in impairment for trade receivables in the statement of financial position:

(in millions of euros)	2019	2018	2017(1)
Allowances on trade receivables – in the opening balance	(816)	(760)	(774)
IFRS 9 transition impact	-	(22)	-
Allowances on trade receivables – including IFRS 9 transition impact	(816)	(782)	(774)
Net addition with impact on income statement (2)	(332)	(286)	(251)
Losses on trade receivables	271	255	257
Changes in the scope of consolidation	(1)	(2)	(1)
Translation adjustment	(5)	(1)	7
Reclassifications and other items	(5)	(O)	2
Reclassification to assets held for sale	-	-	-
Allowances on trade receivables – in the closing balance	(888)	(816)	(760)

(1) As authorized by IFRS 9 (see Note 2.3), the Group has chosen not to restate the comparative period 2017.

(2) The change in IFRS 9 provision for 2019 amounts to (2) million euros (it amounted to (3) for 2018).

Accounting policies

The trade receivables are mainly short-term with no stated interest rate and are measured at original invoice amount. Those receivables which include deferred payment terms over 12 or 24 months for the benefit of customers are discounted and classified as current items. Receivables from financial lease offers on firms' equipment are recognized as current operating receivables because they are acquired in the normal course of business.

Impairment of trade receivables is based on three methods:

- a collective statistical method: this is based on historical losses and leads to a separate impairment rate for each aging balance category. This analysis is performed over a homogenous group of receivables with similar credit characteristics because they belong to a customer category (mass-market, small offices and home offices);
- a stand-alone method: the assessment of impairment probability and its amount are based on a set of relevant qualitative factors (ageing of late payment, other balances with the counterpart, rating from independent agencies, geographical area). This method is used for carriers and operators (national and international), local, regional and national authorities and for large accounts of Enterprise Communication Services;
- a provisioning method based on anticipated loss: IFRS 9 requires recognition of expected losses on receivables immediately upon
 recognition of the financial instruments. In addition to the pre-existing provisioning system, the Group applies a simplified approach
 of anticipated impairment at the time the asset is recognized. The percentage applied depends on the maximum revenue
 non-recoverability rate.

Impairment losses identified for a group of receivables represent the step preceding impairment identification for individual receivables. When information is available (clients in bankruptcy or subject to equivalent judicial proceedings), these receivables are then excluded from the statistical impairment database and individually impaired.

The trade receivables may be part of securitization programs. When they are sold to consolidated special purpose entities, they are still recognized in the statement of financial position. Other sales to financial institutions may lead to their de-recognition where the risks and benefits are transferred as described by IFRS 9.

4.4 Customer contract net assets and liabilities

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Customer contract net assets (1) Costs of obtaining a contract Costs to fulfill a contract	771	784	815
	258	233	250
	181	149	139
Total customer contract net assets	1,209	1,166	1,204
Prepaid telephone cards Connection fees Loyalty programs Other deferred revenue (2) Other customer contract liabilities	(212)	(221)	(241)
	(665)	(706)	(725)
	(38)	(38)	(43)
	(1,163)	(1,025)	(1,002)
	(15)	(12)	(10)
Total deferred revenue related to customer contracts	(2,093)	(2,002)	(2,021)
Total customer contract net assets and liabilities	(884)	(836)	(817)

⁽¹⁾ Assets net of remaining performance obligations.

The following tables give an analysis of the balances of customer contract net assets and the costs of acquiring and fulfilling them in the financial statements.

(in millions of euros)	2019	2018	2017
Customer contract net assets – in the opening balance	784	815	916
Business related variations (1)	(13)	(36)	(109)
Changes in the scope of consolidation	1 -	-	-
Translation adjustment	1	(1)	7
Reclassifications and other items	0	6	1
Reclassification to assets held for sale	-	-	-
Customer contract net assets – in the closing balance	771	784	815

⁽¹⁾ Mainly includes the new customer contract assets net of related liabilities, the transfer of the net contract assets directly to trade receivables and impairment of the period.

⁽²⁾ Includes subscription fees

Below is presented the change in deferred income on customer contracts (prepaid telephone cards, service access fees, loyalty programs and other unearned income) in the statement of financial position.

(in millions of euros)	2019	2018	2017
Deferred revenue related to customer contracts – in the opening balance	2,002	2,021	2,071
Business related variations	(20)	(18)	(40)
Changes in the scope of consolidation	101	7	-
Translation adjustment	13	2	(16)
Reclassifications and other items	(3)	(10)	6
Reclassification to assets held for sale	-	-	-
Deferred revenue related to customer contracts – in the closing balance	2,093	2,002	2,021

Accounting policies

Customer contract net assets and liabilities

The timing of revenue recognition may differ from customer invoicing.

Trade receivables presented in the consolidated statement of financial position represent an unconditional right to receive consideration (primarily cash), i.e. the services and goods promised to the customer have been transferred.

By contrast, contract assets mainly refer to amounts allocated per IFRS 15 as compensation for goods or services provided to customers for which the right to collect payment is subject to providing other services or goods under that same contract (or group of contracts). This is the case in a bundled offer combining the sale of a mobile phone and mobile communication services for a fixed-period, where the mobile phone is invoiced at a reduced price leading to the reallocation of a portion of amounts invoiced for telephone communication services to the supply of the mobile phone. The excess of the amount allocated to the mobile phone over the price invoiced is recognized as a contract asset and transferred to trade receivables as the service is invoiced.

Contract assets, like trade receivables, are subject to impairment for credit risk. The recoverability of contract assets is also verified, especially to cover the risk of impairment should the contract be interrupted. Recoverability may also be impacted by a change in the legal environment governing offers.

Contract liabilities represent amounts paid by customers to Orange before receiving the goods and/or services promised in the contract. This is typically the case for advances received from customers or amounts invoiced and paid for goods or services not transferred yet, such as contracts payable in advance or prepaid packages (previously recognized in deferred income).

Customer contract assets and liabilities are presented, respectively, in current assets and current liabilities since they are a normal part of the Group's operations.

(in millions of euros)	2019	2018	2017
Costs of obtaining a contract – in the opening balance	233	250	274
Business related variations	21	(14)	(30)
Changes in the scope of consolidation	1	-	-
Translation adjustment	1	(3)	6
Reclassifications and other items	1	Ô	-
Reclassification to assets held for sale	-	-	-
Costs of obtaining a contract – in the closing balance	258	233	250
(in millions of euros)	2019	2018	2017
Costs to fulfill a contract – in the opening balance	149	140	145
Business related variations	30	22	(5)
Changes in the scope of consolidation	-	-	-
Translation adjustment	2	3	-
Reclassifications and other items	_	(16)	-
Reclassification to assets held for sale	-	-	-

Accounting policies

Cost of obtaining a contract

Where a telecommunications service contract is signed via a third-party distributor, this distributor may receive business provider remuneration, generally paid in the form of a commission for each contract or invoice-indexed commission. Where the Group considers the commission incremental and believes that it would not have been paid in the absence of the contract, the commission cost is estimated and capitalized in the balance sheet. It should be noted that the Group has adopted the simplification measure authorized by IFRS 15 to recognize the costs of obtaining contracts as an expense when they are incurred if the amortization period of the asset, it would have recognized in respect of them, would not have exceeded a year.

The costs of obtaining fixed-period mobile service contracts are capitalized and released to profit or loss on a straight-line over the enforceable contract term, as these costs are generally incurred each time the customer renews the fixed-period. The costs of obtaining fixed-period landline services for Mass market customers are expensed on a straight-line over the estimated period of the customer relationship. The costs of obtaining business and operator solutions contracts are not material.

Costs to fulfill a contract

Costs to fulfill a contract consist of all the initial contractual costs necessary to fulfill one or more performance obligations of a contract. These costs, when they qualify as non-distinct from the performance obligation, are capitalized and costs incurred are recorded on a time-apportioned basis over the effective period of the contract.

At Group level, these costs mainly concern contracts for Corporate customers, with, for example, design, installation, connection and migration fees that relate to a future performance obligation of the contract.

The assumptions underlying the period over which the costs of fulfilling a contract are expensed are periodically reviewed and adjusted in line with observations; termination of the contractual relationship with the customer results in the immediate expensing of the remaining deferred costs. Where the carrying amount of deferred costs exceeds the remaining consideration expected to be received for the transfer of the related goods and services, less expected costs relating directly to the transfer of these goods and services still to be incurred, the excess amount is similarly immediately expensed.

The cost of obtaining and fulfilling contracts impacted EBITDAaL in 2019 and adjusted EBITDA in 2018 and 2017.

The following table presents the transaction price assigned to unfulfilled performance obligations as of December 31, 2019. Unfulfilled performance obligations are the services that the Group is obliged to provide to customers during the remaining fixed term of the contract.

As allowed by the simplification procedure in IFRS 15, these disclosures are only related to performance obligations with an initial term greater than one year.

(in millions of euros)	December 31, 2019
Less than one year	6,176
Between 1 and 2 years	2,660
Between 2 and 3 years	818
Between 3 and 4 years	433
Between 4 and 5 years	260
More than 5 years	430
Total remaining performance obligations	10,777

Accounting policies

Unfulfilled performance obligations

On the allocation of the total contract transaction price to identified performance obligations, a portion of the total transaction price can be allocated to performance obligations that are unsatisfied or partially satisfied at the end of the reporting period. We have elected to apply certain available practical expedients when disclosing unfulfilled performance obligations, including the option to exclude expected revenues from unsatisfied obligations of contracts with an original expected duration of one year or less. These contracts are primarily monthly service contracts.

In addition, certain contracts offer customers the ability to purchase additional services. These additional services are not included in the transaction price and are recognized when the customer exercises the option (generally on a monthly basis). They are not therefore included in unfulfilled performance obligations.

Some multi-year service contracts with Corporate business customers and Operator customers include fixed monthly costs and variable user fees. These variable user fees are excluded from the table of unfulfilled performance obligations.

4.5 Deferred income

(in millions of euros)	2019	2018	2017
Deferred income – in the opening balance	58	76	84
Business related variations	(O)	(42)	(8)
Changes in the scope of consolidation	0	2	0
Translation adjustment	(O)	0	(2)
Reclassifications and other items	(6)	22	2
Reclassification to assets held for sale	-	-	-
Deferred income – in the closing balance	51	58	76

4.6 Other assets

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Advances and downpayments Submarine cable consortiums ⁽¹⁾ Security deposits paid Orange Money – restriction of electronic money ⁽¹⁾ Others	101	84	92
	168	130	157
	93	97	79
	613	497	408
	408	473	468
Total	1,383	1,281	1,204

(1) These receivables are offset by the liabilities of the same amount (see accounting policies and Note 5.7).

(in millions of euros)	2019	2018	2017
Other assets – in the opening balance	1,281	1,204	1,179
Business related variations	97	74	49
Changes in the scope of consolidation	0	7	(6)
Translation adjustment	3	1	(12)
Reclassifications and other items	2	(5)	(6)
Reclassification to assets held for sale	-	-	-
Other assets – in the closing balance	1,383	1,281	1,204
o/w other non-current assets	125	129	110
o/w other current assets	1,258	1,152	1,094

Accounting policies

Other assets relating to "Submarine cable consortiums" are receivables from submarine cable consortium members when Orange is in charge of centralizing the payments to the equipment suppliers that build and manage these cables. These receivables are offset by the liabilities of the same amount (see Note 5.7).

Orange Money is a money transfer, payment and financial services solution provided via an electronic money ("e-money") account linked to an Orange mobile number.

Since 2016, the Orange group has become an Electronic Money Issuer ("EMI") in some of the countries in which it operates, via dedicated, approved, internal subsidiaries. Regulations state that EMIs, as last-resort guarantors for the reimbursement of e-money holders, are obliged to restrict the funds collected in exchange for the issue of e-money (obligation to protect holders). The e-money distribution model relies on Orange's subsidiaries and third-party distributors. EMIs issue e-money (or units of value "UV") at the request of these distributors in exchange for funds collected therefrom. The distributors then transfer the e-money to end holders.

Within the Orange group, this restriction includes the protection of third-party holders (distributors and customers).

These transactions have no impact on the Group's net financial debt and are listed under the following headings:

- assets restricted to an amount equal to the e-money in circulation outside of the Orange group (or UV in circulation);
- UV in circulation under liabilities, representing the obligation to reimburse the third-party holders (customers and third-party distributors).

These two headings are presented under "other assets" and "other liabilities" and under operating activities as "change in working capital requirement".

4.7 Related party transactions

The French State, either directly or through Bpifrance Participations, is one of the main shareholders of Orange SA. The communication services provided to the French State are done so as part of a competitive process held for each service according to the nature of

the service. They have no material impact on consolidated revenues. Transactions with associates and joint ventures are presented in

Accounting policies

Orange group's related parties are listed below:

- the Group's key management personnel and their families (see Note 6);
- the French State, and its departments in Bpifrance Participations and central State departments (see Notes 10 and 14);
- associates, joint ventures and companies in which the Group holds a significant stake (see Note 11).

Note 5 Purchases and other expenses

5.1 External purchases

(in millions of euros)	2019	2018	2017
Commercial, equipments expenses and content rights o/w costs of terminals and other equipment sold o/w advertising, promotional, sponsoring and rebranding costs Service fees and inter-operator costs Other network expenses, IT expenses Other external purchases o/w rental expenses	(7,293) (4,042) (823) (4,612) (3,253) (2,739) (270)	(7,228) (4,123) (850) (4,923) (3,192) (3,220) (1,181)	(7,117) (4,112) (845) (5,128) (3,074) (3,062) (1,148)
Total	(17,897)	(18,563)	(18,381)

Accounting policies

Firm purchase commitments are disclosed as unrecognized contractual commitments (see Note 15).

Advertising, promotion, sponsoring, communication and brand marketing costs are recorded as expenses during the period in which they are incurred.

As of January 1, 2019, lease expenses include lease payments on contracts of 12 months or less, contracts where the new value of the underlying asset is less than 5,000 euros and variable lease payments which were not figured into the measurement of a lease liability (see Note 2.3.1).

5.2 Other operating expenses

(in millions of euros)	2019	2018	2017
Allowances and losses on trade receivables – telecom activities	(315)	(277)	(251)
Expenses from universal service	(21)	(38)	(43)
Litigation	(107)	(10)	(315)
Operating foreign exchange gains (losses)	(4)	3	(14)
Cost of bank credit risk	(10)	(7)	(6)
Integration costs (1)	(17)	-	-
Other expenses	(124)	(176)	(95)
Total	(599)	(505)	(724)

⁽¹⁾ Since January 1st 2019, integration costs are presented in other operating expenses. In 2018 and 2017 those costs were presented in restructuring costs (see Note 5.3).

Impairment and losses on trade receivables of telecom activities are detailed in Note 4.3.

The cost of credit risk exclusively applies to Orange Bank and includes impairment charges and reversals on fixed-income securities, loans and receivables to customers as well as impairment charges and reversals relating to guarantee commitments given, losses on receivables and recovery of amortized debts.

Expenses for legal disputes for which provisions or immediate payment have been made include the reassessment of the risk related to various disputes.

(in millions of euros)	2019	2018	2017
Provision for litigation – in the opening balance	572	779	537
Additions with impact on income statement	99	35	354
Reversals with impact on income statement	(8)	(25)	(34)
Discounting with impact on income statement	· -	3	2
Utilizations without impact on income statement (1)	(22)	(221)	(37)
Changes in consolidation scope	1	1	_
Translation adjustment	0	3	7
Reclassifications and other items	1	(3)	(50)
Reclassification to assets held for sale	-	-	-
Provision for litigation – in the closing balance	643	572	779
o/w non-current provision	45	67	53
o/w current provision	598	505	726

⁽¹⁾ In 2018, mainly related to the payment of the fine in Poland for 152 million euros.

Payments related to some litigation are directly recorded in other operating expenses.

The Group's significant litigations are described in Note 17.

Accounting policies

Litigation

In the ordinary course of business, the Group is involved in a number of legal and arbitration proceedings and administrative actions described in Note 17.

The costs which may result from these proceedings are accrued at the reporting date if the Group has a present obligation towards a third party resulting from a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and the amount of that liability can be quantified or estimated within a reasonable range. The amount of provision recorded is based on a case-by-case assessment of the risk level, and events arising during the course of legal proceedings may require a reassessment of this risk. Where appropriate, litigation cases may be analyzed as contingent liabilities, which correspond to:

- probable obligations arising from past events that are not recognized because their existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the Company's control; or
- present obligations arising from past events that are not recognized because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or because the amount of the obligation cannot be measured with sufficient reliability.

Integration costs

Integration costs are incurred at the time of acquisition of legal entities (costs linked to the acquisition of the entity, consultancy fees, training costs for new staff, migration costs associated with customer offers, labor expenses associated with the transition). They are incurred over a maximum period of 12 months following the acquisition date.

5.3 Restructuring and integration costs

(in millions of euros)	2019	2018	2017
Restructuring costs	(132)	(189)	(164)
Departure plans ⁽¹⁾	(68)	(30)	(67)
Lease property restructuring (2)	5	(28)	(58)
Distribution channels (3)	(26)	(11)	(4)
Other	(43)	(120)	(35)
Integration costs (4)	-	(10)	(3)
Acquisition costs of investments	-	(10)	(3)
Total restructuring costs	(132)	(199)	(167)

- (1) Mainly voluntary departure plans of Orange Polska in 2019 and 2017 (approximately 2,100 people in 2019 and 2,700 people in 2017).
- (2) In 2018 and 2017, essentially related to vacant leases in France.
 (3) Concerns the end of the relationship with some indirect distributors.
- (4) From January, 1 2019, Integration costs are presented in "Other operating expenses".

Some restructuring and integration costs are directly recorded in operating income and are not included in the following movements of provisions:

(in millions of euros)	2019	2018	2017
Restructuring and integration provision – in the opening balance	389	377	375
Additions with impact on income statement	97	162	150
Reversals releases with impact on income statement	(13)	(15)	(34)
Utilizations without impact on income statement	(124)	(143)	(133)
Translation adjustment	ì	· (1)	(1)
Reclassifications and other items ⁽¹⁾	(135)	9	20
Reclassification to assets held for sale	-	-	-
Restructuring and integration provision – in the closing balance	216	389	377
o/w non-current provision	96	230	251
o/w current provision	120	159	126

⁽¹⁾ In 2019, effect of IFRS 16 application (see Note 2.3.1).

Accounting policies

Restructuring costs

The adjustment of Group activities in line with changes in the business environment may also incur other types of transformation costs. These actions may have a negative effect on the period during which they are announced or implemented; for instance but not limited to, some of the transformation plans approved by the internal governance bodies.

Provisions are recognized only when the restructuring has been announced and the Group has drawn up or started to implement a detailed formal plan prior to the end of the reporting period.

The types of costs approved by the Group as restructuring costs primarily consist of:

- employee departure plans;
- indemnities paid to suppliers to terminate a contract (distribution networks, content operations, etc.);
- cost of vacant buildings (Out of the scope of IFRS 16);
- transformation plans for communication network infrastructures.

Onerous contracts: during the course of a contract, when the economic circumstances that prevailed at inception change, some commitments towards the suppliers may become onerous, i.e. the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

5.4 Broadcasting rights and equipment inventories

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Handset inventories (1)	534	678	583
Other products sold	78	41	32
Available broadcasting rights	89	73	68
Others supplies	270	242	198
Gross value	970	1,034	881
Depreciation	(63)	(69)	(54)
Net book value	906	965	827

⁽¹⁾ Of which inventories treated as consignment with distributors amounting to 35 million euros as of December 31, 2019, 49 million euros as of December 31, 2018 and 55 million euros as of December 31, 2017.

(in millions of euros)	2019	2018	2017
Inventories – in the opening balance	965	827	819
Business related variations	(64)	138	14
Changes in the scope of consolidation	2	2	0
Translation adjustment	2	(1)	(3)
Reclassifications and other items	1	(1)	(4)
Reclassification to assets held for sale	-	-	-
Inventories – in the closing balance	906	965	827

Network maintenance equipment and equipment intended for sale to customers are measured at the lower of cost or likely realizable value. The cost corresponds to the purchase or production cost determined by the weighted average cost method.

Handset inventories include inventories treated as consignment with distributors when these are qualified, for accounting purposes, as agents in the sales of handsets bought from the Group.

Film or sports broadcasting rights are recognized in the statement of financial position when they are available for exhibition and expensed when broadcast.

5.5 Prepaid expenses

(in millions of euros)	December 31, 2019	December 31, 2018	
Prepaid external purchases	678	522	
Other prepaid operating expenses	52	49	47
Total	730	571	455
(in millions of euros)	2019	2018	2017
Prepaid expenses – in the opening balance	571	455	394
Business related variations	127	93	78
Changes in the scope of consolidation	65	6	-
Translation adjustment	5	0	(17)
Reclassifications and other items	(38)	17	0
Reclassification to assets held for sale	1	-	-
neclassification to assets held for sale			

5.6 Trade payables

(in millions of euros)	2019	2018	2017
Trade payables – in the opening balance	6,736	6,527	6,214
Business related variations Changes in the scope of consolidation Translation adjustment Reclassifications and other items	(85) 36 27 (32)	189 18 1 1	413 (9) (56) (35)
Reclassification to assets held for sale Trade payables – in the closing balance	6.682	6.736	6,527
o/w trade payables from telecom activities o/w trade payables from Orange Bank	6,580 102	6,635 101	6,445 82

Supplier payment terms are mutually agreed between the suppliers and Orange in accordance with the rules in force. Certain key suppliers and Orange have agreed to a flexible payment schedule which, for certain invoices, can be extended up to six months.

Trade payables and fixed asset payables that were subject to a payment extension, and had an impact on the change in working capital requirements at the end of the period, amounted to approximately 526 million euros at December 31, 2019, approximately 310 million euros at the end of 2018 and approximately 300 million euros at the end of 2017.

Trade payables resulting from trade transactions and settled in the normal operating cycle are classified as current items. They include those that have been financed by the supplier (with or without notification of transfer to financial institutions) under direct or reverse factoring, and those for which the supplier proposed an extended payment period to Orange and for which Orange confirmed the payment arrangement under the agreed terms. Orange considers these financial liabilities to carry the characteristics of trade payables, in particular due to the ongoing trade relationship, the payment schedules ultimately consistent with the operational cycle of a telecommunications operator in particular for the purchase of primary infrastructures, the supplier's autonomy in the anticipated relationship and a financial cost borne by Orange that corresponds to the compensation of the supplier for the extended payment schedule agreed.

For payables without specified interest rates, they are measured at nominal value if the interest component is negligible. For interest bearing payables, the measurement is at amortized cost.

5.7 Other liabilities

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Provision for litigation ⁽¹⁾	643	572	779
Cable network access fees (IRU) (2)	103	152	194
Submarine cable consortium (3)	168	130	157
Security deposit received	147	160	182
Orange Money – units in circulation (3)	613	497	408
Other	774	739	738
Total	2,448	2,250	2,456
o/w other non-current liabilities	353	462	521
o/w other current liabilities	2,095	1,788	1,935

⁽¹⁾ See Note 5.2.

 ⁽²⁾ See accounting policies Note 4.6.
 (3) These liabilities are offset by the receivables of the same amount (see accounting policies and Note 4.6).

(in millions of euros)	2019	2018	2017
Other liabilities – in the opening balance	2,250	2,456	2,138
Business related variations	190	(166)	267
Changes in the scope of consolidation	12	16	18
Translation adjustment	4	(2)	(7)
Reclassifications and other items	(8)	(54)	40
Reclassification to assets held for sale	-	-	-
Other liabilities – in the closing balance	2,448	2,250	2,456

5.8 Related party transactions

Orange does not purchase goods or services from the French State (either directly or via Bpifrance Participations), except the use of spectrum resources. These resources are allocated after a competitive process.

Note 6 **Employee benefits**

6.1 Labor expenses

(in millions of euros)	Note	2019	2018	2017
Average number of employees (full-time equivalents) ⁽¹⁾		135,619	135,943	138,038
Wages and employee benefit expenses		(8,240)	(8,828)	(8,402)
o/w wages and salaries		(6, 199)	(6,017)	(5,986)
o/w social security charges ⁽²⁾		(2,079)	(2,068)	(2,121)
o/w French part-time for seniors plans	6.2	6	(773)	(310)
o/w capitalized costs (3)		848	842	839
o/w other labor expenses (4)		(816)	(812)	(824)
Employee profit sharing		(181)	(180)	(183)
Share-based compensation	6.3	(73)	(66)	11
Total in operating income		(8,494)	(9,074)	(8,574)
Net interest on the net defined liability in finance costs		(20)	(16)	(21)
Actuarial (gains)/losses in other comprehensive income		(109)	45	16

Of whom 36% were Orange SA's French civil servants (40% at December 31, 2018 and 45% at December 31, 2017).

6.2 Employee benefits

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Post-employment benefits ⁽¹⁾	1,105	989	1,005
Other long-term benefits	1,867	2,434	2,313
o/w French part-time for seniors plans	1,233	1,784	1,644
Provision for employment termination benefits	2	3	4
Other employee-related payables and payroll taxes due	1,782	1,715	1,710
Provision for social risks and litigation	59	74	90
Total	4,815	5,215	5,122
o/w non-current employee benefits o/w current employee benefits	2,554 2,261	2,823 2,392	2,674 2,448

⁽¹⁾ Does not include defined contribution plans

The payments to be made in respect of post-employment benefits and other long-term benefits are presented below. These are estimated based on Group headcounts as of December 31, 2019, including rights acquired and not acquired at December 31, 2019, but for which it is assumed the rights will be acquired by the year 2040 approximately:

(in millions of euros)		Scl	nedule of be	nefits to be	paid, und	discounted
	2020	2021	2022	2023	2024	2025 and beyond
Post-employment benefits	60	56	51	45	54	2,595
Other long-term benefits (1)	515	389	307	250	145	87
o/w French part-time for seniors plans	425	318	240	197	91	20
Total	575	445	358	295	199	2,682

⁽¹⁾ Provisions for Time Saving Account (CET) and long-term leave and long-term sick leave not included.

Types of post-employment benefits and other long-term benefits

In accordance with the laws and practices in force in the countries where it operates, the Group has obligations in terms of employee benefits:

- with regard to retirement, the majority of employees are covered by defined contribution plans required by law or under national agreements. In France, civil servants employed by Orange SA are covered by the French government sponsored civil and military pension plan. Orange SA's obligation under the plan is limited to the payment of annual contributions (French law No. 96-660 dated July 26, 1996). Consequently, Orange SA has no obligation to fund future deficits of the pension plans covering its own civil servant employees or any other civil service plans. Expenses recognized under the terms of defined contribution pension plans amounted to 724 million euros in 2019 (828 million euros in 2018 and 924 million euros in 2017);

the Group is committed to a limited number of annuity-based defined-benefit plans: notably the Equant plans in the United Kingdom for 330 million euros and a plan for senior management staff in France for 205 million euros. Plan assets were transferred

⁽²⁾ Net of approximately 85 million euros for competitiveness and employment tax credit for 2018 in France (102 million euros as of December 31, 2017). (3) Capitalized costs correspond to labor expenses included in the cost of assets produced by the Group (see Notes 8.4 and 8.5).

Other labor expenses comprise other short-term allowances and benefits, payroll taxes, post-employment benefits and other long term benefits (except French part-time for seniors plans).

to these plans in the United Kingdom and in France. A few years ago, these plans were closed to new subscribers and also closed in the United Kingdom with regard to the acquisition of rights;

- the Group is also committed to capital-based defined benefit plans where, in accordance with the law or contractual agreements, employees are entitled to bonuses on retirement, depending on their years of service and end of career salary; this essentially relates to bonuses due upon retirement in France, particularly for employees under private-law contracts (838 million euros for Orange SA, equal to 84% of the capital-based plans) and for civil servants (33 million euros, equal to 3% of capital-based plans);
- other post-employment benefits are also granted to retired employees: these are benefits other than defined-benefit and defined-contribution plans;
- other long-term benefits may also be granted such as seniority awards, long-term compensated absences and French part-time for seniors plans (TPS) detailed below.

French part-time for seniors plans

The part-time for seniors plans are accessible to civil servants and employees under private contract from the French entities who are eligible for full retirement benefits within 3 to 5 years and who have at least 15 years service within the Group. Eligible employees are those who will retire no later than January 1, 2025.

These plans give employees the opportunity to work 50% or 60% of a full-time job whilst receiving:

- a base salary between 65% and 80% of full-time employment;

- the retirement entitlement benefits of full-time employment during the period in question (both the Company's and the employee's contributions);
- a minimum salary level.

These plans last for a period of at least 18 months and no longer than five years.

The beneficiaries may decide to invest part of their base compensation (5%, 10% or 15%) in a Time Savings Account (CET), with an additional Group contribution. The CET allows for a reduction in the amount of time worked.

At December 31, 2019 31,500 employees had signed up for TPS, 22,200 of whom have already passed through it. The number of employees who are or will be participating in the French part-time for seniors plans and thus included in the provision, is estimated approximately at 14,200 employees.

Key assumptions used to calculate the amount of obligations

The assessment of post-employment benefits and other long-term benefits is based on retirement age calculated in accordance with the provisions applicable to each plan and the necessary conditions to ensure entitlement to a full pension, both of which are often subject to legislative changes.

The valuation of the obligation of the French part-time for seniors plans is sensitive to estimates of the potentially eligible population and to the sign-up rate for the plans (estimated at 70% on average), and the trade-offs that the beneficiaries will ultimately make between the different plans proposed.

The discount rates used for the euro zone (which accounts for 87% of Orange's pension and other long-term employee benefit obligations) are as follows:

	December 31, 2019	December 31, 2018	December 31, 2017
More than 10 years	0.70% to 0.90%	1.70% to 1.85%	1.55% to 1.65%
Less than 10 years	-0.33% to 0.70% ⁽¹⁾	-0.20% to 1.30%	-0.25% to 1.65%

⁽¹⁾ A -0.25% rate has been used to value the obligation regarding the French part-time for seniors plans (versus -0.05% as of December 31, 2018).

The discount rates used for the euro zone are based on corporate bonds rated AA with a duration equivalent to the duration of the

The increase in annuities of the Equant plans in the United Kingdom is based on inflation (2.95% used) up to 5%. In France, the revaluation of the annuity-based plan for senior management is based on the INSEE consumer price index (2% used).

The main capital-based defined benefit plan (retirement bonuses for employees under private-law contracts in France) is principally sensitive to employment policy assumptions (Orange has historically had high numbers of staff at retirement age). The estimated increase in the capital of this plan is based on a long-term inflation assumption of 2% associated with the effect of a higher "GVT" (acronym for Wage drift - Seniority - Job-skills). "Wage drift - Seniority - Job-skills" refers to annual change in total payroll costs independent of general or categorical increases in wages and salaries, due to in-grade promotions, out of grade promotions and the aging of existing staff.

The impacts on pension benefit obligations of changes in key assumptions would be as follows:

(in millions of euros)	Rate increase by 50 poin	ts Rate decrease by 50 points
Discount rates ⁽¹⁾	- (113)	124
	Rate decrease by 5	% Rate increase by 5%
Sign-up rates for French part-time for seniors plans ⁽²⁾	(42)	42

⁽¹⁾ Includes 12 million euros for the French part-time for seniors plans (short term duration). (2) Sensitivity is performed on future entries in French part-time for seniors plans (TPS).

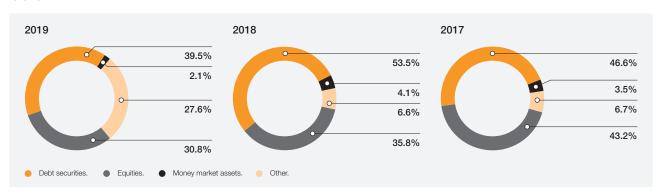
6.2.3 Commitments and plan assets

(in millions of euros)		Post-employment L benefits		ong-term benefits	2019	2018	2017	
	Annuity- based plans	Capital- based plans	-	French part-time for seniors lans (TPS)	Other			
Total benefit obligations in the opening balance	502	833	68	1,784	650	3,837	3,727	4,009
Service cost	1	48	1	45	51	146	786	154
Net interest on the defined benefit liability Actuarial losses/(gains) arising	9	17	1	(1)	1	27	23	29
from changes of assumptions	32	122	(52)	(22)	2	82	(34)	67
o/w arising from change in discount rate	53	120	2	5	2	182	(38)	37
Actuarial losses/(gains) arising from experience	ce 5	28	1	(29)	0	5	78	212
Benefits paid	(21)	(41)	(3)	(545)	(77)	(687)	(746)	(738)
Translation adjustment and other	15	(4)	1	1	7	20	3	(6)
Total benefit obligations								
in the closing balance (a)	543	1,003	17	1,233	634	3,430	3,837	3,727
o/w benefit obligations in respect of employe	е							
benefit plans that are wholly or partly funded	543	19	-	-	-	562	507	523
o/w benefit obligations in respect of employe	е							
benefit plans that are wholly unfunded	-	984	17	1,233	634	2,868	3,330	3,204
Weighted average duration of the plans (in year	rs) 13	14	18	2	5	9	6	6
(in millions of euros)		Post-em	olovment	I	_ong-term	2019	2018	2017

(in millions of euros)		Post-employment benefits		Long-term benefits		2019	2018	2017
-	Annuity- based plans	Capital- based plans		French part-time for seniors plans (TPS)	Other			
Fair value of plan assets in the opening balance	414	(0)	-	-	-	414	409	395
Net interest on the defined benefit liability	8	(0)	-	-	-	8	7	7
(Gains)/Losses arising from experience	26	(O)	-	-	-	26	2	20
Employer contributions	16	-	-	-	-	16	16	18
Benefits paid by the fund	(19)	-	-	-	-	(19)	(17)	(22)
Translation adjustment and other	13	-	-	-	-	13	(3)	(9)
Fair value of plan assets in the closing balance (b)	458	(0)	_	_	_	458	414	409

Funded annuity-based plans represent 16% of Group social commitments.

The funded annuity-based plans are primarily located in the United Kingdom (63%) and France (35%) and their assets are broken down as follows:



Employee benefits in the statement of financial position correspond to commitments less plan assets. These have not been subject to asset ceiling adjustment for the periods presented.

(in millions of euros)	Post-employment benefits		Long-term benefits		2019	2018	2017	
	Annuity- based plans	Capital- based plans	Other	French part-time for seniors plans (TPS)	Other			
Employee benefits in the opening balance	88	833	68	1,784	650	3,423	3,318	3,614
Net expense for the period	2	65	2	(7)	55	117	889	452
Employer contributions	(16)	-	-	-	-	(16)	(16)	(18)
Benefits directly paid by the employer Actuarial (gains)/losses generated	(2)	(41)	(3)	(545)	(77)	(668)	(729)	(716)
during the year	11	149	(51)	-	_	109	(45)	(16)
Translation adjustment and other	2	(3)	1	1	6	7	6	2
Employee benefits in the closing balance –								
Net unfunded status (a) - (b)	85	1,003	17	1,233	634	2,972	3,423	3,318
o/w non-current	62	966	16	808	545	2,397	2,722	2,600
o/w current	23	37	1	425	89	575	701	718

The following table discloses the net expense:

(in millions of euros)		Post-employment benefits		L	Long-term benefits		2018	2017
	Annuity- based plans	Capital- based plans		French part-time for seniors plans (TPS)	Other			
Service cost Net interest on the net defined benefit liability Actuarial gains/(losses)	(1) (1) -	(48) (17)	(1) (1) -	(45) 1 51	(51) (1) (3)	(146) (19) 48	(786) (16) (87)	(154) (21) (277)
Total	(2)	(65)	(2)	7	(55)	(117)	(889)	(452)
o/w expenses in operating income o/w net interest on the net defined	(1)	(48)	(1)	6	(54)	(98)	(873)	(431)
liability in finance cost	(1)	(17)	(1)	1	(1)	(19)	(16)	(21)

Accounting policies

Post-employment benefits are granted through:

- defined contribution plans: the contributions, paid to independent institutions which are in charge of the administrative and financial
 management thereof, are recognized in the fiscal year during which the services are rendered;
- defined-benefit plans: the sum of future obligations under these plans are based on actuarial assumptions using the projected unit credit method:
 - their calculation is based on demographic (employee turnover, mortality, gender parity, etc.) and financial assumptions (salary increases, rate of inflation, etc.) defined at the level of each entity concerned,
 - the discount rate is defined by country or geographical area and by reference to market yields on high quality corporate bonds (or government bonds where no active market exists). Its computation is based on external indices commonly used as reference for the Eurozone,
 - actuarial gains and losses on post-employment benefits are fully recorded in other comprehensive income,
 - the Group's defined benefit plans are generally not financed. In the rare cases where they are, hedging plan assets are set up by employer and employee contributions which are managed by separate legal entities whose investments are subject to fluctuations in the financial markets. These entities are generally administrated by joint committees comprising representatives of the Group and of the beneficiaries. Each committee adopts its own investment strategy which is designed to strike the optimum strategies to match assets and liabilities, based on specific studies performed by external experts. It is generally carried out by fund managers selected by the committees and depends on the market opportunities. Assets are measured at fair value, determined by reference to quoted prices, since they are mostly invested in listed securities (primarily shares and bonds) and the use of other asset categories is limited.

Other long-term benefits may be granted such as seniority awards, long-term compensated absences and French part-time for seniors plan (TPS) agreements. The calculation of the related commitments is based on actuarial assumptions (including demographic, financial and discounting assumptions) similar to those relating to post-employment benefits. The relevant actuarial gains and losses are recognized in profit or loss when they arise.

Termination benefits are subject to provisions (up to the related obligation). For all commitments where termination of employment contracts would trigger payment of an indemnity, actuarial gains and losses are recognized in profit or loss for the period when modifications take place.

6.3 Share-based payment

Orange Vision 2020 free share award plan

2017 - 2019 free share award (FSA) plan

On October 25, 2017 the Board of Directors approved the implementation of a free share award plan for employees of 9.2 million units, of which a maximum estimated at 9.1 million would be issued in the form of shares. This plan has been granted to some 144,000 employees working in 87 countries. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the plan will receive a cash value based on the exchange-traded price of Orange stock on March 31, 2020.

Vesting occurred at December 31, 2019 and the awarding of shares on March 31, 2020, the shares being subject to:

- a condition of employment from September 1, 2017 to December 31, 2019; and
- internal performance conditions, specifically the adjusted EBITDA including banking activities (50%) and the organic cash-flow from telecom activities (50%) as defined by the plan.

Each of these indicators will be compared to the budget approved by the Board of Directors for each of the three years. If the performance conditions were not met, each employee meeting the employment condition would nonetheless be awarded half of the shares initially planned.

Performance is assessed for the years 2017, 2018 and 2019 in relation to the budget for each of these three years, as approved in advance by the Board of Directors. As such, satisfaction of each performance condition is recorded year on year and entitlement to final allocation is a percentage based on the sum of performances assessed over the course of the vesting period. The definitive number of shares allocated

will be announced on March 31, 2020, following confirmation by the Board of Directors of achievement or non-achievement of the performance conditions of the past year.

Long Term Incentive Plan (LTIP) 2017 - 2019

In addition to the free share award plan, the Board of Directors' Meeting on July 26, 2017 approved the implementation of a free share award plan (Long Term Incentive Plan or LTIP) reserved for the Executive Committee, Corporate Officers, executives and leaders involving 1.6 million free shares units. This plan was granted to approximately 1,200 employees. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the International Plan will receive an amount in cash equal to the price of Orange stock on March 31, 2020.

Vesting occurred at December 31, 2019, and the awarding of shares on March 31, 2020, the shares being subject to:

- a condition of continued employment from January 1, 2017 with respect to corporate officers and members of the Executive Committee and from July 15, 2017, with respect to the qualifying senior executives, until December 31, 2019;
- performance conditions, internal and external respectively, namely the organic cash flow from telecom activities (50%) as defined in the plan, assessed annually in comparison with the budget, and the Total Shareholder Return (TSR) (50%). TSR performance is measured by comparing the change between January 1, 2017 and December 31, 2019 in Orange's TSR based on the relative performance of the total return to an Orange shareholder over the three years with the change in TSR calculated on the average values of the Stoxx Europe 600 Telecommunications reference index or any other index having the same purpose and therefore a substitute for the duration of the Plan.

Valuation assumptions:

	Free share award plan	Long Term Incentive Plan
Measurement date Vesting date Price of underlying instrument at measurement date Price of underlying instrument at closing date Expected dividends (% of the share price) Risk free yield	October 26, 2017 December 31, 2019 13.74 euros 13.12 euros 4.5% -0.45%	July 26, 2017 December 31, 2019 14.33 euros 13.12 euros 4.5% -0.32%
Fair value per share of benefit granted to employees	12.45 euros	9.55 euros
o/w fair value of internal performance condition o/w fair value of external performance condition	12.45 euros -	12.81 euros 6.29 euros

Accounting effect

For the portion of the free share award plan issued in the form of shares, fair value has been determined based on the market price of Orange shares on the date of allocation and the expected dividends discounted until December 31, 2019. For the portion of the LTIP plan issued in the form of shares, fair value also takes into account the likelihood of achievement of the market performance conditions,

determined using the Monte Carlo method. For the portion of the plans issued in cash, as of December 31, 2019, fair value has been determined based on the market price of Orange shares on the closing date.

All the performance criteria were met with the exception of the criteria relating to 2018 organic cash flow.

The total charge of the plan amounted to 131 million euros (including social security contributions), including 14 million euros recorded in 2017, 57 million euros in 2018 and 59 million euros in 2019 with corresponding entries in equity of 44 million euros and social debt of 15 million euros.

The social security contributions for the French entities will be due upon delivery of the shares in 2020.

Long Term Incentive Plan (LTIP) 2018 - 2020

The Board of Directors' Meeting on July 25, 2018 approved the implementation of a free share award plan (Long Term Incentive Plan or LTIP) reserved for the Executive Committee, Corporate Officers,

executives and leaders involving 1.7 million free shares units. This plan was granted to approximately 1,200 employees. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the International Plan will receive an amount in cash equal to the price of Orange stock on March 31, 2021.

Vesting will occur at December 31, 2020, and the awarding of shares on March 31, 2021, the shares being subject to:

- a condition of continued employment from January 1, 2018 until December 31, 2020;
- performance conditions, internal and external respectively, namely the organic cash flow from telecom activities (50%) as defined in the plan, assessed annually in comparison with the budget, and the Total Shareholder Return (TSR) (50%). TSR performance is assessed by comparing, between January 1, 2018 and December 31, 2020, the evolution of Orange's TSR based on its total shareholder return performance over the three fiscal years, and the evolution of its TSR based on the average values of the "Stoxx Europe 600 Telecommunications" index or any other similar index that may replace it during the lifetime of the Plan.

Valuation assumptions

	Long Term Incentive Plan
Measurement date Vesting date Price of underlying instrument at measurement date Price of underlying instrument at closing date Expected dividends (% of the share price) Risk free yield	July 25, 2018 December 31, 2020 13.98 euros 13.12 euros 5.0% -0.33%
Fair value per share of benefit granted to employees	11.23 euros
o/w fair value of internal performance condition o/w fair value of external performance condition	11.94 euros 10.51 euros

For the portion of the plan issued in the form of shares, fair value has been determined based on the market price of Orange shares on the date of allocation and the expected dividends discounted until December 31, 2019. For the portion of the LTIP plan issued in the form of shares, fair value also takes into account the likelihood of achievement of the market performance conditions, determined using the Monte Carlo method. For the portion of the plan issued in cash, as of December 31, 2019, fair value has been determined based on the market price of Orange shares on the closing date.

Accounting effect

In 2018, the performance criterion based on organic cash flow was not met, a charge of 3 million euros (including social security contributions) was recorded for the period concerned (based on the dates of the Board of Directors' meetings that approved the plans), with corresponding entries in equity of 2 million euros and in social debt of 1 million euros.

In 2019, all performance criteria were met, a charge of 7 million euros (including social security contributions) was recorded, with corresponding entries in equity of 6 million euros and social debt of 1 million euros.

The social security contributions for the French entities will be due upon delivery of the shares in 2021.

Long Term Incentive Plan (LTIP) 2019 - 2021

The Board of Directors' Meeting on July 24, 2019 approved the implementation of a free share award plan (Long Term Incentive Plan or LTIP) reserved for the Executive Committee, Corporate Officers, executives and leaders involving 1.7 million free shares units. This plan was granted to approximately 1,200 employees. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the International Plan will receive an amount in cash equal to the price of Orange stock on March 31, 2022.

Vesting will occur at December 31, 2021, and the awarding of shares on March 31, 2022, the shares being subject to:

- a condition of continued employment from January 1, 2019, until December 31, 2021;
- performance conditions, internal and external respectively, namely the organic cash flow from telecom activities (50%) as defined in the plan, assessed annually in comparison with the budget, and the Total Shareholder Return (TSR) (50%). TSR performance is assessed by comparing, between January 1, 2019 and December 31, 2021, the evolution of Orange's TSR based on its total shareholder return performance over the three fiscal years, and the evolution of its TSR based on the average values of the "Stoxx Europe 600 Telecommunications" index or any other similar index that may replace it during the lifetime of the Plan.

Valuation assumptions

	Long Term Incentive Plan
Measurement date	July 24, 2019
Vesting date	December 31, 2021
Price of underlying instrument at measurement date	13.16 euros
Price of underlying instrument at closing date	13.12 euros
Expected dividends (% of the share price)	5.3%
Risk free yield	-0.70%
Fair value per share of benefit granted to employees	7.80 euros
o/w fair value of internal performance condition	11.10 euros
o/w fair value of external performance condition	4.50 euros

For the portion of the plan issued in the form of shares, fair value has been determined based on the market price of Orange shares on the date of allocation and the expected dividends discounted until December 31, 2019. For the portion of the LTIP plan issued in the form of shares, fair value also takes into account the likelihood of achievement of the market performance conditions, determined using the Monte Carlo method. For the portion of the plan issued in cash, as of December 31, 2019, fair value has been determined based on the market price of Orange shares on the closing date.

Accounting effect

In 2019, all the performance criteria were met, a charge of 3 million euros (including social security contributions) was recorded for the

period concerned (based on the dates of the Board of Directors' Meetings that approved the plans), with corresponding entries in equity of 2 million euros and in social debt of 1 million euros.

The social security contributions for the French entities will be due upon delivery of the shares in 2022.

Other plans

All stock option plans granted by the various Group entities reached maturity in 2017. No options had been exercised in 2017.

Accounting policies

Employee share-based compensation: the fair value of stock options and bonus shares is determined by reference to the exercise price, the life of the option, the current price of the underlying shares at the grant date, the expected share price volatility, expected dividends, and the risk-free interest rate over the option's life. Vesting conditions other than market conditions are not part of the fair value assessment, but are part of the grant assumptions (employee turnover, probability of achieving performance criteria).

The determined amount is recognized in labor expenses on a straight-line basis over the vesting period, with as counterparty:

- employee benefit liabilities for cash-settled plans, re-measured against profit or loss at each year-end; and
- equity for equity-settled plans.

6.4 Executive compensation

The following table shows the compensation booked by Orange SA and its controlled companies to persons who were members of Orange SA's Board of Directors or Executive Committee at any time during the year or at the end of the year.

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Short-term benefits excluding employer social security contributions (1) Short-term benefits: employer's social security contributions Post-employment benefits (2) Share-based compensation (3)	(13.5)	(14.7)	(12.9)
	(4.2)	(4.6)	(4.1)
	(0.1)	(0.4)	(1.2)
	(2.0)	(1.2)	(0.4)

⁽¹⁾ Includes all compensation: gross salaries including the variable component, bonuses, attendance fees and benefits in kind, incentive scheme and profit-sharing, cash settled Long Term Incentive Plan (LTIP) in 2017 and 2018.

⁽²⁾ Service cost.

⁽³⁾ Includes employee shareholding plans and shares settled Long Term Incentive Plan (LTIP).

The total amount of retirement benefits (contractual retirement bonuses and defined-benefit supplementary pension plan) provided in respect of persons who were members of the Board of Directors or Executive Committee at the end of the year was 6.1 million euros (5.7 million euros in 2018 and 19.6 million euros in 2017).

Executive Committee members' contracts include a clause providing for a contractual termination settlement not exceeding 15 months of their total gross annual compensation (including the contractual termination benefit). Stéphane Richard, Chairman and Chief Executive

Officer, has no employment contract, and the employment contracts of Deputy CEOs were suspended on the date of their appointment as corporate officers. These employment contracts may be reinstated at the end of their terms of office, with recovery of rights.

Orange has not acquired any other goods or services from persons who are or were at any time during the year or at the end of the fiscal year, members of the Board of Directors or Executive Committee of Orange SA (or any parties related thereto).

Note 7 Impairment losses and goodwill

7.1 Impairment losses

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Jordan Luxembourg Democratic Republic of the Congo	(54) - -	(56)	(19) (1)
Total of impairment of goodwill	(54)	(56)	(20)

The impairment tests on Cash Generating Units (CGUs) may result in impairment losses on goodwill and on the fixed assets (see Note 8.3).

At December 31, 2019

In Jordan, the 54 million euros impairment of goodwill still reflects the effects of an uncertain political and economic climate and heavy competitive pressure on the fixed and mobile data markets. The net carrying value of assets tested was brought down to the value in use of long-term assets and working capital at 100% as of December 31, 2019 (0.8 billion euros).

In Egypt, the reversal of 89 million euros on provisions for property assets primarily reflects an improvement in that country's economic situation (see Note 8.3).

At December 31, 2018

In Jordan, the 56 million euros impairment of goodwill mostly reflected the effects of an uncertain political and economic climate and heavy competitive pressure on the fixed and mobile data markets. The net carrying value of assets tested was brought down to the value in use of long-term assets and working capital at 100% at December 31, 2018 (0.7 billion euros).

In Niger, the telecommunications market continued to fall in terms of value in a still-difficult business context. Because of its economic and financial position, the Company remained prudent and recognized an impairment of property assets in the amount of (43) million euros which

should cover Orange's exposure as closely as we could estimate it as of December 31, 2018.

At December 31, 2017

In Niger, the impairment of fixed assets in the amount of 52 million euros reflected an uncertain political and economic climate and the effects resulting from strong tax and regulatory pressure. The net carrying value of assets tested was brought down to the value in use of long-term assets and working capital at 100% at December 31, 2017 (0.1 billion euros).

In Luxembourg, the goodwill impairment in the amount of 19 million euros primarily reflected strong competitive pressure. The net carrying value of assets tested was brought down to the value in use of long-term assets and working capital at 100% at December 31, 2017 (0.1 billion euros).

In the Democratic Republic of the Congo, the impairment in the amount of 120 million euros (of which 1 million euros for goodwill and 119 million euros for fixed assets (see Note 8.3)), reflected an ongoing uncertain political and economic climate, a proven decrease in purchasing power with its effects on the consumption of telecommunications products and services and a continuous regulatory pressure. The net carrying value of assets tested was brought down to the value in use of long-term assets and working capital at 100% at December 31, 2017 (0.1 billion euros).

7.2 Goodwill

(in millions of euros)	[December 31, 201	19	December 31, 2018	December 31, 2017
	Gross value	Accumulated impairment losses	Net book value	Net book value	Net book value
France	14,377	(13)	14,364	14,364	14,364
Spain	6,986	(114)	6,872	6,840	6,818
Europe	6,683	(4,017)	2,665	2,580	2,589
Poland	2,856	(2,716)	140	111	116
Belgium	1,063	(713)	350	298	298
Romania	1,806	(570)	1,236	1,236	1,236
Slovakia	806	-	806	806	806
Moldova	83	-	83	79	83
Luxembourg	68	(19)	50	50	50
Africa & Middle East	2,621	(1,140)	1,481	1,542	1,629
Egypt	617	(617)	-	-	-
Burkina Faso	428	-	428	428	448
Côte d'Ivoire	417	(42)	375	375	375
Jordan	280	(168)	112	163	210
Morocco	257	-	257	251	246
Sierra Leone	134	-	134	152	181
Democratic Republic of the Congo	199	(199)	-	-	-
Cameroon	134	(90)	44	44	44
Other	155	(25)	131	129	125
Enterprise	2,894	(650)	2,245	1,830	1,493
International Carriers & Shared Services	18	-	18	18	18
Goodwill	33,579	(5,935)	27,644	27,174	26,911

(in millions of euros)	Note	December 31, 2019	December 31, 2018	December 31, 2017
Gross Value in the opening balance		32,949	32,687	32,689
Acquisitions Disposals Translation adjustment Reclassifications and other items Reclassification to assets held for sale		520 (4) 111 3	353 (12) (39) (40)	38 - (40) - -
Gross Value in the closing balance		33,579	32,949	32,687
Accumulated impairment losses in the opening balance		(5,775)	(5,776)	(5,710)
Impairment Disposals Translation adjustment Reclassifications and other items Reclassification to assets held for sale	7.1	(54) 4 (110) - -	(56) 12 45 - -	(20) - (46) - -
Accumulated impairment losses in the closing balance		(5,935)	(5,775)	(5,776)
Net book value of goodwill for continuing operations		27,644	27,174	26,911

7.3 Key assumptions used to determine recoverable amounts

The key operational assumptions reflect past experience and expected trends: unforeseen changes have in the past affected, and could continue to significantly affect, these expectations. In this respect, the review of expectations could affect the margin of recoverable amounts over the carrying value tested (see Note 7.4) and result in impairment losses on goodwill and fixed assets.

In 2019 the Group updated its strategic plan. Thus, new business plans have been established for all CGUs.

- discount rates and growth rates to perpetuity used to determine the values in use were revised as follows at the end of December 2019:
 - the discount rates, which may incorporate a specific premium reflecting increased risk in executing certain business plans or in-country risks, were raised in Europe and lowered in the Middle East and Africa, where the risk premium is trending down. In Europe, Brexit is a factor of volatility for the market and economic activity that might in the future affect interest rates and therefore discount rates,
 - the perpetual growth rate was higher in Poland and Slovakia and lower in the Middle East and Africa region, where we make more conservative assumptions about trajectories past the business

plan horizon. In Europe, the perpetual growth rates were maintained, on the whole, as in the assessment carried out at the end of December 2019, the economic situation is not expected to lead to any change in the long-term outlook of the industry of services offered by the Group;

- as of December 31, 2019, the specific random factors were as follows:
 - in Europe:
 - the tradeoffs to be made by regulatory and competition authorities between reducing prices to consumers and stimulating business investment, or in terms of rules for awarding 5G operating licenses or of market concentration,
 - the fiercely competitive nature of the markets where the Group operates, where price pressure is strong, particularly in Spain,
 - the Group's ability to adjust costs and capital expenditures to potential changes in revenue;
 - in the Middle East and Maghreb (Jordan, Egypt, Tunisia) and some of the African countries (Mali, Democratic Republic of the Congo, Central African Republic):
 - changes in the political situation and security with their resulting negative economic impacts on overall business climate.

The parameters used for the determination of recoverable amount of the main consolidated operations are set forth below:

December 31, 2019	France	Spain	Poland I	Enterprise	Belgium	Sierra Leone	Liberia
Basis of recoverable amount			Va	lue in use			
Source used			Int	ernal plan			
Methodology			Discou	nted cash f	ow		
Perpetuity growth rate	0.8%	1.5%	1.5%	0.3%	0.5%	3.8%	3.8%
Post-tax discount rate	6.0% (1)	7.3%	8.3%	7.5%	7.5%	13.0%	13.0%
Pre-tax discount rate	8.1%	9.1%	9.7%	10.0%	9.6%	15.9%	15.9%
December 31, 2018							
Basis of recoverable amount			Va	lue in use			
Source used				ernal plan			
Methodology			Discou	nted cash f	OW		
Perpetuity growth rate	0.8%	1.5%	1.0%	0.3%	0.5%	4.0%	4.0%
Post-tax discount rate	6.0% (1)	7.0%	8.0%	7.5%	6.8%	14.8%	15.0%
Pre-tax discount rate	7.8%	8.8%	9.5%	10.2%	8.6%	18.4%	17.9%
December 31, 2017							
Basis of recoverable amount			Va	lue in use			
Source used			Int	ernal plan			
Methodology			Discou	nted cash f	ow		
Perpetuity growth rate	0.8%	1.5%	1.0%	0.3%	0.5%	4.0%	4.0%
Post-tax discount rate	5.5% (2)	8.6%	8.3%	7.5%	6.8%	14.0%	14.3%
Pre-tax discount rate	7.4%	10.8%	9.7%	10.7%	9.0%	17.1%	16.9%

The Group's listed subsidiaries are Orange Polska (Warsaw Stock Exchange), Orange Belgium (Brussels Stock Exchange), Jordan Telecom (Amman Stock Exchange), Sonatel (Regional Stock Exchange (BRVM)) and Business & Decision (Euronext). The aggregated share of these subsidiaries, which publish their own regulated information, is less than or equal to 20% of the consolidated revenue, operating income and net income.

⁽¹⁾ The after-tax discount rate for France includes a corporate tax reduction of 25.82% by 2022.
(2) The after-tax discount rate for France includes a corporate tax reduction of 28.92% by 2020 but it does not include the corporate tax reduction of 25.82% by 2022 voted in the 2018 Finance law at the end of December 2017.

7.4 Sensitivity of recoverable amounts

Because of the correlation between operating cash flow and investment capacity, sensitivity of net cash flow is used. Cash flow for the terminal year forming a significant part of the recoverable amount, of which a change of plus or minus 10% is presented in the sensitivity analysis.

Cash flow is cash provided by operating activities net of acquisitions and sales of property, plant and equipment and intangible assets (including tax at a standard rate, lease liabilities repayments and debts

related to financed assets repayments, related interest expenses and excluding other interest expenses).

Sensitivity test was conducted for these CGUs and is presented below to allow readers of the financial statements to estimate the impact in their own assessment. Variations higher that the levels presented have been observed in the past on cash flow, perpetuity growth rates and discount rates.

	Increase in discount rate in order for the recoverable amount to be equal to the net carrying value (in basis points)	Decrease in the perpetual growth rate in order for the recoverable amount to be equal to the net carrying value (in basis points)	Decrease in the discounted cash flows of the terminal value in order for the recoverable amount to be equal to the net carrying value (in %)
December 31, 201	9		
France	+252 bp	(243) bp	-40%
Spain	+54 bp	(63) bp	-11%
Poland	+200 bp	(178) bp	-24%
Belgium	+856 bp	(711) bp	-69%
Enterprise	+1 130 bp	(1 783) bp	-84%
Sierra Leone	+50 bp	(86) bp	-9%
Liberia	+83 bp	(154) bp	-15%
December 31, 201	8		
France	+347 bp	(399) bp	-48%
Spain	+144 bp	(173) bp	-26%
Poland	+354 bp	(312) bp	-33%
Belgium	+301 bp	(324) bp	-38%
Enterprise	+1 299 bp	(3 573) bp	-88%
December 31, 201	7		
France	+347 bp	(403) bp	-50%
Spain	+225 bp	(292) bp	-32%
Poland	+156 bp	(161) bp	-20%
Belgium	+336 bp	(375) bp	-41%
Enterprise	+1 443 bp	(4 496) bp	-91%
Romania	+38 bp	(41) bp	-6%
Jordan	+4 bp	(4) bp	-1%
Liberia	+45 bp	(98) bp	-10%

At December 31, 2019 the sensitivity analysis performed on the impaired CGU in Jordan did not disclose any significant risk of additional impairment.

This analysis was carried out on each of the following criteria, taken one at a time:

- discount rate higher by 1%;
- perpetual growth rate lower by 1%;
- cash flow in final year lower by 10%.

The same analysis was performed on Spain and disclosed an impairment risk estimated at about 10% of the net value of the goodwill.

The other entities not listed above, with the exception of the Orange brand presented in Note 8.3, each account for a less than 3% share of the aggregated recoverable amount of the consolidated entities or do not have a recoverable amount close to net book value.

Goodwill recognized as an asset in the statement of financial position comprises the excess calculated:

- either on the basis of the equity interest acquired (and for business combinations after January 1, 2010, no subsequent changes for any additional purchases of non-controlling interests); or
- on a 100% basis, leading to the recognition of goodwill relating to the non-controlling.

Goodwill is not amortized. It is tested for impairment at least annually and more frequently when there is an indication that it may be impaired. Thus, the evolution of general economic and financial trends, the different levels of resilience of the telecommunication operators with respect to the decline of local economic environments, the changes in the market capitalization values of telecommunication companies, as well as actual economic performance compared to market expectations represent external indicators that are analyzed by the Group, together with internal performance indicators, in order to assess whether an impairment test should be performed more than once a year.

These tests are performed at the level of each Cash Generating Unit (CGU) (or group of CGUs). These generally correspond to operating segments or to each country in Africa and the Middle East. This is reviewed if the Group changes the level at which it monitors return on investment for goodwill testing purposes.

To determine whether an impairment loss should be recognized, the carrying value of the assets and liabilities of the CGUs or groups of CGUs is compared to recoverable amount, for which Orange uses mostly the value in use.

Value in use is the present value of the expected future cash flows. Cash flow projections are based on economic and regulatory assumptions, license renewal assumptions and forecast trading and investment activity drawn up by the Group's management, as follows:

- cash flow projections are based on three to five-year business plans and include a tax cash flow calculated as EBIT (operating income) multiplied by the statutory tax rate (excluding deferred tax and unrecognized tax loss carry forward impacts at the date of valuation); In the case of recent acquisitions, longer term business plans may be used;
- post-tax cash flow projections beyond that timeframe may be extrapolated by applying a declining or flat growth rate for the next year, and then by a growth rate to perpetuity reflecting the expected long-term growth in the market;
- post-tax cash flows are subject to a post-tax discount rate, using rates which incorporate a relevant premium reflecting a risk assessment for the implementation of certain business plans or country risks. The value in use derived from these calculations is identical to the one that would derive from discounting pre-tax cash flows at pre-tax discount rates.

The key operating assumptions used to determine the value in use are common across Group's business segments. These assumptions include:

- key revenue assumptions, which reflect market level, penetration rate of the offerings and market share, positioning of the competition's offerings and their potential impact on market price levels and their transposition to the Group's offerings bases, regulatory authority decisions on pricing of services to customers and on access and pricing of inter-operator services, technology migration of networks (e.g. extinction of copper local loops), decisions of competition authorities in terms of concentration or regulation of adjacent sectors such as cable;
- key cost assumptions, on the level of marketing expenses required to renew product lines and keep up with competition, the ability
 to adjust costs to potential changes in revenues or the effects of natural attrition and committed employee departure plans;
- key assumptions on the level of capital expenditure, which may be affected by the roll-out of new technologies, by decisions of regulatory authorities relating to licenses and spectrum allocation, deployment of fiber networks, mobile network coverage, sharing of network elements or obligations to open up networks to competitors.

Tested net carrying values include goodwill, land, and assets with finite useful life (property, plant and equipment, intangible assets and net working capital requirements including intragroup balances). The Orange brand, an asset with an indefinite useful life, is subject to a specific test, see Note 8.3.

If an entity partially owned by the Group includes goodwill attributable to non-controlling interests, the impairment loss is allocated between the shareholders of Orange SA and the non-controlling interests on the same basis as that on which profit or loss is allocated (i.e. ownership interest).

Impairment loss for goodwill is recorded definitively in operating income.

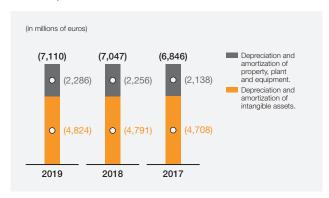
Note 8 Fixed assets

8.1 Gains (losses) on disposal of fixed assets

(in millions of euros)	2019	2018	2017
Transfer price Net book value of assets sold	610 (307)	224 (44)	124 (36)
Proceeds from the disposal of fixed assets ⁽¹⁾	303	180	88

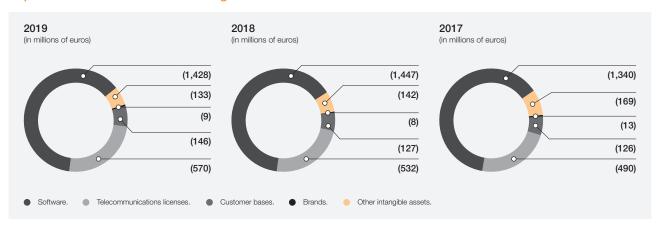
⁽¹⁾ In 2019, the gains on disposal of fixed assets related to the sale and leaseback transactions amount to 195 million euros and mainly comprise property asset disposals in France and Poland, as well as mobile site disposals in Spain. These transactions fall within the context of the Group asset portfolio review.

8.2 Depreciation and amortization

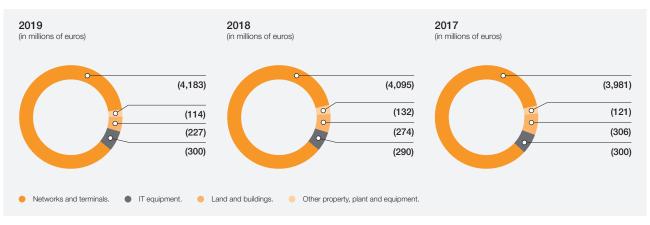


The increase in depreciation and amortization by 63 million euros in 2019 and by 201 million euros in 2018 is mainly due to the effect of the increase in investments on very high-speed broadband networks (4G and optical fiber) in France, Spain and Poland.

Depreciation and amortization of intangible assets



Depreciation and amortization of property, plan and equipment



Assets are depreciated to expense their cost (generally with no residual value deducted) on a basis that reflects the pattern in which their future economic benefits are expected to be consumed. The straight-line basis is usually applied. The useful lives are reviewed annually and are adjusted if current estimated useful lives differ from previous estimates. This may be the case for outlooks on the implementation of new technologies (for example, the replacement of copper local loop by optical fiber). These changes in accounting estimates are recognized prospectively.

Main assets	Depreciation period (average)
Brands acquired	Up to 15 years, except for the Orange brand with an indefinite useful life
Customer bases acquired	Expected life of the commercial relationship: 3 to 16 years
Mobile network licenses	Grant period from the date when the network is technically ready and the service can be marketed
Indefeasible Rights of Use of submarine and terrestrial cables	Shorter of the expected period of use and the contractual period, generally less than 20 years
Patents	20 years maximum
Software	5 years maximum
Development costs	3 to 5 years
Buildings	10 to 30 years
Transmission and other network equipment	5 to 10 years
Copper cables, optical fiber and civil works	10 to 30 years
Computer hardware	3 to 5 years

8.3 Impairment of fixed assets

(in millions of euros)	2019	2018	2017
Egypt Niger	89	(4) (43)	2 (52)
Democratic Republic of the Congo Poland	- (12)	- 1	(119)
Other	(4)	(2)	(21)
Total of impairment of fixed assets	73	(49)	(190)

The impairment of fixed assets resulting from the impairment tests on Cash-Generating Units (CGUs) are described in Note 7.1.

Key assumptions and sensitivity of the recoverable amount of the Orange brand

Key assumptions and sources of sensitivity used in the assessment of recoverable amount of the Orange brand are similar to those used for the goodwill of consolidated operations (see Note 7.3), which affect the sales base and potentially the level of brand fees.

Other assumptions that affect the assessment of the recoverable amount are as follows: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1$

	December 31, 2019	December 31, 2018	December 31, 2017
Basis of recoverable amount	Value in use	Value in use	Value in use
Source used	Internal plan	Internal plan	Internal plan
Methodology	Discounted net fees	Discounted net fees	Discounted net fees
Perpetuity growth rate	1.1%	1.2%	1.1%
Post-tax discount rate	7.4%	7.4%	7.6%
Pre-tax discount rate	8.8%	8.8%	8.9%

The sensitivity analysis did not highlight any risk of impairment of the Orange brand.

Given the nature of its assets and businesses, most of the Group's individual assets do not generate cash flow independent of the cash flows generated by Cash-Generating Units. The recoverable amount is therefore determined on the level of CGU (or CGU group) to which belong the assets, according to a method similar to the one for goodwill.

The Orange brand has an indefinite useful life and is not amortized but is tested for impairment at least annually. Its recoverable amount is assessed based on the expected contractual royalties (and included in the business plan) discounted in perpetuity, less the costs attributable to the brand's owner.

8.4 Other intangible assets

(in millions of euros)	December 31, 2019			December 31, 2018	December 31, 2017	
	Gross value	Accumulated depreciation and amortization	Accumulated impairment	Net book value	Net book value	Net book value
Telecommunications licenses Software Orange brand Other brands Customer bases Other intangible assets	11,435 12,833 3,133 1,117 5,329 2,230	(5,340) (8,563) - (114) (4,720) (1,426)	(51) (21) - (915) (12) (179)	6,043 4,250 3,133 88 597 626	5,917 4,046 3,133 89 449 439	6,233 3,946 3,133 88 555 384
Total	36,078	(20,163)	(1,178)	14,737	14,073	14,339

(in millions of euros)	2019	2018	2017
Net book value of other intangible assets – in the opening balance	14,073	14,339	14,602
Acquisitions of other intangible assets	2,385	1,895	1,893
o/w telecommunications licenses ⁽¹⁾	519	200	318
Impact of changes in the scope of consolidation (2)	328	69	(13)
Disposals	(10)	(O)	(7)
Depreciation and amortization	(2,286)	(2,256)	(2,138)
Impairment (3)	88	(10)	(55)
Translation adjustment	106	7	(74)
Reclassifications and other items	52	29	131
Reclassifications to assets held for sale	-	-	-
Net book value of other intangible assets – in the closing balance	14,737	14,073	14,339

⁽¹⁾ Relates in 2019 to licenses for 296 million euros in Spain, for 119 million euros in Burkina Faso and for 82 million euros in Guinea. In 2018, related to the acquisition of the 5G license for

Internal costs capitalized as intangible assets

(in millions of euros)	2019	2018	2017
Labor expenses	389	382	373
Total	389	382	373

¹⁴² million euros in Spain. In 2017, related to the acquisition of licenses for 152 million euros in Mali.
(2) In 2019, mainly relates to the effects of SecureLink and SecureData acquisitions (see Note 3.2).
(3) Includes impairment detailed in Note 7.1.

Information on telecommunications licenses at December 31, 2019

Orange's principal commitments under licenses awarded are disclosed in Note 15.

(in millions of euros)	Gross value	Net book value	Residual useful life ⁽¹⁾
LTE (4 licenses) ⁽²⁾	2,182	1,721	11.8 to 16.9
UMTS (2 licenses)	914	209	1.7 and 10.4
GSM	266	20	1.5
France	3,362	1,950	
5G (2 licenses)	459	459	11 and 18.9
LTE (3 licenses)	523	355	11.0 to 11.3
UMTS	690	12	0.3
GSM (2 licenses)	285	136	11.0
Spain	1,957	962	
LTE (3 licenses)	798	583	8.0 and 11.1
UMTS (2 licenses)	391	71	1.0 and 3.0
GSM (2 licenses)	140	54	7.6 and 9.5
Poland	1,329	708	
LTE	441	370	12.0
UMTS	152	54	12.0
GSM (2 licenses)	428	133	12.0
Egypt	1,021	557	
LTE	52	42	15.2
UMTS	29	13	12.5
GSM	754	188	11.3
Morocco	835	243	
LTE	184	114	9.3
UMTS	61	23	9.3
GSM	292	134	9.3
Romania	537	271	
LTE	90	63	10.4
UMTS (3 licenses)	144	90	5.2 to 13.3
GSM	193	106	9.0
Jordan	427	259	
LTE (2 licenses)	140	98	7.4 and 13.9
UMTS	149	12	1.3
GSM	76	17	1.2
Belgium	365	127	
Other	1,602	968	
Total	11,435	6,044	

In number of years, at December 31, 2019.
 Comprises the 700 MHz license of which the spectrum is technologically neutral.

Intangible assets consist mainly of acquired brands, acquired customer bases, telecommunications licenses and software, as well as operating rights granted under certain concession agreement.

Intangible assets are initially recognized at acquisition or production cost. The payments indexed to revenue, especially for some telecommunications licenses, are expensed in the relevant periods.

The operating rights granted under certain concession arrangements give right to charge users of the public service (see Note 4.1).

8.5 Property, plant and equipment

(in millions of euros)	December 31, 2019			December 31, 2018	December 31, 2017	
	Gross value	Accumulated depreciation and amortization	Accumulated impairment	Net book value	Net book value	Net book value
Networks and terminals Land and buildings IT equipment Other property, plant and equipment	88,739 7,183 3,933 1,696	(63,428) (4,943) (3,128) (1,234)	(174) (214) (2) (6)	25,137 2,026 803 456	23,962 2,479 817 435	22,880 2,535 802 448
Total property, plant and equipment	101,551	(72,733)	(395)	28,423	27,693	26,665
(in millions of euros)				2019	2018	2017
Net book value of property, plant and e	equipment – in th	e opening bala	псе	27,693	26,665	25,912
IFRS 16 transition impact (1)				(574)	-	-
Net book value of property, plant and ed	quipment – includ	ling IFRS 16 tran	sition impact	27,119	26,665	25,912
Acquisitions of property, plant and equipmow finance leases o/w financed assets Impact of changes in the scope of consol Disposals and retirements Depreciation and amortization o/w fixed assets o/w financed assets Impairment (3) Translation adjustment Reclassifications and other items Reclassifications to assets held for sale				6,181 - 144 (52) (164) (4,838) (4,824) (14) (15) 115 78	5,883 136 - 63 (44) (4,791) - (39) (27) (17)	5,677 43 - 0 (35) (4,708) - (135) (44) (2)
Net book value of property, plant and e	equipment – in th	e closing balan	ce	28,423	27,693	26,665

Following IFRS 16 application as of January 1, 2019, financial lease contracts have been reclassified in right-of-use assets (see Note 2.3.1).
 Mainly relates in 2019 to the disposal of Orange Niger. In 2018, mainly related to Basefarm entities acquisition.
 Includes impairment detailed in Note 7.1.

Financed assets

Financed assets include as of December 31, 2019 the set-up boxes in France which are financed by an intermediary bank and meet the standard criterion of a tangible asset according to IAS 16. The debts associated to these financed assets are presented in financial liabilities and are included in the definition of the net financial debt.

Property, plant and equipment held under finance leases

(in millions of euros)	December 31, 2018	December 31, 2017
	Net book value	Net book value
Land and buildings	423	454
Networks and terminals	115	53
IT Equipment and other	36	21
Total	574	528

Internal costs capitalized as property, plant and equipment

(in millions of euros)	2019	2018	2017
Labor expenses	459	460	466
Total	459	460	466

Accounting policies

Property, plant and equipment are made up of tangible fixed assets and financed assets. They mainly comprise network facilities and equipment.

The gross value of property, plants and equipment is made up of their acquisition or production cost, which includes study and construction fees as well as enhancement costs that increase the capacity of equipment and facilities. Maintenance and repair costs are expensed as incurred, except where they serve to increase the asset's productivity or extend its useful life.

The cost of property, plant and equipment also includes the estimated cost of dismantling, removing and restoring the site occupied due to the obligation incurred by the Group.

The roll-out of assets by stage, especially for network assets, in the Group's assessment, does not generally require a substantial period of preparation. As a result, the Group does not generally capitalize the interest expense incurred during the construction and acquisition phase for its property, plant and equipment and intangible assets.

In France, the regulatory framework governing the optical fiber network roll-out (Fiber To The Home – FTTH) organizes the access by commercial operators to the last mile of networks rolled-out by another operator on a co-funding basis (*ab initio* or *a posteriori*) or through a line access. The sharing of rights and obligations between the various operators co-financing the terminal section of networks is classified as a joint operation in accordance with IFRS 11 "Partnerships": Orange only recognizes as an asset its share of the network assets self-built or purchased to other co-financing operators.

The Group has entered into network sharing arrangements with other mobile operators on a reciprocal basis, which may cover passive infrastructure sharing, active equipment or even spectrum. Accordingly, in Poland, the arrangements with Deutsche Telekom have been qualified as a joint operation: the infrastructure and equipment of the access networks recognized as fixed assets are equivalent to the proportionate share of the Group in the assets installed by the Group or Deutsche Telekom, each in their geographical zone.

As a reminder, before applying IFRS 16, the accounting principles related to the assets acquired in form of finance lease and in operating lease were the following:

The assets acquired in form of finance lease did not affect the cash flow on acquisition. However, the subsequent rental payments during the leasing period represented interest payments (cash flow on operating activities) and capital repayments (cash flow on financing activities).

The majority of the assets held under finance lease were office and network buildings. The land and buildings hosting radio sites could belong to the Group, or be held through a finance lease, or be available under an operating lease or be simply made available.

The lease agreements of office buildings and points of sale generally were qualified as operating leases and the future lease payments were disclosed as unrecognized contractual commitments.

Simultaneously the equipment, very often generic, of which the risks and rewards of ownership are transferred from the Group to third parties via a lease, was considered as sold.

8.6 Fixed assets payables

(in millions of euros)	2019	2018	2017
Fixed assets payables – in the opening balance	3,447	3,656	3,707
Business related variations	200	(230)	55
Changes in the scope of consolidation	(14)	Ô	0
Translation adjustment	29	8	(32)
Reclassifications and other items	3	13	(74)
Reclassification to assets held for sale	-	-	-
Fixed assets payables – in the closing balance	3,665	3,447	3,656
o/w non-current fixed assets payables	817	612	610
o/w current fixed assets payables	2,848	2,835	3,046

Accounting policies

These payables are generated from trading activities. The payment terms can be over several years in the case of infrastructure roll-out and license acquisition. The payables due in more than 12 months are presented in non-current items. For payables without specified interest rates, they are measured at nominal value if the interest component is immaterial. For interest bearing payables, the measurement is at amortized cost.

Trade payables also include those that the supplier may have sold with or without notifying financial institutions in a direct or reverse factoring arrangement (see Note 5.6).

Firm purchase commitments are disclosed as unrecognized contractual commitments (see Note 15), net of any prepayment, which are recognized as prepayment on fixed assets.

8.7 Dismantling provision

The asset dismantling obligations mainly relate to restoration of mobile telephony antenna sites, dismantling of telephone poles, treatment of electrical and electronic equipment waste and dismantling of telephone booths.

(in millions of euros)	2019	2018	2017
Dismantling provision – in the opening balance	776	789	737
Provision reversal with impact on income statement Discounting with impact on income statement Utilizations without impact on income statement Changes in provision with impact on assets (1) Changes in the scope of consolidation Translation adjustment Reclassifications and other items	(0) 5 (24) 67 - 2 0	13 (15) (19) - (3) 11	(0) 11 (20) 57 - 4
Reclassification to assets held for sale Dismantling provision – in the closing balance	825	776	789
o/w non-current provision o/w current provision	810 15	765 11	774 15

⁽¹⁾ Included in 2018 extinctions of obligations for (66) million euros.

The Group is required to dismantle technical equipment and restore technical sites.

When the obligation arises, a dismantlement asset is recognized in compensation for the dismantling provision.

The provision is based on dismantling costs (on a per-unit basis for telephone poles, terminals and telephone booths, and on a per-site basis for mobile antennas) incurred by the Group to meet its environmental commitments over the asset dismantling and site restoration planning. The provision is assessed on the basis of the identified costs for the current fiscal year, extrapolated for future years using the best estimate of the commitment settlement. This estimate is revised annually and adjusted where appropriate against the asset to which it relates. The provision is present-discounted at a rate set by geographical area and equal to the average rate of risk-free investments in 15-year State bonds.

In case of extinguishment of the obligation, the provision is reversed in compensation for the net carrying value of the dismantlement asset and of the net carrying value of the underlying assets if the dismantlement asset is less than the reversal of the provision.

Note 9 Lease agreements

In the course of its activities, the Group regularly enters into leases as a lessee. These leases concern the following asset categories:

- land and buildings;
- networks and terminals;
- iT equipment;
- other.

Accounting policies

The main accounting positions related to the application of IFRS 16 norm as of January 1, 2019 are detailed in the dedicated transition note (see Note 2.3.1).

The Group classifies as a lease, a contract that conveys to the lessee the right to control the use of an identified asset for a given period, including a service contract if it contains a lease component.

The Group has defined four major lease contract categories:

- land and buildings: these contracts mainly concern commercial (point of sale) or service activity (offices and head office) leases, as well as leases of technical buildings not owned by the Group. Real estate leases entered into in France generally have long terms (9-year commercial leases with early termination options after 3 and 6 years, known as "3/6/9 leases") (see Note 9.1). However, depending on the geographical location of the leases, the legal term may vary and the Group may be required to adopt a specific enforceable period taking into account the local legal environment;
- networks and terminals: the Group is required to lease a certain number of assets in connection with its mobile activities. This is
 notably the case of lands to be used to install antennas, mobile sites leased to a third-party operator and certain "TowerCos" contracts
 (companies operating telecom towers). Leases are also entered into as part of fixed wireline access network activities. These leases
 mainly concern access to the local loop where Orange is a market challenger (total or partial unbundling), as well as the lease of
 land transmission cables;
- IT equipment: this asset category primarily comprises leases of servers and hosting space in datacenters;
- other: this asset category primarily comprises leases of vehicles and technical equipment.

Leases are recognized in the consolidated statement of financial position via an asset reflecting the right to use the leased assets and a liability reflecting the related lease obligations (see Notes 9.2 and 9.1). In the consolidated income statement, amortization and depreciation of the right-of-use asset (see Note 9.2) is presented separately from the interest expenses on the lease liability. In the consolidated statement of cash flows, cash outflows relating to interests impact operating flows, while repayments of the lease liability impact financing flows.

When the Group proceeds with a transaction qualified as sale and leaseback according to IFRS 16, a right-of-use asset is recognized in proportion of the accounting value of the asset retained as a result of the leaseback against a lease liability. A gain (or loss) on disposal of fixed assets is recognized in the income statement in proportion of the rights transferred to the buyer-lessor. The adjustment of the gain (or loss) on disposal recognized in the income statement for the share on which the Group retains its right to use the underlying asset corresponds to the difference between the right-of-use asset and the lease liability recognized in the balance sheet.

Finally, the Group applies the two exemptions proposed by IFRS 16, concerning leases with a term of 12 months or less and leases of underlying assets with a value when new of less than 5,000 euros approximately. Leases covered by either of these exemptions are presented in off-balance sheet commitments and an expense is recognized in "external purchases" in the consolidated income statement.

9.1 Lease liabilities

As of December 31, 2019, lease liabilities amount to 6,492 million euros, including non-current lease liabilities of 5,225 million euros and current lease liabilities of 1,267 million euros.

The following table details the undiscounted future cash flows of lease liabilities:

(in millions of euros)	December 31, 2019	2020	2021	2022	2023	2024	2025 and beyond
Undiscounted lease liabilities	7,142	1,280	1,194	900	749	821	2,197

Accounting policies

The Group recognizes a liability (i.e. a lease liability) at the date the underlying asset is made available. This lease liability is equal to the present value of fixed and in-substance fixed payments not paid at that date, plus any amounts that Orange is reasonably certain to pay at the end of the lease, such as the exercise price of a purchase option (where it is reasonably certain to be exercised), or penalties payable to the lessor for terminating the lease (where the termination option is reasonably certain to be exercised).

The Group only takes into account the lease component of lease when measuring the lease liability. For certain asset classes where the lease includes service and lease components, the Group may recognize a single contract classified as a lease (i.e. without distinction between the service and lease component).

Orange systematically determines the lease term as the period during which leases cannot be canceled, plus periods covered by any extension options that the lessee is reasonably certain to exercise and by any termination options that the lessee is reasonably certain not to exercise. In the case of "3/6/9" leases in France, the term adopted is assessed on a contract by contract basis.

This period is also defined taking into account any laws and practices specific to each jurisdiction and business sector regarding the firm lease commitment term granted by lessors. This is the case for open-ended leases, where Orange generally adopts the notice period as the enforceable period. The Group nonetheless assesses, based on the circumstances of each lease, the enforceable period taking account of certain indicators such as the existence of non-insignificant penalties in the event of termination by the lessee. The Group considers in particular the economic importance of the leased asset when determining this enforceable period.

When non-removable leasehold improvements have been made to leased assets, the Group assesses, on a case-by-case basis, whether these improvements provide an economic benefit when determining the enforceable period of the lease.

When a lease includes a purchase option, the enforceable term is equal to the useful life of the underlying asset where the Group is reasonably certain to exercise the purchase option.

For each contract, the Group applies a discount rate determined based on the government loan yield, specific to each contract, according to its currency, term and the lessee country, plus the Group's credit spread.

After the lease commencement date, the amount of the lease liability may be reassessed to reflect changes introduced in the following main cases:

- a change in term resulting from a contract amendment or a change in assessment of the reasonable certainty that a renewal option will be exercised or a termination option will not be exercised;
- a change in the amount of lease payments, for example following application of a new index or rate in the case of variable payments;
- a change in assessment of whether a purchase option will be exercised;
- any other contractual change, for example a change to the scope of the lease or the underlying asset.

9.2 Right-of-use assets

(in millions of euros)		December 31, 2019					
	Gross value	Accumulated depreciation and amortization	Accumulated impairment	Net book value	Net book value		
Land and buildings Networks and terminals	6,071 1,802	(1,106) (494)	(176)	4,789 1,308	4,834 1,359		
IT equipment Other right-of-use	116 198	(87) (61)	(O) (O)	29 137	33 122		
Total right-of-use assets	8,187	(1,748)	(176)	6,263	6,347		

(in millions of euros)	December 31, 2019
Net book value of right-of-use assets – in the opening balance	6,347
Increase (new right-of-use assets) ⁽¹⁾	1,009
Impact of changes in the scope of consolidation	18
Depreciation and amortization (2)	(1,239)
Impairment (3)	(33)
Impact of changes in the assessments	169
Translation adjustment	21
Reclassifications and other items	(28)
Reclassifications to assets held for sale	-
Net book value of right-of-use assets – in the closing balance	6,263

⁽¹⁾ Including 25 million euros related to sale and leaseback transactions.

In 2019, the rental expense recognized in external purchases in the income statement amounts to 270 million euros. It includes lease payments on contracts of 12 months or less, contracts where the new

value of the underlying asset is less than 5,000 euros, and variable lease payments which were not figured into the measurement of the lease liability.

Accounting policies

A right-of use is recognized as an asset, with a corresponding lease liability (see Note 9.1). This right-of-use asset is equal to the amount of the lease liability, plus any direct costs incurred under certain leases such as fees, lease negotiation expenses or administration costs and less rent-free period liabilities and lessor financial contributions.

Work performed by the lessee and modifications to the leased asset, as well as guarantee deposits, are not components of the right-of-use asset and are recognized in accordance with other standards.

Finally, the right-of-use asset is depreciated in the consolidated income statement on a straight-line basis over the lease term adopted by the Group.

Note 10 Taxes

10.1 Operating taxes and levies

10.1.1 Operating taxes and levies recognized in the income statement

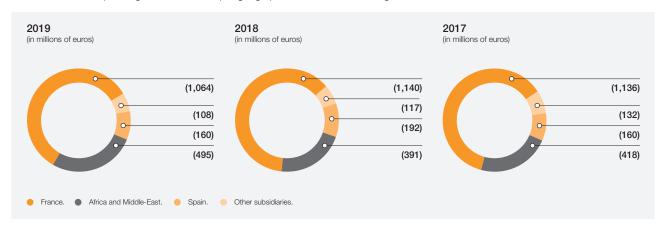
(in millions of euros)	2019	2018	2017
Territorial Economic Contribution, <i>IFER</i> and similar taxes Spectrum fees Levies on telecommunication services Other operating taxes and levies	(758) (329) (276) (465)	(820) (309) (286) (425)	(817) (304) (296) (429)
Total	(1,827)	(1,840)	(1,846)

Although comprising a directly identifiable counterpart, the periodic spectrum fees are presented within the operating taxes and levies as they are set by and paid to the States and Local Authorities.

⁽²⁾ Including right-of-use assets depreciation and amortization expenses of land and buildings for (880) million euros, networks and terminals for (297) million euros, IT equipment for (12) million euros and other right-of-use assets for (50) million euros.

⁽³⁾ Impairment losses on right-of-use assets concern real estate leases qualified as onerous contracts in France.

The breakdown of operating taxes and levies per geographical area is the following:



10.1.2 Operating taxes and levies in the statement of financial position

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Value added tax	996	953	958
Other operating taxes and levies	94	74	87
Operating taxes and levies – receivables	1,090	1,027	1,045
Value added tax	(649)	(647)	(616)
Territorial Economic Contribution, IFER and similar taxes	(90)	(94)	(100)
Spectrum fees	(22)	(29)	(40)
Levies on telecommunication services	(118)	(113)	(97)
Other operating taxes and levies	(408)	(439)	(409)
Operating taxes and levies – payables	(1,287)	(1,322)	(1,262)
Operating taxes and levies – net	(197)	(295)	(217)

Developments in tax disputes and audits

In the same way as other telecom operators, the Group regularly deals with disagreements concerning the taxation of its network in various countries.

In 2017, Orange Espagne received a notification of a tax adjustment of approximately 55 million euros relating to the Business Activity Tax (BAT) for fiscal years 2013 to 2015. The disagreement concerns the characterization of antennas whose number is taken into account in the calculation basis of the tax amount. Orange Espagne contested the adjustment and believed it had strong arguments to justify its assessment. Consequently, this disagreement was treated as a contingent liability. In July 2019, a decision favorable to Orange Espagne was rendered by the Economic and Administrative Central

Court, thereby quashing the tax reassessments and claims for back taxes.

In addition, Orange Espagne is involved in various tax disputes related to local taxes on mobile services. In May 2016, the Supreme Court of Spain amended its previous ruling and considered admissible some terms and conditions of taxation over mobile telecom operators using the infrastructures located on the local public domain. Since then, some municipalities sent out tax bills in accordance with the ruling of the Supreme Court. In 2018, Orange has re-evaluated the risk in light of the course of the proceedings. There are no new developments in 2019 that would lead to a modification of the Group's accounting position.

Changes in operating taxes and levies

(in millions of euros)	2019	2018	2017
Net operating taxes and levies (payables) in the opening balance	(295)	(217)	(323)
Operating taxes and levies recognized in profit or loss	(1,827)	(1,840)	(1,846)
Operating taxes and levies paid	1,939	1,777	1,934
Changes in the scope of consolidation	3	(13)	-
Translation adjustment	(16)	(3)	21
Reclassifications and other items	(1)	1	(3)
Reclassifications to assets held for sale	-	-	-
Net operating taxes and levies (payables) in the closing balance	(197)	(295)	(217)

VAT (Value Added Tax) receivables and payables correspond to the VAT collected or deductible from the various states. Collections and repayments to states have no impact on the income statement.

In the normal course of business, the Group regularly deals with differences of interpretation of tax law with the tax authorities, which can lead to tax reassessments or tax disputes.

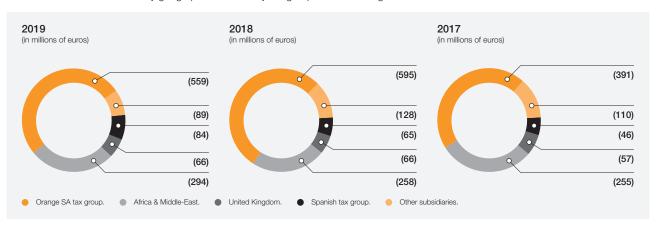
Operating taxes and levies are measured by the Group at the amount expected to be paid or recovered from the tax authorities of each country, based on its interpretation with regard to the application of tax legislation. The Group calculates the tax assets, liabilities and accruals recognized in the statement of financial position based on the technical merits of the positions it defends versus that of the tax authorities.

10.2 Income tax

10.2.1 Income tax

(in millions of euros)	2019	2018	2017
Orange SA tax group	(875)	(702)	(564)
- Current tax	(559)	(595)	(391)
- Deferred tax	(316)	(107)	(173)
Spanish tax group	(123)	(164)	(55)
- Current tax	(84)	(65)	(46)
- Deferred tax	(39)	(99)	(9)
Africa & Middle East	(296)	(255)	(256)
- Current tax	(294)	(258)	(255)
- Deferred tax	(1)	3	(1)
United Kingdom	(66)	(66)	(57)
- Current tax	(66)	(66)	(57)
- Deferred tax	(O)	(O)	0
Other subsidiaries	(86)	(122)	(120)
- Current tax	(89)	(128)	(110)
- Deferred tax	3	6	(10)
Total Income tax	(1,447)	(1,309)	(1,052)
- Current tax	(1,093)	(1,112)	(859)
- Deferred tax	(354)	(197)	(193)

The breakdown of current tax by geographical area or by tax group is the following:



Orange SA tax group

As part of the law enacted on July 11, 2019 concerning the creation of a digital services tax, the French government instituted a new measure maintaining the corporate income tax rate to 34.43% for the 2019 fiscal year instead of the 32.02% rate originally planned. This measure resulted in an additional tax expense for the Group of (35) million euros in 2019.

The corporate tax rate applicable for the 2018 fiscal year was 34.43%.

In 2017, the corporate tax rate was 44.43%, following the establishment of an exceptional surtax applicable only to this fiscal year, which led to an additional tax expense of (78) million euros.

Current tax expense

Since 2018, the current tax expense reflects the requirement to pay income tax calculated on the basis of 100% of taxable income due to the depletion of tax loss carry forwards.

In 2017, the current tax expense reflected the requirement to pay a minimum level of income tax calculated on the basis of 50% of taxable income due to the restriction on the utilization of available tax loss carry forwards.

Deferred tax expense

Deferred taxes are recorded at the tax rate expected at the time of their reversal

Until 2017, the deferred tax expense mainly arose from the use of tax loss carry forwards.

The 2018 French Finance Act, that passed in late December 2017, reinforced the gradual reduction in the corporate tax rate with an expected tax rate of 25.82% as of 2022 for the Group.

In 2017, this gradual rate reduction resulted in a (75) million euros decrease in net deferred tax assets recorded on the balance sheet for entities of the Orange SA tax group (of which (44) million euros recorded in income statement and (31) million euros in other comprehensive income).

The 2020 French Finance Law enacted in December 2019 modifies the originally planned downward trajectory of the corporate income tax without changing its target of 25.82% planned for 2022 and forward.

Developments in tax disputes and audits in France

Tax audits

Orange SA underwent tax audits of fiscal years 2010 to 2016, for which the outcome has no material impact on the Group's financial statements.

Dispute over the 3% tax on dividends

The Constitutional Court, in its decision of October 6, 2017, recognized as unconstitutional the 3% tax on dividends, confirming the CJEU decision rendered on May 17, 2017. In December 2017, all claims made by Orange SA had been reimbursed by the French tax authority, resulting in a tax income of 304 million euros for the year (of which 270 million euros in principal and 34 million euros in late interests).

Disputes in progress concerning fiscal years 2000-2006

In the context of the absorption of Cogecom by Orange SA and pursuant to an adverse ruling by the Court of Montreuil on July 4, 2013 which triggered the payment of the amounts claimed by the Tax authority, Orange SA had to pay in 2013 the remaining balance on principal and late payment interest claimed for a total amount of 2.1 billion euros.

Over the last few years, the main developments in terms of legal proceedings brought before the Versailles Administrative Court of Appeal were the following:

- concerning fiscal year 2000-2004:
 - in a ruling given on July 24, 2018, the Administrative Court of Appeal of Versailles upheld the request from Orange. As the Tax administration did not appeal in cassation, this litigation is now closed. The accounting consequences were taken into account in the 2018 consolidated financial statements with no material impact;
- concerning fiscal years 2005-2006:
 - in a ruling of February 18, 2016, the Administrative Court of Appeal of Versailles upheld the judgment of July 4, 2013, despite the contrary conclusions of the appointed *Rapporteur*. The Group then appealed to the *Conseil d'État* on April 18, 2016 to rule on the substance of the case,
 - in a ruling dated December 5, 2016, the Conseil d'État annulled the February 18, 2016 ruling by the Administrative Court of Appeal of Versailles and remanded the dispute to the same Court, on the grounds argued by the Group, i.e., the principle of intangibility of the opening balance sheet of the earliest fiscal year still subject to audit
 - in a ruling dated July 24, 2018, the Administrative Court of Appeal
 of Versailles made an adverse decision against Orange, despite
 the contrary conclusions of the appointed Rapporteur. The Group
 appealed in cassation to the Conseil d'État which will render the
 final decision.

A favorable outcome to this dispute would result in a current tax income of 2.1 billion euros, before late interests. While awaiting the new decision from the Conseil d'Etat, this amount is treated as a contingent asset.

Spanish tax group

Current tax expense

The corporate tax rate applicable is 25% and the current income tax expense mainly represents the obligation to pay a minimum level of tax calculated on the basis of 75% of taxable income due to the 25% restriction on the utilization of tax loss carry forwards.

Deferred tax expense

The deferred tax expense for 2019 mainly represents the evolution of futures perspectives for the recoverability of the deferred tax assets.

In 2018, a deferred tax expense of 86 million euros was recorded in order to reflect the negative effect on the recoverable value of deferred tax assets of a strong competitive pressure.

Africa & Middle East

The main contributors to the income tax expense are Senegal, Mali, Côte d'Ivoire and Guinea.

In Senegal, the corporate tax rate is 30% and the current income tax expense stands at 56 million euros. In Mali, the corporate tax rate is 30% and the current income tax expense stands at 55 million euros. In Côte d'Ivoire, the corporate tax rate is 30% and the current income tax expense stands at 52 million euros. In Guinea, the corporate tax rate is 35% and the current income tax expense stands at 42 million euros.

United Kingdom

Current tax expense

The current income tax expense primarily reflects the taxation of activities related to Orange's brand activities. The corporate tax rate sets to 19% since April 1, 2017.

Deferred tax expense

The 2016 Finance Act adopted on September 15, 2016, included a reduction in the tax rate to 17% starting April 1, 2020.

Group tax proof

(in millions of euros)	Note	2019	2018	2017
Profit before tax of continuing operations		4,673	3,467	3,063
Statutory tax rate in France		34.43%	34.43%	34.43%
Theoretical income tax		(1,609)	(1,194)	(1,055)
Reconciling items:				
Exceptional surtax (1)		-	-	(78)
Impairment of goodwill (2)	7.1	(19)	(19)	(7)
Impairment of BT shares	12.7	(34)	(30)	(156)
Share of profits (losses) of associates and joint ventures		3	1	2
Adjustment of prior-year taxes		10	23	37
Recognition/(derecognition) of deferred tax assets		(36)	(151)	(27)
Difference in tax rates (3)		192	189	92
Change in applicable tax rates (4)		43	(84)	(50)
Other reconciling items (5)		3	(44)	190
Effective income tax		(1,447)	(1,309)	(1,052)
Effective tax rate		30.97%	37.75%	34.35%

10.2.2 Income tax on other comprehensive income

(in millions of euros)	2019	9	201	8	2017		
	Gross amount	Deferred tax	Gross amount	Deferred tax	Gross amount	Deferred tax	
Actuarial gains and losses							
on post-employment benefits (1)	(109)	30	45	(6)	16	(23)	
Assets available for sale	-	-	-	-	23	-	
Assets at fair value	(16)	-	(30)	-	-	-	
Cash flow hedges	144	(47)	(67)	18	49	(20)	
Translation adjustment	78	-	(7)	-	(176)	26	
Other comprehensive income of associates							
and joint ventures	-	-	-	-	(9)	-	
Total presented in other							
comprehensive income	97	(17)	(59)	12	(97)	(17)	

⁽¹⁾ In 2017, the deferred tax includes the remeasurement of the deferred tax in France.

Effect of the exceptional surtax put in place in France for 2017 which increased the corporate tax rate from 34.43% to 44.43%.
 Reconcilitation item calculated based on the tax rate applicable to the parent company of the Group. The difference between the tax rate of the parent company and the local tax rate of subsidiaries is presented below in "Difference in tax rates".
 The Group is present in jurisdictions in which tax rates are different from the French tax rate. This mainly includes the United Kingdom (tax rate of 19%) and Spain (tax rate of 25%).
 Takes into account the remeasurement of the deferred tax due to change of tax rate in tax legislation. It also takes into account the impact of the fact that some deferred tax are booked with a different tax rate than the or present one.

with a different tax rate than the on-going one.

(5) Notably includes the non-deductible interests in France, respectively an income tax expense of 78 and 80 million euros in 2018 and 2017. Includes the tax income of 304 million euros

resulting from the dispute over the 3% tax on dividends in 2017.

10.2.3 Tax position in the statement of financial position

(in millions of euros)	Dece	mber 31, 2	2019	December 31, 2018			December 31, 2017		
	Assets	Liabi- lities	Net	Assets	Liabi- lities	Net	Assets	Liabi- lities	Net
Orange SA tax group									
Current tax	-	385	(385)	-	438	(438)	-	288	(288)
 Deferred tax⁽¹⁾ 	633	-	633	977	-	977	1,059	-	1,059
Spanish tax group									
Current tax	-	32	(32)	-	4	(4)	53	-	53
 Deferred tax⁽²⁾ 	11	-	11	50	-	50	149	-	149
Africa & Middle East									
Current tax	43	212	(168)	32	182	(150)	25	189	(164)
Deferred tax	92	55	37	84	42	42	99	54	45
United Kingdom									
Current tax	-	30	(30)	-	34	(34)	-	22	(22)
 Deferred tax⁽³⁾ 	1	539	(538)	-	531	(531)	-	531	(531)
Other subsidiaries									
Current tax	76	90	(14)	87	97	(10)	54	97	(43)
Deferred tax	255	108	147	255	58	197	279	70	209
Total									
- Current tax	120	748	(629)	119	755	(636)	132	596	(464)
 Deferred tax 	992	703	289	1,366	631	735	1,586	655	931

Change in net current tax

(in millions of euros)	2019	2018	2017
Net current tax assets/(liabilities) in the opening balance	(636)	(464)	(168)
Cash tax payments ⁽¹⁾	1,079	928	583
Change in income statement (2)	(1,093)	(1,116)	(859)
Change in other comprehensive income	· _	-	-
Change in retained earnings (3)	48	0	(11)
Changes in the scope of consolidation	(1)	19	(O)
Translation adjustment	(1)	(3)	5
Reclassification and other items	(24)	(O)	(14)
Reclassification to assets held for sale	-	-	-
Net current tax assets/(liabilities) in the closing balance	(629)	(636)	(464)

Change in net deferred tax

(in millions of euros)	2019	2018	2017
Net deferred tax assets in the opening balance	735	931	1,141
Change in income statement (1)	(354)	(197)	(210)
Change in other comprehensive income	(17)	12	(17)
Change in retained earnings (2)	4	-	(8)
Change in the scope of consolidation	(76)	(10)	Ô
Translation adjustment	0	(7)	11
Reclassification and other items	(3)	6	14
Reclassification to assets held for sale	` -	-	-
Net deferred tax assets in the closing balance	289	735	931

Mainly includes deferred tax assets on employee benefits.
 The recognized deferred tax assets are partially offset by the deferred tax liabilities on the goodwill which is tax deductible.
 Mainly deferred tax liabilities on the Orange brand.

Includes in 2017 the reimbursement of 304 million euros due to the dispute of the 3% tax on dividends.
 Of which 0 million euros in consolidated net income of discontinued operations in 2019 ((4) million euros in 2018 and 0 million euros in 2017).
 Mainly corresponds to the tax effect relating to the remeasurement of the portion of subordinated notes denominated in foreign currency.

Of which 0 million euros in consolidated net income of discontinued operations in 2019 (0 million euros in 2018 and (17) million euros in 2017).
 Mainly corresponds in 2017 to the tax effect relating to the remeasurement of the portion of subordinated notes denominated in foreign currency.

Deferred tax assets and liabilities by type

(in millions of euros)	Dece	December 31, 2019 December 31, 2018		December 31, 2017		2017			
	Assets	Liabi- lities	Income state- ment	Assets	Liabi- lities	Income state- ment	Assets	Liabi- lities	Income state- ment
Provisions for employee benefit obligations Fixed assets	704 614	- 1,216	(169) (68)	833 721	- 1.123	(25) (26)	842 790	- 1.139	(132) (38)
Tax losses carryforward	3,895	- 1,210	8	3,914	- 1,120	(105)	4,011	- 1,100	(456)
Other temporary differences Deferred tax	2,700 7,913	2,746 3,963	(83) (313)	1,245 6,713	1,146 2,269	(42) (198)	1,538 7,181	1,407 2,546	(34) (660)
Depreciation of deferred tax assets Netting	(3,661) (3,260)	(3,260)	(41)	(3,709) (1,638)	(1,638)	1	(3,704) (1,891)	(1,891)	450
Total	992	703	(354)	1,366	631	(197)	1,586	655	(210)

As of December 31, 2019, the tax losses carry forwards mainly relate to Spain and Belgium, all of the tax losses carry forwards in France were used since 2018.

As of December 31, 2019, the unrecognized deferred tax assets mainly relate to Spain for 2.0 billion euros and Belgium (Belgian subsidiaries other than Orange Belgium) for 0.8 billion euros, and mostly include tax losses that can be carried forward indefinitely. In

Spain, tax losses carry forwards for which a deferred tax asset has been recognized are expected to be fully utilized by 2024, unless affected by changes in tax rules and changes in business projections. The deferred tax assets recognized for Spain arise to 0.7 billion euros on December 31, 2019.

Most of the other tax losses carry forwards for which no deferred tax assets were recognized will expire beyond 2024.

Accounting policies

Current income tax and deferred tax are measured by the Group at the amount expected to be paid or recovered from the tax authorities of each country, based on its interpretation with regard to the application of tax legislation. The Group calculates the tax assets and liabilities recognized in the statement of financial position based on the technical merits of the positions it defends versus that of the tax authorities.

Deferred taxes are recognized for all temporary differences between the carrying values of assets and liabilities and their tax basis, as well as for unused tax losses, using the liability method. Deferred tax assets are recognized only when their recovery is considered probable.

A deferred tax liability is recognized for all taxable temporary differences associated with investments in subsidiaries, interests in joint ventures and associates, except to the extent that both of the following conditions are satisfied:

- the Group is able to control the timing of the reversal of the temporary difference (e.g. the payment of dividends); and
- it is probable that the temporary difference will not reverse in the foreseeable future.

Accordingly, for fully consolidated companies, a deferred tax liability is only recognized in the amount of the taxes payable on planned dividend distributions by the Group.

Deferred tax assets and liabilities are not discounted.

At each period end, the Group reviews the recoverable amount of the deferred tax assets carried by certain tax entities with significant tax losses carry forwards. The recoverability of the deferred tax assets is assessed in the light of the business plans used for impairment testing. This plan may be adjusted for any tax specificities.

Deferred tax assets arising on these tax losses are not recognized under certain circumstances specific to each company/tax consolidation group concerned, and particularly where:

- entities cannot assess the probability of the tax loss carry forwards being set off against future taxable profits, due to the horizon for forecasts based on business plans used for impairment testing and uncertainties as to the economic environment;
- entities have not yet begun to use the tax loss carry forwards;
- entities do not expect to use the losses within the timeframe allowed by tax regulations;
- it is estimated that tax losses are uncertain to be used due to risks of differing interpretations with regard to the application of tax legislation.

Note 11 Interests in associates and joint ventures

The interests in associates and joint ventures included the activities of Orange as an operator in various African and Middle Eastern countries, including in particular Tunisia and Mauritius.

(in millions of euros)	2019	2018	2017
Interests in associates – in the opening balance	104	77	130
Dividends	(2)	(3)	_
Share of profits (losses)	8	3	6
Impairment	(O)	-	-
Change in components of other comprehensive income	-	-	(9)
Changes in the scope of consolidation	2	(1)	(3)
Translation adjustment	(4)	5	(2)
Reclassifications and other items	(5)	23	(45)
Reclassification as held for sale	-	-	-
Interests in associates – in the closing balance	103	104	77

Changes in other comprehensive income of associates and joint ventures (excluding "assets held-for-sale") are presented below:

(in millions of euros)	2019	2018	2017
Profit (loss) recognized in other comprehensive income during the period Reclassification to net income for the period	- -	-	(9)
Other comprehensive income of associates and joint venture – continuing operations	-	-	(9)

The unrecognized contractual commitments entered into by the Group relating to the interests in associates and joint ventures are described in Note 15.

The operations performed between the Group and the interests in associates and joint ventures are reflected as follow in Orange's consolidated financial statements:

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Assets			
Non-current financial assets Trade receivables Current financial assets Other current assets	37 2 1	(0) 31 (1)	2 30 (2) 0
Liabilities			
Current financial liabilities Trade payables Other current liabilities Deferred income	10 0	7 9 -	4 8 -
Income statement			
Revenue Other operating income External purchases and other operating expenses Finance cost, net	10 7 (10) 1	13 8 (66)	15 18 (57) 0

Accounting policies

The carrying amount accounted for under the equity method corresponds to the initial acquisition cost increased by the share of profit or loss in the period. If an associate incurs losses and the carrying amount of the investment is reduced to zero, the Group ceases to recognize the additional share of losses since it has no commitment beyond its investment.

An impairment test is performed at least annually and when there is objective evidence of impairment, for instance a decrease in the quoted price when the investee is listed, significant financial difficulty of the entity, observable data indicating that there is a measurable decrease in the estimated future cash flows, or information about significant changes having an adverse effect on the entity.

An impairment loss is recorded when the recoverable amount is lower than the carrying amount, the recoverable amount being the higher of the value in use and the fair value less costs to sell. The unit of account is the whole investment. Any impairment is recognized as "Share of profits (losses) of associates and joint ventures". Impairment losses shall be reversed once the recoverable amount exceeds the carrying amount.

Note 12 Financial assets, liabilities and financial results (excluding Orange Bank)

12.1 Financial assets and liabilities of telecom activities

In order to improve the readability of financial statements and to be able to distinguish the performance of telecom activities from the performance of Orange Bank, the notes related to financial assets and liabilities as well as financial income or expenses are split to respect these two business areas.

Note 12 presents the financial assets, liabilities and related gains and losses specific to telecom activities and Note 16 concerns the activities of Orange Bank with regard to its assets and liabilities, with net financial income being not material.

The following table reconciles the contributive balances of assets and liabilities for each of these two areas to the consolidated balance sheet (intra-group transactions between telecom activities and Orange Bank are not eliminated) with the consolidated statement of financial position as of December 31, 2019.

(in millions of euros)	Orange consolidated financial statements	O/w telecom activities	Note	O/w Orange Bank	Note	O/w eliminations telecom activities/ bank
Non-current financial assets						
related to Orange Bank activities	1,259	-		1,259	16.1.1	-
Non-current financial assets	1,208	1,235	12.7		-	(27) (1)
Non-current derivatives assets	562	562	12.8	-	16.1.3	-
Current financial assets						
related to Orange Bank activities	3,095	-		3,098	16.1.1	(3)
Current financial assets	4,766	4,766	12.7	-		(O)
Current derivatives assets	12	12	12.8	-	16.1.3	-
Cash and cash equivalents	6,481	6,112		369		-
Non-current financial liabilities						
related to Orange Bank activities	-	-		27	16.1.2	(27) (1)
Non-current financial liabilities	33,148	33,148	12.3	-		-
Non-current derivatives liabilities	487	413	12.8	74	16.1.3	-
Current financial liabilities						
related to Orange Bank liabilities	4,279	-		4,280	16.1.2	(O)
Current financial liabilities	3,925	3,928	12.3	-		(3)
Current derivatives liabilities	22	22	12.8	-	16.1.3	-

⁽¹⁾ Loan granted by Orange SA to Orange Bank.

12.2 Profits and losses related to financial assets and liabilities

The cost of net financial debt consists of gains and losses related to the components of net financial debt (described in Note 12.3) during the period.

Foreign exchange gains and losses related to the components of net financial debt correspond mainly to the revaluation in euros of bonds denominated in foreign currencies (Note 12.5) as well as to the symmetrical revaluation of associated hedges.

The net foreign exchange financial loss mostly reflects the effect of revaluation of the economic hedges of foreign exchange risk on notional amounts of subordinated notes denominated in pounds sterling and recognized in equity at their historical value (see Note 14.4).

Other financial expenses mainly comprise interest on lease liabilities in the amount of (122) million euros (see Note 2.3.1) and the impact of the Group's investment in BT shares for (119) million euros corresponding to the impairment loss, net of the foreign exchange hedge and of the 2019 income related to BT dividends, compared to (51) million euros in 2018 and (372) million euros in 2017 (see Note 12.7).

Finally, other comprehensive income includes the revaluation of financial assets at fair value through other comprehensive income (Note 12.7) and cash flow hedges (Note 12.8.2).

Other gains and losses related to financial assets and liabilities are recognized in the operating income (foreign exchange gains and losses on trade receivables, trade payables and the associated derivative hedges) for (7) million euros in 2019, versus 3 million euros in 2018 and (13) million euros in 2017.

			Finance c	osts, net			Other compre- hensive income
(in millions of euros)	Cost of gross financial debt ⁽¹⁾	Gains (losses) on assets contri- buting to net financial debt	Cost of net financial debt	Foreign exchange gains (losses)	Other net financial expenses ⁽²⁾	Finance costs, net	Reserves
2019							
Financial assets Financial liabilities	- (1,255)	5 -	5 (1,255)	31 (351)	(65)		(25)
Lease liabilities Derivatives Discounting expense	- 146 -	- - -	146 -	397 -	(122) - (39)		- 144 -
Total	(1,109)	5	(1,104)	76	(226)	(1,254)	119
2018							
Financial assets Financial liabilities Derivatives Discounting expense	(1,395) 54	9 -	9 (1,395) 54	(17) (353) 366	16 - - (42)		(22) - (67)
Total	(1,341)	9	(1,332)	(4)	(26)	(1,362)	(89)
2017							
Financial assets Financial liabilities Derivatives Discounting expense	- (1,357) 83 -	11 - -	11 (1,357) 83	(54) 1,217 (1,226)	(346) - - (43)		20 - 49 -
Total	(1,274)	11	(1,263)	(63)	(389)	(1,715)	69

12.3 Net financial debt

Compared with December 31, 2018, the definition of the net financial debt as of December 31, 2019 now excludes the lease liabilities included in the scope of IFRS 16 (see Note 2.3.1) and includes the debts relating to financed assets (see Note 8.5).

Net financial debt is one of the indicators of financial position used by the Group. This aggregate, not defined by IFRS, may not be comparable to similarly entitled indicators used by other companies. It is provided as additional information only and should not be considered as a substitute for an analysis of all the Group's assets and

Net financial debt as defined and used by Orange does not include Orange Bank activities for which the concept is not relevant.

It consists of (a) financial liabilities excluding operating payables (translated into euros at the year-end closing rate) including derivative instruments (assets and liabilities), less (b) cash collateral paid, cash, cash equivalents and financial assets at fair value.

Furthermore, financial instruments designated as cash flow hedges included in net financial debt are set up to hedge in particular items that are not included therein, such as future cash flows. Effects of these hedges are carried in other comprehensive income. As a consequence, the portion of these components related to unmatured hedging instruments is added to gross financial debt to offset this temporary difference.

⁽¹⁾ Include interests on debt relating to financed assets for (1) million euros in 2019.
(2) Include interest on lease liabilities for (122) million euros in 2019 and effects related to the investment in BT for (119) million euros in 2019, (51) million euros in 2018 and (372) million euros in 2017.

(in millions of euros) Note	December 31, 2019	December 31, 2018	December 31, 2017
	2010	2010	2017
TDIRA 12.4	822	822	1,234
Bonds 12.5	30,893	27,070	25,703
Bank loans and from development organizations			
and multilateral lending institutions 12.6	4,013	3,664	2,961
Debt relating to financed assets	125	-	-
Finance lease liabilities	-	584	571
Cash collateral received 13.5	261	82	21
Neu Commercial Papers (1)	158	1,116	1,358
Bank overdrafts	203	318	193
Other financial liabilities	602 (2)	363	434
Current and non-current financial liabilities (excluding derivatives)			
included in the calculation of net financial debt	37,076	34,019	32,475
Current and non-current Derivatives (liabilities) 12.8	436	845	963
Current and non-current Derivatives (assets) 12.8	(573)	(385)	(234)
Other comprehensive income components			
related to unmatured hedging instruments 12.8	(542)	(721)	(686)
Gross financial debt after derivatives (a)	36,397	33,758	32,518
Cash collateral paid ⁽³⁾	(123)	(553)	(695)
Investments at fair value ⁽⁴⁾	(4,696)	(2,683)	(2,647)
Cash equivalents	(3,651)	(2,523)	(3,166)
Cash	(2,462)	(2,558)	(2,167) (5)
Assets included in the calculation of net financial debt (b)	(10,931)	(8,317)	(8,675)
Net financial debt (a) + (b)	25,466	25,441	23,843

Debt maturity schedules are presented in Note 13.3.

- Negotiable European Commercial Papers (formerly called "commercial papers").
 Include 500 million euros of subordinated notes (first call date on February 7, 2020) reclassified as a short term liability (see Note 14.4).
 Only cash collateral paid, included in non-current financial assets of the consolidated statement of financial position, are deducted from gross financial debt.
 Only investments at fair value, included in current financial assets of the consolidated statement of financial position, are deducted from gross financial debt (Note 12.7).
 As of December 31, 2017, the amount does not take into account the effect of the escrowed amount of approximatively 346 million euros in February 2018 related to the Digicel litigation.

Net financial debt is most carried by Orange SA in the amount of 24,495 million euros, representing over 96% of the Group's net financial debt.

Changes in financial assets or financial liabilities whose cash flows are disclosed in financing activities in the cash-flow statement are the following (see Note 1.7):

(in millions of euros)	December 31, 2018	Cash flows	Other changes with no impact on cash flows			December 31, 2019
			Changes in the scope of consolidation	Foreign exchange movement	Other	
TDIRA	822	-	-	-	-	822
Bonds	27,070	3,391	148	346	(63)(1)	30,893
Bank loans and from development organi	zations					
and multilateral lending institutions	3,664	335	(30)	36	8	4,013
Finance lease liabilities	584	-	-	-	(584)	-
Debt relating to financed assets	-	(17)	-	-	143	125
Cash collateral received	82	179	-	-	(O)	261
Neu Commercial Papers	1,116	(958)	-	(O)	(1)	158
Bank overdrafts	318	(123)	(4)	5	7	203
Other financial liabilities	363	(10)	9	10	229	602
Current and non-current financial liabil	ities					
(excluding derivatives) included						
in the calculation of net financial debt	34,019	2,797	123	398	(261)	37,076
Net derivatives	460	26	(2)	(376)	(246)	(138)
Cash collateral paid	(555)	430	-	(O)	-	(123)
Cash flows from financing activities		3,253				

⁽¹⁾ Mainly corresponding to changes in accrued interests.

(in millions of euros)	December 31, 2017	,		,		Other changes with no impact on cash flows		December 31, 2018
			Changes in the scope of consolidation	Foreign exchange movement	Other			
TDIRA	1,234	(443)	-	-	31	822		
Bonds	25,703	1,136	5	321	(95)(1)	27,070		
Bank loans and from development organia	zations							
and multilateral lending institutions	2,961	613	14	20	56	3,664		
Finance lease liabilities	571	(123)	2	(1)	135	584		
Cash collateral received	21	61	-	-	-	82		
Neu Commercial Papers	1,358	(243)	-	(O)	1	1,116		
Bank overdrafts	193	82	38	5	-	318		
Other financial liabilities	434	(153)	135	8	(61)	363		
Current and non-current financial liabil	ities							
(excluding derivatives) included								
in the calculation of net financial debt	32,475	930	194	353	67	34,019		
Net derivatives	729	8		(339)	62	460		
Cash collateral paid	(695)	140	-	-	-	(555)		
Cash flows from financing activities		1,078						

⁽¹⁾ Mainly corresponding to changes in accrued interests.

(in millions of euros)	December 31, 2016	Cash flows	Other changes with no impact on cash flows		mpact	December 31, 2017
			Changes in the scope of consolidation	Foreign exchange movement	Other	
TDIRA	1,212	-	-	-	22	1,234
Bonds	27,370	(460)	-	(1,104)	(103)(1)	25,703
Bank loans and from development organia	zations					
and multilateral lending institutions	2,710	294	-	(54)	11	2,961
Finance lease liabilities	622	(96)	-	-	45	571
Cash collateral received	541	(520)	-	-	-	21
Neu Commercial Papers	542	818	-	(2)	-	1,358
Bank overdrafts	278	(66)	-	(19)	-	193
Other financial liabilities	250	196	-	(21)	9	434
Current and non-current financial liabili	ities					
(excluding derivatives) included						
in the calculation of net financial debt	33,525	166	-	(1,200)	(16)	32,475
Net derivatives	(399)	(66)	-	1,183	11	729
Cash collateral paid	(77)	(618)	-	-	-	(695)
Cash flows from financing activities		(518)				

⁽¹⁾ Mainly corresponding to changes in accrued interests.

Net financial debt by currency

The net financial debt by currency is presented in the table below, after foreign exchange effects of hedging derivatives (excluding instruments set up to hedge operational items).

(equivalent value in millions of euros at year-end closing rate)	EUR	USD	GBP	PLN	EGP	JOD	MAD	Other	Total
Gross financial debt after derivatives Financial assets included in the calculation	24,959	4,718	3,800	25	216	148	594	1,937	36,397
of net financial debt	(9,648)	(91)	(9)	(96)	(2)	(30)	(191)	(864)	(10,931)
Net debt by currency before effect									
of foreign exchange derivatives (1)	15,311	4,627	3,791	(71)	214	118	403	1,073	25,466
Effect of foreign exchange derivatives	9,124	(4,677)	(5,312)	1,505	-	-	-	(640)	-
Net financial debt by currency after effect									
of foreign exchange derivatives	24,436	(50)	(1,521)	1,435	214	118	403	433	25,466

⁽¹⁾ Including the market value of derivatives in local currency.

Accounting policies

Cash and cash equivalents

The Group classifies investments as cash equivalent in the statement of financial position and statement of cash flows when they comply with the conditions of IAS 7 (see cash management detailed in Notes 13.3 and 13.5):

- held in order to face short-term cash commitments; and
- short term and highly liquid assets at acquisition date, readily convertible into known amount of cash and not exposed to any material risk of change in value.

Bonds, bank loans and loans from multilateral lending institutions

Among financial liabilities, only the bond of 25 million euros maturing in 2020 and any commitments to redeem non-controlling interests are recognized at fair value in profit or loss.

Borrowings are recognized upon origination at the discounted value of the sums to be paid and subsequently measured at amortized cost using the effective interest rate method. Transaction costs that are directly attributable to the acquisition or issue of the financial liability are deducted from the liability's carrying value. The costs are subsequently amortized over the life of the debt, using the effective interest rate method.

Some financial liabilities at amortized cost, mainly borrowings, are subject to hedging. This relates mostly to borrowings hedged against the exposure of their future cash flows to foreign exchange risk (cash flow hedge).

12.4 TDIRA

The perpetual bonds redeemable for shares ("TDIRAs") with a par value of 14,100 euros are listed on Euronext Paris. Their issuance was described in a securities note approved by the Commission des Opérations de Bourse (French Securities Regulator, renamed Autorité des marchés financiers (French Financial Markets Authority)) on February 24, 2003. As of December 31, 2019, taking into account redemptions made since their issuance, 57,981 TDIRAs remain outstanding for a total par value of 818 million euros.

The TDIRAs are redeemable in new Orange SA shares, at any time at the holders' request or, under certain conditions as described in the

appropriate prospectus, at Orange SA's initiative based on a ratio of 583.261 shares to one *TDIRA* (i.e., conversion price of 24.175 euros), as the initial ratio of 300 shares to one *TDIRA* has been adjusted several times to protect bondholders' rights, and may be further adjusted under the terms and conditions set out in the information memorandum.

Since January 1, 2010, the interest rate on the TDIRAs has been the three-month Euribor +2.5%.

The *TDIRA* are subject to split accounting between equity and liabilities. For the securities outstanding on December 31, 2019, the "equity" component before deferred tax stood at 196 million euros.

The amounts recognized for the in the financial statements are as follows:

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Number of securities	57,981	57,981	89,398
Equity component before deferred taxes	196	196	303
Debt component	822	822	1,234
o/w accrued interests not yet due	4	4	7
Paid interest	18	27	27

Accounting policies

Some Group financial instruments include both a liability component and an equity component. This relates to perpetual bonds redeemable for shares (*TDIRA*). On initial recognition, the liability component is measured at its market value, corresponding to the value of the contractually determined future cash flows discounted at the market rate applied at the date of issue to comparable instruments providing substantially the same conditions, but without the option to convert or redeem in shares. This liability component is subsequently recognized at amortized cost.

The carrying amount of the equity component is determined at inception by deducting the fair value of the financial liability from the notional value of the instrument. This does not change throughout the life of the instrument.

12.5 Bonds

Unmatured bonds at December 31, 2019 were all issued by Orange SA, with the exception of two obligations (each with a fixed-rate tranche and a variable-rate tranche) denominated in Moroccan dirhams held by Médi Telecom, and a euro-denominated bond issued by SecureLink.

With the exception of the commitments made by Médi Telecom, which are redeemable on a regular annual basis, as of December 31, 2019, the bonds issued by the Group were redeemable at maturity. No specific guarantee had been given in relation to their issuance. Some bonds may be redeemed in advance, at the request of the issuer.

Bonds or new tranches issued during fiscal year 2019 are shown in bold.

Notional	Initial nominal amount	Maturity		Oustandir	ons of euros)	
currency	(in millions of currency units)		(%)	December 31,	December 31,	December 31,
				2019	2018	2017
Bonds mature	ed before December 31, 2019				4,399	7,396
EUR	25	February 10, 2020	4.200	25	25	25
EUR(1)	25	February 10, 2020	10Y CMS + 0.80	25	25	25
EUR	1,000	April 9, 2020	3.875	1,000	1,000	1,000
GBP	450	November 10, 2020	7.250	280	266	268
EUR	1,250	January 14, 2021	3.875	1,250	1,250	1,250
GBP (2)	517	June 27, 2021	0.375	608	578	583
USD	1,000	September 14, 2021	4.125	890	873	834
EUR	255	October 13, 2021	10Y CMS + 0.69	255	255	255
EUR	272	December 21, 2021	10Y TEC + 0.50	272	272	272
EUR	650	January 15, 2022	0.500	650	-	-
EUR	1,000	June 15, 2022	3.000	1,000	1,000	1,000
EUR	500	September 16, 2022	3.375	500	500	500
EUR (3)	150	February 6, 2023	EUR 3M + 5.5	150	-	-
EUR	500	March 1, 2023	2.500	500	500	500
EUR	750	September 11, 2023	0.750	750	750	750
HKD	700	October 6, 2023	3.230	80	78	75
HKD	410	December 22, 2023	3.550	47	46	44
EUR	650	January 9, 2024	3.125	650	650	650
EUR	1,250	July 15, 2024	1.125	1,250	-	-
EUR	750	May 12, 2025	1.000	750	750	750
EUR	800	September 12, 2025	1.000	800	800	-
NOK	500	September 17, 2025	3.350	51	50	51
CHF	400	November 24, 2025	0.200	369	-	-
GBP	350	December 5, 2025	5.250	308	293	296
MAD ⁽⁴⁾	1,090	December 18, 2025	3.970	87	100	-
MAD (4)	720	December 18, 2025	1Y BDT + 1.00	57	66	-
EUR	750	September 4, 2026	0.000	750	-	-
EUR	75	November 30, 2026	4.125	75	75	75
MAD (4)	1,002	December 10, 2026	3.400	93	-	-
MAD ⁽⁴⁾	788	December 10, 2026	1Y BDT + 0.85	73		
EUR	750	February 3, 2027	0.875	750	750	750
EUR	500	September 9, 2027	1.500	500	500	500
EUR	1,000	March 20, 2028	1.375	1,000	1,000	-
EUR	50	April 11, 2028	3.220	50	50	50
NOK	800	July 24, 2028	2.955	81	80	-
GBP	500	November 20, 2028	8.125	588	559	564
EUR	1,250	January 15, 2029	2.000	1,250	-	-
EUR	150	April 11, 2029	3.300	150	150	150
CHF	100	June 22, 2029	0.625	92	1 000	-
EUR	1,000	January 16, 2030	1.375	1,000	1,000	-
EUR	1,200	September 12, 2030	1.875	1,200	1,200	105
EUR	105	September 17, 2030	2.600	105	105	105
EUR	100	November 6, 2030	0.091 (5)	100	100	100
USD EUR	2,500	March 1, 2031 May 29, 2031	9.000 ⁽⁶⁾ 1.342	2,191 300	2,150	2,052
EUR	300	•			67	64
EUR	50 50	December 5, 2031	4.300 (zero coupon) 4.350 (zero coupon)	69 70	67	
EUR	50	December 8, 2031 January 5, 2032	4.450 (zero coupon) 4.450 (zero coupon)	68	65	65 62
GBP	750	January 15, 2032	3.250	882	00	02
EUR	1,000	September 4, 2032	0.500	1,000	_	-
EUR	1,500	January 28, 2033	8.125	1,500	1,500	1,500
LUN	1,300	Jai luai y 20, 2003	0.120	1,500	1,500	1,500

Bond measured at fair value through profit or loss.
 Exchangeable bonds in BT shares (see below).
 Bond issued in 2018 by SecureLink at Euribor 3M (floored at 0) + 5.5%.
 Bonds issued by Médi Telecom. Bonds bearing 1Y BDT rate corresponds to 52 weeks Moroccan treasury bonds rate (recalculated once a year).
 Bond bearing interests at a five rate of 2% until 2017 and then at CMS 10 years X 166% (0.091% until November 2020). The variable rate is floored at 0% and capped at 4% until 2023 and at 5% beyond.
 Bond until November 2020). The variable rate is floored at 0% and capped at 4% until 2023 and at 5% beyond.

⁽⁶⁾ Bond with a Step-up clause (clause that triggers a change in interest payments of Orange's credit rating from the rating agencies changes). See Note 13.3.

Notional	Initial nominal amount	Maturity	Interest rate	Oustandir	ons of euros)	
currency	(in millions of currency units)		(%)	December 31, 2019	December 31, 2018	December 31, 2017
EUR	55	September 30, 2033	3.750	55	55	55
GBP	500	January 23, 2034	5.625	588	559	564
HKD	939	June 12, 2034	3.070	107	-	-
EUR	300	July 11, 2034	1.200	300	-	-
EUR	50	April 16, 2038	3.500	50	50	50
USD	900	January 13, 2042	5.375	801	786	750
USD	850	February 6, 2044	5.500	757	742	709
EUR	750	September 4, 2049	1.375	750	-	-
GBP	500	November 22, 2050	5.375	588	559	564
Outstanding a	amount of bonds			30,537	26,695	25,253
Accrued intere Amortized cos				532 (176)	527 (152)	550 (100)
Total				30,893	27,070	25,703

In the first semester 2019, Orange purchased call options with the same characteristics of the sale of call option included in bonds exchangeable in BT shares. Those instruments have neutralized the original sale of call option, so the Group is no more exposed to the change in fair value of BT shares in relation with the bonds exchangeable in BT shares.

As a reminder, in June 2017, the Group issued bonds exchangeable in BT shares for a notional amount of 517 million pounds sterling (585 million euros at the ECB daily reference rate) bearing a coupon of 0.375% and having an underlying 133 million of BT shares. The Bonds mature in June 2021 and have been redeemable on demand by investors since August 7, 2017 in cash, in BT stock or in a combination of the two, at the choice of Orange. Under IFRS, this operation was split between a financial debt at amortized cost and a derivative instrument (sale of call option) revalued at fair value through profit and loss.

12.6 Loans from development organizations and multilateral lending institutions

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Sonatel	380	343	289
Médi Telecom	282	335	385
Orange Côte d'Ivoire	237	225	275
Orange Egypt	213	210	183
Orange Mali	203	200	64
Orange Cameroon	82	105	101
Orange Jordanie	77	31	46
Other	150	127	130
Bank loans	1,625	1,574	1,473
Orange SA ⁽¹⁾	2,356	2,023	1,388
Orange Espagne	33	67	100
Loans from development organizations			
and multilateral lending institutions (2)	2,389	2,090	1,488
Total	4,013	3,664	2,961

⁽¹⁾ Orange SA negotiated with the European Investment Bank a loan of 350 million euros (maturity in 2026) in 2019 and two loans in 2018 for a total notional of 650 million euros (maturity in 2025).
(2) Primarily the European Investment Bank.

12.7 Financial assets

After application of IFRS 9 on January 1, 2018, the financial assets break down as follows:

(in millions of euros)	December 31, 2019		December 31, 2018	January 1, 2018 ⁽¹⁾	
	Non-current	Current	Total	Total	Total
Financial assets at fair value through					
other comprehensive income that will					
not be reclassified to profit or loss	277	-	277	254	208
Investments securities	277	-	277	254	208
Financial assets at fair value through profit or loss	257	4,696	4,953	4,041	4,347
Investments at fair value	-	4,696	4,696	2,683	2,647
o/w negotiable debt securities ⁽²⁾	-	4,696	4,696	2,679	2,498
o/w other	-	-	-	4	149 ⁽³⁾
Investments securities	133	-	133	805	1,005
Cash collateral paid (4)	123	-	123	553	695
Financial assets at amortized cost	701	71	772	762	405
Receivables related to investments (5)	52	18	70	55	46
Other	649 (6)	52	702	707 (6)	359
Total financial assets	1,235	4,766	6,001	5,057	4,960

As of 2017, for which the IFRS 9 standard was not applied as authorized by the standard, the financial assets broke down as follows:

(in millions of euros)	December 31, 2017
Assets available for sale	
Equity securities	1,067
Financial assets at fair value	
Investments at fair value	2,647
o/w negotiable debt securities	2,498
o/w others	149(1)
Equity securities measured at fair value	146
Cash collateral paid	695
Other financial assets	
Receivables related to investments	46 (2)
Other	359
Total	4,960

Investment securities

Investment securities measured at fair value through other comprehensive income that may not be reclassified to profit or loss

(in millions of euros)	2019	2018
Investment securities measured at fair value through other comprehensive income that may not be reclassified to profit or loss – in the opening balance	254	208
Acquisitions Changes in fair value Sales Other movements	52 (25) (2) (2)	75 (22) (7) 0
Investment securities measured at fair value through other comprehensive income that may not be reclassified to profit or loss – in the closing balance	277	254

Investment securities measured at fair value through other comprehensive income that may not be reclassified to profit or loss included numerous shares in companies held by investment funds.

Figures have been adjusted after IFRS 9 application.
 NEUCP only.
 OAT bonds (repurchase agreement with Orange Bank).
 See Note 13.5.

 ⁽a) Dee Note 103.
 (b) Including loan from Orange SA to Orange Bank for 27 million euros.
 (c) Including the escrowed amount of 346 million euros related to the Digicel litigation.

OAT bonds (repurchase agreement with Orange Bank).
 Including loan from Orange SA to Orange Bank for 27 million euros.

Investment securities measured at fair value through profit or loss

(in millions of euros)	2019	2018
Investment securities measured at fair value through profit or loss – in the opening balance	805	1,005
Changes in fair value Sale of BT shares Other movements	17 (659) (29)	(101) (53) (46)
Investment securities measured at fair value through profit or loss – in the closing balance	133	805

For the period 2017 for which IFRS 9 was not applied as authorized, the change in investment securities broke down as follows:

(in millions of euros)	2017
Investment securities – in the opening balance	1,878
Sale of one third of BT shares Impairment of BT shares maintained excluding effect of FX risk hedge Changes in fair value	(570) (325) 20
Other movements	64
Investment securities – in the closing balance	1,067

BT shares

On January 29, 2016, following the disposal of EE, Orange received 4% of the equity in BT Group Plc (BT), or about 399 million shares for the equivalent of 2,462 million euros (converted at the ECB fixing of pound sterling against euro on January 28, therefore 0.76228).

In 2017, the Orange Group sold a third of its investment or 133 million shares for a net amount of 433 million euros (converted at the ECB reference rate of June 22, 2017, the settlement/delivery date, of 0.88168). At December 31, 2016, the fair value of these shares amounted to 570 million euros. The related effect of these shares on profit and loss was (126) million euros, including 11 million euros from the foreign exchange hedge.

In 2018, the Orange Group sold 18 million shares for a net amount of 53 million euros. As of December 31, 2017, the fair value of these shares amounted to 55 million euros. The effect in profit or loss in 2018 related to securities sold stood at (2) million euros. These securities were not subject to exchange-rate hedging in 2018.

On June 28, 2019 the Group decided to sell its residual shares of 2.49% in BT Group Plc (BT) at a price of 1.99 pounds sterling per share for a total net amount of 486 million pound sterling (543 million euros at the ECB daily reference rate of July 2, 2019, the settlement/delivery date, i.e., 0.89443). On December 31, 2018 the fair value of these shares amounted to 659 million euros. The impact in the income statement in 2019 amounts to (119) million euros (of which (3) million euros from the foreign exchange hedge effects).

The effect of the investment in BT on consolidated net finance costs is given below:

(in millions of euros)	2019	2018	2017
Impact of 2017 sale	-	-	(126)
Impact of 2018 sales	-	(2)	(22)
Impact of 2019 sale	(119)	(93)	(271)
Dividends received	-	44	47
Effect in the consolidated financial net income of the investment in BT	(119)	(51)	(372)

Accounting policies

Financial assets

Financial assets at fair value through profit or loss (FVR)

Certain investment securities which are not consolidated or equity-accounted, and cash investments such as negotiable debt securities, deposits and mutual funds (UCITS), that are compliant with the Group's risk management policy or investment strategy, may be designated by Orange as being recognized at fair value through profit or loss. These assets are recognized at fair value at inception and subsequently. All changes in fair value are recorded in net financial expenses.

- Financial assets at fair value through other comprehensive income that may not be reclassified to profit or loss (FVOCI)

Investment securities which are not consolidated or equity-accounted are, subject to exceptions, recognized as assets at fair value through other comprehensive income that may not be reclassified to profit/loss. They are recognized at fair value at inception and subsequently. Temporary changes in value and gains (losses) on disposals are recorded in other comprehensive income that may not be reclassified to profit/loss.

- Financial assets at amortized cost (AC)

This category mainly includes loans and receivables. These instruments are recognized at fair value at inception and are subsequently measured at amortized cost using the effective interest method. If there is any objective evidence of impairment of these assets, the value of the asset is reviewed at the end of each reporting period. An impairment loss is recognized in the income statement when impairment tests demonstrate that the financial asset carrying amount is higher than its recoverable amount. For trade receivables, the provisioning system also covers expected losses.

As a reminder, before the application of IFRS 9, the accounting policies related to financial assets were as follows:

Assets available for sale

The Group's assets available for sale mainly consist of investment securities, which are not consolidated and not accounted for using the equity method, and marketable securities that do not fulfill the criteria for classification in any of the other categories of financial assets. They are recognized at fair value at inception and subsequently.

Temporary changes in value are recorded as "Gains (losses) on assets available for sale" within other comprehensive income.

When there is an objective evidence of impairment on available-for-sale assets or a decrease in fair value by at least one-third or over 2 consecutive semesters, the cumulative impairment loss included in other comprehensive income is definitely reclassified from equity to profit or loss within net financial expenses.

Financial assets at fair value through profit or loss

The Group can designate at fair value at inception financial investments such as negotiable debt securities, deposits and mutual funds (UCITS), that are compliant with the Group's risk management policy or investment strategy (see Note 13.3). They are recognized at fair value at inception and subsequently. All changes in fair value are recorded in net financial expenses.

Other financial assets

This category mainly includes loans and receivables. These instruments are recognized at fair value at inception and are subsequently measured at amortized cost using the effective interest method. If there is any objective evidence of impairment of these assets, the value of the asset is reviewed at the end of each reporting period. An impairment loss is recognized in the income statement when impairment tests demonstrate that the financial asset carrying amount is higher than its recoverable amount.

12.8 Derivatives instruments

12.8.1 Market value of derivatives

	December 31,	December 31,	December 31,
	2019	2018	2017
(in millions of euros)	Net	Net	Net
Hedging derivatives Cash flow hedge derivatives Fair value hedge derivatives Derivatives held for trading (1)	324	(162)	(447)
	328	(160)	(447)
	(4)	(2)	(0)
	(187)	(298)	(282)
Net derivatives (2)	138	(460)	(729)

⁽¹⁾ Mainly due to the foreign exchange effects of the economic hedges against the revaluation of subordinated notes denominated in pounds sterling (equity instruments recognized at their historical value – see Note 14.4) for (136) million euros in 2019, (246) million euros in 2018 and (203) million euros in 2017.

The risks hedged by these derivative instruments are described in Note 13. These derivatives are associated with cash-collateral agreements, the effects of which are described in Note 13.5.

⁽²⁾ Of which foreign exchange effects of the cross currency swaps (classified as hedging or held for trading) hedging foreign exchange risk on gross debt notional for 822 million euros in 2019, 512 million euros in 2018 and 125 million euros in 2017. The foreign exchange effects of the cross currency swaps is the difference between the notional converted at the closing rate and its notional converted at the opening rate (or at the trading day spot rate in case of new instrument).

Accounting policies

Derivative instruments are measured at fair value in the statement of financial position and presented according to their maturity date, regardless of whether they qualify for hedge accounting under IFRS 9 (hedging instruments versus trading instruments).

Derivatives are classified as a separate line item in the statement of financial position.

Trading derivatives are non-qualified economic hedges. Changes in the value of these instruments are recognized directly in profit and loss

Hedge accounting is applicable when:

- at the inception of the hedge, there is a formal designation and documentation of the hedging relationship;
- the effectiveness of the hedge is demonstrated at inception and it is expected to continue in subsequent periods: i.e. at inception and throughout its duration, the company expects changes in the fair value of the hedged element to be almost fully offset by changes in the fair value of the hedged instrument.

There are three types of hedge accounting:

- the fair value hedge is a hedge of the exposure to changes in fair value of a recognized asset or liability (or an identified portion of the asset or liability) that are attributable to a particular interest rate and/or currency risk and which could affect profit or loss. The hedged portion of these items is re-measured at fair value in the statement of financial position. Change in this fair value is booked in the income statement and offset by symmetrical changes in the fair value hedging of financial hedging instruments up to the limit of the hedge effectiveness;
- the cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular interest rate and/or currency risk associated with a recognized asset or liability or a highly probable forecast transaction (such as a future purchase or sale) and which could affect profit or loss. As the hedged item is not recognized in the statement of financial position, the effective portion of change in fair value of the hedging instrument is booked in other comprehensive income. It is reclassified in profit or loss when the hedged item (financial asset or liability) affects the profit or loss or in the initial cost of the hedged item when it relates to the hedge of a non-financial asset acquisition cost;
- the net investment hedge is a hedge of the exposure to changes in values attributable to exchange risk of a net investment in a foreign operation, and could affect profit or loss on the disposal of the foreign operation. The effective portion of the net investment hedge is recorded in other comprehensive income. It is reclassified in profit or loss upon the disposal of the net investment.

For transactions qualified as fair value hedges and economic hedges, the foreign exchange impact of changes in the fair value of derivatives is booked in operating income when the underlying hedged item results from operational transactions and in net finance costs when the underlying hedged item is a financial asset or liability.

Hedge accounting can be terminated when the hedged item is no longer recognized, i.e. when the Group revokes the designation of the hedging relationship or when the hedging instrument is terminated or exercised. The accounting consequences are as follows:

- fair value hedge: at the hedge accounting termination date, the adjustment of the fair value of the liability is amortized using an effective interest rate recalculated at this date. Should the item hedged disappear, the change in fair value is recognized in the income statement;
- cash flow hedge: amounts recorded in other comprehensive income are immediately reclassified in profit or loss when the hedged item is no longer recognized. In all other cases, amounts are reclassified in profit or loss, on a straight basis, throughout the remaining life of the original hedging relationship.

In both cases, subsequent changes in the value of the hedging instrument are recorded in profit or loss.

Concerning the effects of the Foreign Currency Basis Spread, cross currency swaps designated as cash flow hedges, the Group has chosen to designate them as costs of hedge. This option enables recognizing these effects in comprehensive income and amortizing the cost of the Basis Spread to profit/loss over the period of the hedge.

12.8.2 Cash flow hedges

The Group's cash flow hedges main goal is to neutralize foreign exchange risk on future cash flows (notional, coupons) or switch floating-rate debt to fixed-rate debt.

The ineffective portion of cash flow hedges recognized in net income is not significant during the periods presented. The main hedges unmatured at December 31, 2019, as well as their effects on the financial statements, are detailed in the table below.

(in millions of euros)		Hedged risk				
	Total	Exchange and interest rate risk	Exchange risk	Interest rate risk		
Hedging instruments	328	Cross currency swap	Forward FX swap Option	Interest rate swap		
Carrying amount – asset Carrying amount – liability	557 (229)	554 (190)	2 (3)	1 (36)		
Change in cash flow hedge reserve	144	148	(10)	7		
Gain (loss) recognized in other comprehensive income Reclassification in financial result Reclassification in operating income Reclassification in initial carrying amount of hedged item	179 (38) 1 2	184 (36) -	(12) (1) 1 2	7 (1) - -		
Cash flow hedge reserve	(123)	(95)	(6)	(22)		
o/w related to unmatured hedging instruments o/w related to discontinued hedges	(542) 418	(513) 418	(6)	(22) 0		
Hedged item		Bonds and credit line	Purchases of handsets and equipment	Bonds and Leasing		
Balance sheet item		Current and non current financial liabilities	Property, plant and equipment	Other liabilities and financial liabilities current and non current		

The main hedges unmatured at December 31, 2018, as well as their effects on the financial statements, are detailed in the table below.

(in millions of euros)		Hedged	risk	
	Total	Exchange and interest rate risk	Exchange risk	Interest rate risk
Hedging instruments	(160)	Cross currency swap	Forward FX swap Option	Interest rate swap
Carrying amount – asset Carrying amount – liability	353 (513)	351 (479)	2 (0)	(34)
Change in cash flow hedge reserve	(67)	(83)	(7)	23
Gain (loss) recognized in other comprehensive income Reclassification in financial result Reclassification in operating income Reclassification in initial carrying amount of hedged item	(53) (22) (1) 9	(45) (38) - -	(15) - (1) 9	7 16 - -
Cash flow hedge reserve	(267)	(245)	3	(25)
o/w related to unmatured hedging instruments o/w related to discontinued hedges	(721) 454	(696) 451	3 0	(28) 3
Hedged item		Bonds and credit line	Purchases of handsets and equipment	Bonds and Leasing
Balance sheet item		Current and non current financial liabilities	Property, plant and equipment	Current and non current financial liabilities
The change in the cash flow hedge reserve in 2017 was analyzed	d as follows:			
(in millions of euros)				2017
Gain (loss) recognized in other comprehensive income during the Reclassification in financial result for the period Reclassification in operating income for the period Reclassification in initial carrying amount of hedged item	e period ⁽¹⁾			51 (10) (3) 11
Other comprehensive income				49
In 2017, the cash flow hedge reserve broke down as follows:				
(in millions of euros)			D	ecember 31, 2017
Other comprehensive income related to unmatured hedging instroo/w Orange SA o/w other entities Reserve to be amortized for discontinued hedges	ruments			(686 <u>)</u> (666, (20, 486
Other comprehensive income related to hedging instruments	S			(200)

The nominal amounts of the main cash flow hedges are presented below:

	Notional amounts of hedging instruments per maturity (in millions of hedged currency units)					
	2020	2021	2022	2023	2024 and beyond	
Orange SA					and boyond	
Cross currency swaps						
CHF	-	-	-	-	500(1)	
GBP	238	517	-	-	2,512(2)	
HKD	-	-	-	1,110	939 (3)	
NOK	-	-	-	-	1,300 (4)	
USD	23	1,000	-	-	4,200 (5)	
Interest rate swaps EUR	-	255	-	-	100 (6)	
FT IMMO H						
Interest rate swaps EUR	13	48	57	-	40 (7)	
FT IMMO H						
Forwards EUR	158	-	-	-	-	

- 400 MCHF with a maturity 2025 and 100 MCHF with a maturity 2029.
- 262 MGBP with a maturity 2025, 500 MGBP with a maturity 2032, 500 MGBP with a maturity 2034 and 500 MGBP with a maturity 2050. 939 MHKD with a maturity 2034.

- 500 MNOK with a maturity 2025 and 800 MNOK with a maturity 2028. $2,\!450$ MUSD with a maturity 2031, 900 MUSD with a maturity 2042 and 850 MUSD with a maturity 2044.
- 100 MEUR with a maturity 2030.
- 40 MEUR with a maturity 2024.

Note 13 Information on market risk and fair value of financial assets and liabilities (excluding Orange Bank)

The Group uses financial position or performance indicators that are not specifically defined by IFRS, such as EBITDAaL (see Note 1.8) and net financial debt (see Note 12.3).

Market risks are monitored by Orange's Treasury and Financing Committee, which reports to the Executive Committee. The Committee is chaired by the Group's Executive Committee Member in charge of Finance and Performance and meets on a quarterly basis.

It sets the guidelines for managing the Group's debt, especially in respect of its interest rate, foreign exchange, liquidity and counterparty risk exposure for the coming months, and reviews past management (transactions realized, financial results).

13.1 Interest rate risk management

Management of fixed-rate/variable-rate debt

Orange Group seeks to manage its fixed-rate/variable-rate exposure in euros in order to minimize interest costs by using firm and conditional interest rate derivatives such as swaps, futures, caps and floors.

The fixed-rate component of gross financial debt, excluding cash collateral received and agreements to buy back non-controlling interests, was estimated at 91% at December 31, 2019, 87% at December 31, 2018 and 83% at December 31, 2017.

Sensitivity analysis of the Group's position to changes in interest rates

The sensitivity of the Group's financial assets and liabilities to interest rate risk is only analyzed for the components of net financial debt that are interest-bearing and therefore exposed to interest rate risk.

Sensitivity of financial expenses

Based on a constant amount of debt and a constant management policy, a 1% rise in interest rates would result in a 43 million euros decrease in the annual gross financial debt and a 1% fall in interest rates would result in a 43 million euros increase.

Sensitivity of cash flow hedge reserves

A 1% rise in euro interest rates would increase the market value of derivatives designated as cash flow hedges and the associated cash flow hedge reserves by approximately 1,336 million euros. A 1% fall in euro interest rates would lead to a decrease in their market value and in the cash flow hedge reserves of approximately 1,333 million

13.2 Foreign exchange risk management

Operational foreign exchange risk

The Group's foreign operations are carried out by entities that operate in their own country and mainly in their own currency. Their operational exposure to foreign exchange risk is therefore limited to certain types of flows: purchases of equipment or network capacity, purchases of terminals and equipment sold or leased to customers, purchases from or sales to international operators.

Whenever possible, the entities of the Orange Group have put in place policies to hedge this exposure (see Note 12.8).

Financial foreign exchange risk

Financial foreign exchange risk mainly relates to:

- dividends paid to the parent company: in general, the Group's policy is to economically hedge this risk as from the date of the relevant subsidiary's Shareholders' Meeting;
- financing of the subsidiaries: except in special cases, the subsidiaries are required to cover their funding needs in their functional currency;
- Group financing: most of the Group's bonds, after derivatives, are denominated in euros. From time to time, Orange SA issues bonds in markets other than euro markets (primarily the US dollar, pound sterling and Swiss franc). If Orange SA does not have assets in these currencies, in most cases, the issues are translated into euros through cross currency swaps. The debt allocation by currency also depends on the level of interest rates and particularly on the interest rate differential relative to the euro.

Lastly, the Group economically hedges foreign exchange risk on its subordinated notes denominated in pound sterling that are recorded in equity at their historical value (see Note 14.4), with cross currency swaps, for a notional amount of 1,250 million pounds sterling.

The table below shows the main exposures to foreign exchange fluctuations of the net financial debt in foreign currencies of Orange SA, excluding the hedging effects of the subordinated notes described above and of Orange Polska and also shows the sensitivity of the entity to a 10% change in the foreign exchange rates of the currencies to which it is exposed. Orange SA is the entity bearing the major foreign exchange risk, including internal operations which generate a net foreign exchange gain or loss in the consolidated annual financial statements.

(in millions of currency units)	E	Exposure in currency units (1)					Sensitivity analysis		
	EUR	USD	GBP	PLN	Total trans- lated	10 % gain in euro	10% loss in euro		
Orange SA Orange Polska	(33)	(35) 2	(1)	(26)	(39) (32)	4 3	(4) (4)		
Total (euros)	(33)	(30)	(2)	(6)	(71)				

⁽¹⁾ Excluding FX hedge of subordinated notes denominated in pound sterling.

Foreign exchange risk to assets

Due to its international presence, the Orange Group's statement of financial position is exposed to foreign exchange fluctuations, as these affect the translation of subsidiaries' assets and equity interests denominated in foreign currencies. The currencies concerned are mainly the pound sterling, the zloty, the Egyptian pound, the US dollar, the Jordanian dinar and the Moroccan dirham.

To hedge its largest foreign asset exposures, Orange has issued debt in the relevant currencies.

The amounts presented below take into account the activities of Orange Bank (activities only in euros).

(in millions of euros)			Cont	ribution	to cons	olidated	net as	sets		Sensitivity	Sensitivity analysis		
	EUR	USD	GBP	PLN	EGP	JOD	MAD	Other curren- cies	Total	10% gain in euro	10% loss in euro		
Net assets excluding net debt (a) ⁽¹⁾ Net debt by currency	51,177	218	(1,456)	3,528	971	574	954	3,919	59,882	(791)	967		
	(24,436)	50	1,521 ⁽³⁾	(1,435)	(214)	(118)	(403)	(433)	(25,466)	94	(115)		
Net assets by currency (a) + (b)	26,741	268	65	2,093 ⁽⁴⁾	756	456	551	3,486	34,416	(698)	853		

⁽¹⁾ Excluding net debt by currency do not include components of net financial debt.

⁽²⁾ The net financial debt as defined by Orange group does not include Orange Bank activities for which this concept is not relevant (see Note 12.3).

 ⁽³⁾ Of which economic hedge of subordinated note denominated in pounds sterling for 1,250 million pounds sterling (equivalent 1,469 million euros).
 (4) Share of net assets attributable to owners of the parent company in zlotys amounts to 1,061 million euros.

Due to its international presence, the Orange Group income statement is also exposed to risk arising from changes in foreign exchange rates due to the conversion, in the consolidated financial statements, of its foreign subsidiaries' financial statements.

(in millions of euros)		Contribution to consolidated net assets									Sensitivity analysis	
	EUR	USD	GBP	PLN	EGP	JOD	MAD	Other curren- cies	Total	10% gain in euro	10% loss in euro	
Revenues Reported EBITDAaL Operating income	31,977 10,075 4,646	1,184 244 177	254 28 16	2,619 635 96	779 211 137	398 142 7	571 173 26	4,455 1,352 821	42,238 12,860 5,927	(933) (253) (116)	1,140 309 142	

13.3 Liquidity risk management

Diversification of sources of funding

Orange has diversified sources of funding:

- regular issues in the bonds markets;
- occasional financing through loans from multilateral or development lending institutions;
- issues in the short-term securities markets under the NEU Commercial Paper program (Negotiable European Commercial papers);
- on December 21, 2016, Orange entered into a 6 billion euros syndicated loan with 24 international banks in order to refinance the previous syndicated loan maturing in January 2018. The new loan, with initial maturity in December 2021, includes two options to extend for one more year each, exercisable by Orange and subject to the banks' approval. Orange exercised both of its options, the first one in 2017 and the second in 2018, allowing it, after agreement of the lenders, to extend the initial maturity first until December 2022 and then December 2023.

Liquidity of investments

Orange invests its cash surplus in near-cash or in short-term fair value investments (negotiable debt securities, mutual funds or UCITS and term deposits). These investments give priority to minimizing the risk of loss on capital over performance.

Cash and cash equivalents were held mainly in France and other countries of the European Union that are not subject to restrictions on convertibility or exchange control.

Smoothing debt maturities

The policy followed by Orange is to apportion the maturities of debt evenly over the years to come.

The following table shows undiscounted future cash flows for each financial liability shown on the statement of financial position. The key assumptions used in this schedule are:

- amounts in foreign currencies are translated into euro at the yearend closing rate;
- future variable-rate interest is based on the last fixed coupon, unless a better estimate is available;
- TDIRA being necessarily redeemable in new shares, no redemption is taken into account in the maturity analysis. In addition, interest payable on the bonds is due over an undetermined period of time (see Note 12.4) therefore, only interest payable for the first period is included (including interest payments for the other periods would not provide relevant information);
- the maturity dates of revolving credit facilities are the contractual maturity dates;
- the "Other items" (undated and non-cash items) reconcile, for financial liabilities not accounted for at fair value, the future cash flows and the balance in the statement of financial position.

(in millions of euros)	Note	December 31, 2019	2020	2021	2022	2023	2024	2025 and beyond	Other items (1)
TDIRA	12.4	822	4	_	-	-	-	_	818
Bonds	12.5	30,893	1,910	3,323	2,198	1,575	1,947	20,115	(176)
Bank loans and from development organizations and multilateral									
lending institutions	12.6	4,013	1,029	491	266	943	222	1,070	(8)
Debt relating to financed assets	12.3	125	28	28	28	28	13	-	-
Cash collateral received	12.3	261	261	-	-	-	-	-	-
Neu Commercial Papers (2)	12.3	158	158	-	-	-	-	-	-
Bank overdrafts	12.3	203	203	-	-	-	-	-	-
Other financial liabilities	12.3	602	594	3	1	1	1	1	-
Derivatives (liabilities)	12.3	436	17	8	91	61	4	(130)	-
Derivatives (assets)	12.3	(573)	(10)	(220)	(O)	(20)	-	(468)	-
Other Comprehensive Income									
related to unmatured hedging instruments	12.3	(542)	-	-	-	-	-	-	-
Gross financial debt after derivatives		36,397	4,194	3,633	2,584	2,588	2,187	20,589	633
Trade payables		10,246	9,429	91	85	59	129	453	-
Total financial liabilities (including derivative	es assets)	46,643	13,623 ⁽³⁾	3,725	2,669	2,647	2,316	21,042	633
Future interests on financial liabilities (4)		-	2,097	1,048	919	1,021	980	5,990	-

- Undated items: TDIRA notional. Non-cash items: amortized cost on TDIRA, bonds and bank loans, and discounting effect on long term trade payables. Negotiable European Commercial Papers (formerly called "commercial papers").
- Amounts presented for 2020 correspond to notionals and accrued interests for 555 million euros.
- (4) Mainly future interests on bonds for 11,106 million euros, on bank loans for 928 million euros and on derivatives instruments for (1,417) million euros.

The liquidity position is one of the indicators of financial position used by the Group. This aggregate, not defined by IFRS, may not be comparable to similarly entitled indicators used by other groups.

At December 31, 2019, the liquidity position of Orange's telecom activities amounts to 17,027 million euros and exceeds the repayment obligations of its gross financial debt in 2020. It breaks down as follows:

Liquidity position



At December 31, 2019, Orange telecom activities had access to credit facilities in the form of bilateral credit lines and syndicated credit lines. Most of these lines bear interest at floating rates. Available undrawn amount of credit facilities amounts to 6,218 million euros (including 6,000 million euros for Orange SA).

Any specific contingent commitments in respect of compliance with financial ratios are presented in Note 13.4.

Orange's credit ratings

Orange's credit rating is an additional performance indicator used to assess the Group's financial policy and risk management policy and, in particular, its solvency and liquidity risk, and is not a substitute for an analysis carried out by investors. Rating agencies revise the ratings they assign on a regular basis. Any change in the rating could produce an impact on the cost of future financing or restrict access to liquidity.

In addition, a change in Orange's credit rating will, for certain outstanding financing, affect the compensation paid to investors:

- one Orange SA bond (see Note 12.5) with an outstanding amount of 2.5 billion dollars maturing in 2031 (equivalent to 2.2 billion euros at December 31, 2019) is subject to a Step-up clause in the event that Orange's rating changes. This clause was triggered in 2013 and early 2014: the coupon due in March 2014 was thus computed on the basis of an interest rate of 8.75% and since then, the bond bears interest at the rate of 9%;
- the margin of the syndicated credit line of 6 billion euros signed on December 21, 2016 might be modified in light of changes to Orange's credit rating, upwards or downwards. As of December 31, 2019, the credit facility was not drawn.

At December 31, 2019, neither Orange's credit ratings nor the outlook had changed compared with December 31, 2018:

	Standard & Poor's	Moody's	Fitch Ratings	Japan Credit Rating
Long-term debt	BBB+	Baa1	BBB+	А
Outlook	Stable	Stable	Stable	Stable
Short-term debt	A2	P2	F2	Not applicable

13.4 Financial ratios

Main commitments with regard to financial ratios

Orange SA does not have any credit line or loan subject to specific covenant with regard to financial ratios.

Certain subsidiaries of Orange SA are committed to comply with certain financial ratios related to indicators defined in the contracts with the banks. The breach of these ratios constitutes an event of default that can lead to early repayment of the line of credit or loan concerned.

The main obligations are as follows:

- Orange Egypt: in respect of 2018 bank financing contracts, of which the total nominal amount outstanding as of December 31, 2019 was 3,850 million Egyptian pounds (equal to 214 million euros), Orange Egypt must comply with a "net senior debt to EBITDA" ratio;
- Médi Telecom: in respect of its 2012, 2014 and 2015 bank financing contracts, of which the total nominal amount outstanding as of December 31, 2019 was 3,038 million Moroccan Dirhams (283 million euros), Médi Telecom must comply with ratios relating to its "net financial debt" and "net equity";
- Orange Côte d'Ivoire: in respect of its bank financing contracts signed in 2016 and 2019, of which the total notional amount outstanding at December 31, 2019 was 132 billion CFA francs and 34 million euros (for a total of 235 million euros), Orange Côte d'Ivoire must comply with a "net senior debt to EBITDA" ratio.

These ratios were complied with at December 31, 2019.

Clauses related to instances of default or material adverse changes

Most of Orange's financing agreements, including in particular the 6 billion euros syndicated credit facility set up on December 21, 2016, as well as bond issues, are not subject to early redemption obligations in the event of a material adverse change, or cross default provisions. Most of these contracts include cross acceleration provisions. Thus, the mere occurrence of events of default in other financing agreements would not automatically trigger an accelerated repayment under such contracts.

13.5 Credit risk and counterparty risk management

The Group could be exposed to a concentration of counterparty risk in respect of its trade receivables, cash and cash equivalents, investments and derivatives.

Orange considers that it has limited concentration in credit risk with respect to trade receivables due to its large and diverse customer base (residential, professional and large business customers) operating in numerous industries and located in many French regions and foreign countries. In addition, the maximum value of the counterparty risk on these financial assets is equal to their recognized net carrying value. An analysis of net trade receivables past due is provided in Note 4.3. For loans and other receivables, amounts past due but not provisioned are not material.

Orange SA is exposed to bank counterparty risk through its investments and derivatives. Therefore, it performs a strict selection based on the credit rating of public, financial or industrial institutions in which it invests or with which it enters into derivatives agreements.

- For each non-banking counterparty selected for investments, limits are based on ratings and maturities of the investments.
- For each counterparty bank selected for investments and derivatives, limits are based on equity, rating, CDS (Credit Default Swap, an accurate indicator of potential default risk) as well as on periodic analyses carried out by the Treasury Department.
- Theoretical limits and consumption limits are monitored and reported on a daily basis to the Group treasurer and the head of the trading room. These limits are adjusted regularly depending on credit events.

For derivatives, master agreements relating to financial instruments (French Banking Federation) are signed with all counterparties and provide for a net settlement of debts and receivables, in case of failure of one of the parties, as well as for calculation of a final balance to be received or paid. These agreements include a CSA (Credit Support Annex) cash collateral clause that can lead to either a deposit (collateral paid) or collection (collateral received), on a daily basis. These payment amounts correspond to the change in market value of all derivatives.

As a rule, investments are negotiated with high-grade banks. Exceptionally, subsidiaries occasionally deal with counterparties with the highest ratings available locally.

Effect of mechanisms to offset exposure to credit risk and counterparty risk of the derivatives

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Collateralised Derivatives (net) (a)	144	(455)	(706)
Fair value of collateralised derivatives assets	570	383	233
Fair value of collateralised derivatives liabilities	(426)	(838)	(939)
Amount of cash collateral paid/(received) (b)	(138)	471	674
Amount of cash collateral paid	123	553	695
Amount of cash collateral received	(261)	(82)	(21)
Residual exposure to counterparty risk (a) + (b) ⁽¹⁾	7	16	(32)
Non collateralised Derivatives (net)	(6)	(5)	(22)
Fair value of non collateralised derivatives assets	3	2	2
Fair value of non collateralised derivatives liabilities	(10)	(7)	(24)

⁽¹⁾ The residual exposure to counterparty risk is mainly due to a time difference between the valuation of derivatives at the closing date and the date on which the cash collateral exchanges were made.

Changes in net cash collateral between 2018 and 2019 stem mainly from the strengthening of the US dollar and the pound sterling against the euro.

Sensitivity analysis of cash collateral deposits to changes in market interest rates and exchange rates

A change in market rates (mainly euro) of +/-1% would affect the fair value of interest rate hedging derivatives as follows:

(in millions of euros)	Rate decrease of 1% Rate increase of 1%				
Change of fair value of derivatives —	(1,409)	1,412			
Amount of cash collateral received (paid)	1,409	(1,412)			

A change in the euro exchange rate of +/-10% against currencies of hedged financing (mainly the pound sterling and the US dollar) would impact the fair value of foreign exchange derivatives as follows:

(in millions of euros)	10% loss in euro	10% gain in euro	
Change of fair value of derivatives —	1,795	(1,468)	
Amount of cash collateral received (paid))	(1,795)	1,468	

13.6 Equity market risk

Orange SA had no options to purchase its own shares, no forward purchase of shares and at December 31, 2019, held 9,742,968 treasury shares. Orange SA owns subsidiaries listed on equity markets whose share value may be affected by general trends in these markets. In particular, the market value of these listed subsidiaries' shares is one of the measurement variables used in impairment testing.

The mutual funds (UCITS) in which Orange invests for cash management purposes contain no equities.

Orange is also exposed to equity risk through certain retirement plan assets (see Note 6.2).

At December 31, 2019, the Group had no material exposure to market risk on stock in listed companies since the disposal in June 2019 of its residual stake of 2.49% in the share capital of BT (see Note 12.7).

13.7 Capital management

Orange SA and its non-financial subsidiaries are not subject to regulatory requirements related to equity (other than the usual standards applicable to any commercial company).

Its financial subsidiaries (like electronic money institutions) are subject to regulatory equity requirements specific to their sector and jurisdiction.

Like any company, Orange manages its financial resources (both equity and net financial debt) as part of a balanced financial policy, aiming to ensure flexible access to capital markets, including for the purpose of selectively investing in development projects, and to provide a return to shareholders.

In terms of net financial debt (see Note 12.3), this policy translates into liquidity management as described in Note 13.3 and a specific attention to credit ratings assigned by rating agencies.

This policy is also reflected, in some markets, by the presence of minority shareholders in the capital of subsidiaries controlled by Orange. This serves to limit the Group's debt while providing a benefit from the presence of local shareholders.

13.8 Fair value of financial assets and liabilities

(in millions of euros)	Note	Classification	December 31, 2019					
		under IFRS 9 ⁽¹⁾	Book value	Estimated fair value	Level 1 and cash	Level 2	Level 3	
Trade receivables		AC	5,343	5,343	-	5,343	-	
Financial assets	12.7		6,001	6,002	79	5,725	198	
Equity securities		FVOCI	277	277	79	-	198	
Equity securities		FVR	133	134	-	134	-	
Investments at fair value		FVR	4,696	4,696	-	4,696	-	
Cash collateral paid		FVR	123	123	-	123	-	
Financial assets at amortized cost		AC	772	772	-	772	-	
Cash and Cash equivalents	12.3		6,112	6,112	6,112	-	-	
Cash		AC	2,462	2,462	2,462	-	-	
Cash equivalents		FVR	3,651	3,651	3,651	-	-	
Trade payables		AC	(10,246)	(10,246)	-	(10,246)	-	
Financial liabilities	12.3		(37,076)	(42,455)	(34,554)	(7,837)	(64)	
Financial debts		AC	(37,007)	(42,386)	(34,554)	(7,811)	(21)	
Bonds at fair value		FVR	(26)	(26)	-	(26)	-	
Other		FVR	(43)	(43)		-	(43)	
Derivatives (net amount) (2)	12.8		138	138	-	138	-	

^{(1) &}quot;AC" stands for "amortized cost", "FVR " stands for "fair value through profit or loss", "FVOCI" stands for "fair value through other comprehensive income that will not be reclassified to profit or loss".

The market value of the net financial debt carried by Orange was estimated at 30.8 billion euros at December 31, 2019, for a carrying amount of 25.5 billion euros.

The table below provides an analysis of the change in level 3 market values for financial assets and liabilities measured at fair value in the statement of financial position.

(in millions of euros)	Equity securities	Financial liabilities at fair value through profit or loss, excluding derivatives
Level 3 fair values at December 31, 2018	221	(292)
Gains (losses) taken to profit or loss	-	(3)
Gains (losses) taken to other comprehensive income	15	-
Acquisition (sale) of securities	47	-
Transfer to one level to another	(82)(1)	-
Other	(2)	231 (2)
Level 3 fair values at December 31, 2019	198	(64)

⁽¹⁾ Fair value have been transferred from level 3 to level 1 in relation with the listing of the equity securities on an active market in 2019. (2) Include the effect of the cancellation of the commitment to purchase non-controlling interests (put) of Orange Bank (see Note 15.2).

(in millions of euros)	Note	Classification		Dec	ember 31, 2018		
		under IFRS 9	Book value	Estimated fair value	Level 1 and cash	Level 2	Level 3
Trade receivables		AC	5,329	5,329	-	5,329	-
Financial assets	12.7		5,057	5,057	692	4,144	221
Equity securities		FVOCI	254	254	33	-	221
Equity securities		FVR	805	805	659	146	-
Investments at fair value		FVR	2,683	2,683	-	2,683	-
Cash collateral paid		FVR	553	553	-	553	-
Financial assets at amortized cost		AC	762	762	-	762	-
Cash and Cash equivalents	12.3		5,081	5,081	5,081	-	-
Cash		AC	2,558	2,558	2,558	-	-
Cash equivalents		FVR	2,523	2,523	2,523	-	-
Trade payables		AC	(10,082)	(10,082)	_	(10,082)	-
Financial liabilities	12.3		(34,019)	(37,292)	(29,012)	(7,988)	(292)
Financial debts		AC	(33,721)	(36,994)	(29,012)	(7,961)	(21)
Bonds at fair value		FVR	(27)	(27)	-	(27)	-
Other		FVR	(271)	(271)	-	-	(271)
Derivatives (net amount)	12.8		(460)	(460)	-	(460)	-

The market value of the net financial debt carried by Orange was estimated at 28.7 billion euros as of December 31, 2018, for a carrying amount of 25.4 billion euros.

⁽²⁾ IFRS 9 classification for derivatives instruments depends on their hedging qualification.

The table below is presented according to IAS 39.

(in millions of euros)	Note	Classification		Dec	ember 31, 2017		
		under IAS 39	Book value	Estimated fair value	Level 1 and cash	Level 2	Level 3
Trade receivables		L&R	5,184	5,184	_	5,184	-
Financial assets	12.7		4,960	4,960	1,014	3,744	202
Assets available for sale		AFS	1,067	1,067	865	-	202
Equity securities measured at fair va	alue	FVR	146	146	-	146	-
Cash collateral paid		L&R	695	695	-	695	-
Investments at fair value		FVR	2,647	2,647	149	2,498	-
Other		L&R	405	405	-	405	-
Cash and cash equivalents	12.3		5,333	5,333	5,333	-	-
Cash equivalents		FVR	3,166	3,166	3,166	-	-
Cash		L&R	2,167	2,167	2,167	-	-
Trade payables		LAC	(10,099)	(10,132)	-	(10,132)	-
Financial liabilities	12.3		(32,475)	(37,327)	(28,332)	(8,859)	(136)
Financial debt			(32,311)	(37,163)	(28,332)	(8,831)	-
Bonds at fair value through profit	or loss	FVR	(28)	(28)	-	(28)	-
Other		FVR	(136)	(136)	-	-	(136)
Derivatives (net amount)	12.8		(729)	(729)	-	(729)	-

The market value of the net financial debt carried by Orange was estimated at 28.7 billion euros as of December 31, 2017, for a carrying amount of 23.8 billion euros.

Accounting policies

The financial assets and liabilities measured at fair value in the statement of financial position have been classified based on the three hierarchy levels:

- level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date:
- level 2: inputs that are observable for the asset or liability, either directly or indirectly;
- level 3: unobservable inputs for the asset or liability.

The fair value of the **financial assets at fair value through other comprehensive income** is the quoted price at year-end for listed securities and, for non-listed securities, uses a valuation technique determined according to the most appropriate financial criteria in each case (comparable transactions, multiples for comparable companies, shareholders' agreement, discounted present value of future cash flows).

For **financial assets at amortized cost**, the Group considers that the carrying amount of cash, trade receivables and various deposits provide a reasonable approximation of fair value, due to the high liquidity of these elements.

Among financial assets at fair value through profit or loss, with respect to very short-term investments such as deposits, certificates of deposit, commercial paper or negotiable debt securities, the Group considers that the nominal value of the investment and any related accrued interest represent a reasonable approximation of fair value.

The fair value of mutual funds (UCITS) is the latest net asset value.

The fair value of investment securities is the quoted price at year-end for listed securities and, for non-listed securities, uses a valuation technique determined according to the most appropriate financial criteria in each case (comparable transactions, multiples for comparable companies, shareholders' agreement, discounted present value of future cash flows).

For financial liabilities at amortized cost, the fair value of financial liabilities is determined using:

- the quoted price for listed instruments (a detailed analysis is performed in the case of a material decrease in liquidity to evidence whether the observed price corresponds to the fair value; otherwise the quoted price is adjusted);
- the present value of estimated future cash flows, discounted using rates observed by the Group at the end of the period for other instruments. The results calculated using the internal valuation model are systematically benchmarked with the values provided by Bloomberg.

The Group considers the carrying value of trade payables and deposits received from customers to be a reasonable approximation of fair value, due to the high liquidity of these elements.

The fair value of long-term trade payables is the value of future cash flows discounted at the interest rates observed by the Group at the end of the period.

Financial liabilities at fair value through profit or loss mainly concern firm or contingent commitments to purchase non-controlling interests. Their fair value is measured in accordance with the provisions of the contractual agreements. When the commitment is based on a fixed price, a discounted value is retained.

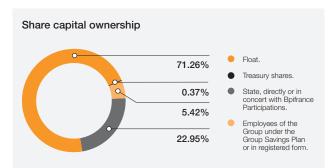
The fair value of **derivatives**, mostly traded over-the-counter, is determined using the present value of estimated future cash flows, discounted using the interest rates observed by the Group at the end of the period. The results calculated using the internal valuation model are consistently benchmarked with the values provided by bank counterparties and Bloomberg.

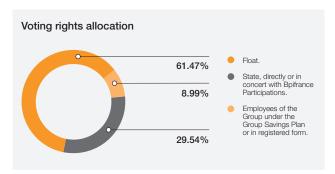
When there are no reliable market data which identify the probability of default, the CVA (Credit Value Adjustment) and the DVA (Debit Value Adjustment) are measured based on historical default charts and CDS (Credit Default Swap) trends. Counterparty credit risk and the Group's own specific default risk are also continuously monitored based on the monitoring of debt security credit spreads on the secondary market and other market information. Given the implementation of collateralization, and based on counterparty policies and the management of indebtedness and liquidity risk described in Note 12, CVA and DVA estimates are not material compared to the measurement of the related financial instruments.

Note 14 Shareholders' equity

At December 31, 2019, Orange SA's share capital, based on the number of issued shares at this date, amounted to 10,640,226,396 euros, divided into 2,660,056,599 ordinary shares with a par value of 4 euros each.

At December 31, 2019, the share capital and voting rights of Orange SA broke down as follows:





14.1 Changes in share capital

No new shares were issued during the 2019 year.

14.2 Treasury shares

As authorized by the Shareholders' Meeting of May 21, 2019, the Board of Directors instituted a new share Buyback program (the 2019 Buyback Program) and canceled the 2018 Buyback Program, with immediate effect. This authorization is valid for a period of 18 months from the aforementioned Shareholders' Meeting. The 2019 Buyback Program is described in the Registration Document filed with the French Financial Markets Authority (Autorité des marchés financiers – AMF) on March 21, 2019.

The share buybacks carried out during the period by Orange primarily related to the Orange Vision 2020, Long Term Incentive Plan (LTIP) 2018 – 2018 and LTIP 2019 – 2021 free share award plans (see Note 6.3).

At December 31, 2019, the company held 9,742,968 treasury shares (of which 853,500 in respect of the liquidity contract and 8,889,468 in respect of the Orange Vision 2020, Long Term Incentive Plan (LTIP) 2018 – 2020 and LTIP 2019 – 2021 free share award plans).

At December 31, 2018, the company held 7,214,000 treasury shares (of which 309,609 in respect of the liquidity contract and 6,882,999 in respect of the Orange Vision 2020 and LTIP 2018 – 2020 free share award plans) and held 497,625 treasury shares at December 31, 2017 (of which 476,000 in respect of the liquidity contract).

Accounting policies

Treasury shares are recorded as a deduction from equity, at acquisition cost. Gains and losses arising from the sale of treasury shares are recognized in consolidated reserves, net of tax.

14.3 Dividends

Full Year	Approved by	Description	Dividend per share (in euro)	Pay out date	How paid	Total (in millions of euros)
2019	Board of Directors Meeting on July 24, 2019	2019 interim dividend	0.30	December 4, 2019	Cash	796
	Shareholders' Meeting on May 21, 2019	Balance for 2018	0.40	June 6, 2019	Cash	1,061
Total divid	ends paid in 2019					1,857
2018	Board of Directors Meeting on July 25, 2018	2018 interim dividend	0.30	December 6, 2018	Cash	796
	Shareholders' Meeting on May 4, 2018	Balance for 2017	0.40	June 7, 2018	Cash	1,064
Total divid	ends paid in 2018					1,860
2017	Board of Directors Meeting on July 26, 2017	2017 interim dividend	0.25	December 7, 2017	Cash	665
	Shareholders' Meeting on June 1, 2017	Balance for 2016	0.40	June 14, 2017	Cash	1,064
Total divid	ends paid in 2017					1,729
2016	Board of Directors Meeting on July 25, 2016	2016 interim dividend	0.20	December 7, 2016	Cash	532
	Shareholders' Meeting on June 7, 2016	Balance for 2015	0.40	June 23, 2016	Cash	1,064
Total divid	ends paid in 2016					1,596

The amount available to provide a return to shareholders in the form of dividends is calculated on the basis of the total net income and retained earnings, under French GAAP, of the entity Orange SA, the parent company.

14.4 Subordinated notes

History of subordinated notes

On February 7, 2014, as part of its EMTN program, Orange issued the equivalent of 2.8 billion euros of deeply subordinated notes denominated in euros and pounds sterling in three tranches: 1 billion euros with a fixed-rate coupon of 4.25%, 1 billion euros with a fixed-rate coupon of 5.25% and 650 million pounds sterling with a fixed-rate coupon of 5.875%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Orange has a call option on each of these tranches respectively after February 7, 2020, February 7, 2024, and February 7, 2022 and upon the occurrence of certain contractually defined events.

Step-up clauses involve coupon adjustments of 0.25% in 2025 and an additional 0.75% in 2040 for the first tranche, 0.25% in 2024 and an additional 0.75% in 2044 for the second tranche, and 0.25% in 2027 and an additional 0.75% in 2042 for the third tranche.

On October 1, 2014, as part of its EMTN program, Orange issued the equivalent of 3 billion euros of deeply subordinated notes denominated in euros and pounds sterling in three tranches: 1 billion euros with a fixed-rate coupon of 4%, 1.25 billion euros with a fixed-rate coupon of 5% and 600 million pounds sterling with a fixed-rate coupon of 5.75%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Both issuances were the subject of a prospectus certified by the AMF under visas no. 14-036 and 14-525.

Orange has a call option on each of these tranches respectively after October 1, 2021, October 1, 2026, and April 1, 2023 and upon the occurrence of certain contractually defined events.

Step-up clauses involve coupon adjustments of 0.25% in 2026 and an additional 0.75% in 2041 for the first tranche, 0.25% in 2026 and an additional 0.75% in 2046 for the second tranche, and 0.25% in 2028 and an additional 0.75% in 2043 for the third tranche.

Under the Group understanding, some rating agencies assign an "equity" component from 0 to 50% to these instruments.

Under IFRS, these instruments are recognized at their historical value. The tranches denominated in pounds sterling were recognized at the ECB fix rate on the issue date (0.8314 for the issue of February 7, 2014 and 0.7782 for the issue of October 1, 2014) and will not be re-measured through the life of the note.

Developments in 2019

On April 15, 2019, as part of its EMTN program, Orange issued the equivalent of 1 billion euros of deeply subordinated notes, denominated only in euros, in one tranche with a fixed-rate coupon of 2.375%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Orange has a call option on this tranche after April 15, 2025 and upon the occurrence of certain contractually defined events.

Step-up clauses involve coupon adjustments of 0.25% in 2030 and an additional 0.75% in 2045.

In the same way, Orange has proceeded to a partial redemption of the existing subordinated notes by a contractual offer for a part of subordinated notes in the following tranches:

- 500 million euros on a nominal of 1 billion euros with a first early redemption date under the control of Orange at February 7, 2020 with a fixed-rate of 4.25%;
- 500 million euros on a nominal of 1 billion euros with a first early redemption date under the control of Orange at October 1, 2021 with a fixed-rate of 4.00%.

On September 19, 2019, as part of its EMTN program, Orange issued the equivalent of 500 million euros of deeply subordinated notes, denominated only in euros, in one tranche with a fixed-rate coupon of 1.75%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Orange has a call option on this tranche after March 19, 2027 (date of the first review of the rates for the tranche concerned) and upon the occurrence of certain contractually defined events.

Step-up clauses involve coupon adjustments of 0.25% in 2032 and an additional 0.75% in 2047.

These issuances were the subject of a prospectus certified by the AMF (under visas no. 14-036, no. 14-525, no. 19-152 and no. 19-442 respectively).

These notes, listed on Euronext Paris, are lowest ranking subordinated notes (senior compared to ordinary shares): the holders will only be remunerated (whether for the nominal, interest or any other amount) after all other creditors, including holders of participating loans and securities, simply subordinated or not, representing a claim on Orange.

At each interest payment date, settlement may be either paid or deferred, at the option of the issuer. Deferred coupons are capitalized and become due and payable in full under certain circumstances defined contractually and under the control of Orange.

On December 12, 2019, the Group announced its intention to exercise, on February 7, 2020, in accordance with contractual stipulations, its call option concerning the remaining 500 million euros on the tranche

with an initial nominal of 1 billion euros, already partially bought back in April 2019. As a result of Orange's commitment to Buyback this last tranche, it was reclassified as a debt instrument and is therefore presented as a short-term financial liability as of December 31, 2019. The coupons payable in respect of this tranche are recognized as other current liabilities in the amount of 21 million euros.

As of December 31, 2019, the amount of subordinated notes presented in the consolidated statements of changes in shareholders' equity does not change due to these operations and corresponds to a nominal of 5,803 million euros booked at historical value (the tranches denominated in pounds sterling have not been remeasured since their issuance in 2014).

Subordinated notes remuneration

Coupons impact equity five working days before the annual payment date, unless Orange exercises its right to defer the payment.

The tax effect relating to the payment of the coupons is accounted for as net income.

Since their issuance, Orange has not exercised its right to defer the coupons related to the subordinated notes.

The note holders received the payments shown in the following table:

	Paid coupons (in millions of currency)	Paid coupons (in millions of euros)
1,000 MEUR issued as of February 1, 2014 with a fixed-rate coupon of 4.25%	46	46
1,000 MEUR issued as of February 1, 2014 with a fixed-rate coupon of 5.25%	52	52
650 MGBP issued as of February 1, 2014 with a fixed-rate coupon of 5.875%	38	44
1,000 MEUR issued as of October 1, 2014 with a fixed-rate coupon of 4%	31	31
1,250 MEUR issued as of October 1, 2014 with a fixed-rate coupon of 5%	63	63
600 MGBP issued as of October 1, 2014 with a fixed-rate coupon of 5.75% (1)	35	39
Total coupons paid to the holders in 2019		276
1,000 MEUR issued as of February 1, 2014 with a fixed-rate coupon of 4.25%	42	42
1,000 MEUR issued as of February 1, 2014 with a fixed-rate coupon of 5.25%	52	52
650 MGBP issued as of February 1, 2014 with a fixed-rate coupon of 5.875%	38	44
1,000 MEUR issued as of October 1, 2014 with a fixed-rate coupon of 4%	40	40
1,250 MEUR issued as of October 1, 2014 with a fixed-rate coupon of 5%	63	63
600 MGBP issued as of October 1, 2014 with a fixed-rate coupon of 5.75% $^{(1)}$	35	39
Total coupons paid to the holders in 2018		280
1,000 MEUR issued as of February 1, 2014 with a fixed-rate coupon of 4.25%	42	42
1,000 MEUR issued as of February 1, 2014 with a fixed-rate coupon of 5.25%	52	52
650 MGBP issued as of February 1, 2014 with a fixed-rate coupon of 5.875%	38	45
1,000 MEUR issued as of October 1, 2014 with a fixed-rate coupon of 4%	40	40
1,250 MEUR issued as of October 1, 2014 with a fixed-rate coupon of 5%	63	63
600 MGBP issued as of October 1, 2014 with a fixed-rate coupon of $5.75\%^{(1)}$	35	40
Total coupons paid to the holders in 2017		282

⁽¹⁾ Coupons payment date as of April 1.

The tax effect of the conversion of subordinated notes whose face value is denominated in pounds sterling was 25 million euros for the period. This effect is shown at "Other movements" in the consolidated statements changes in shareholders' equity.

Accounting policies

Subordinated notes

The Group issued subordinated notes in several tranches.

These instruments have no maturity and the coupon's settlement could be deferred at the option of the issuer. They are booked in equity.

As equity instruments are recognized at historical value, the tranche denominated in foreign currency is never re-measured. Where appropriate, a translation adjustment impact will be booked in equity at the exercise date of any purchase option.

The holders' payment is directly booked in equity at the date of the decision to pay the coupons.

The tax effect relating to the payment is accounted for as net income and the one relating to the remeasurement of the foreign exchange portion is accounted for as equity.

Equity component of perpetual bonds redeemable for shares (TDIRA) (see Note 12.4)

The equity component is determined as the difference between the fair value of the instrument taken as a whole and the fair value of the debt component. Thus, the equity component determined and recognized at inception is not subsequently re-measured and remains in equity, even when the instrument is extinguished.

14.5 Translation adjustment

(in millions of euros)	2019	2018	2017
Gain (loss) recognized in other comprehensive income during the period	90	(6)	(184)
Reclassification to net income for the period	(12)	(1)	(470)
Total transaction adjustments for continuing operations Reclassification to the net income for the period	78	(7)	(176)
Total translation adjustments for discontinued operations	-	-	-

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Polish zloty	807	785	845
Egyptian pound	(455)	(532)	(545)
Slovak koruna	220	220	220
Sierra leonean leone	(120)	(95)	(78)
Moldovan leu	(55)	(63)	(70)
Jordanian dinar	69	58	33
Pound sterling	14	14	15
Other	(151)	(135)	(161)
Total translation adjustments	329	252	259
o/w share attributable to the owners of the parent company	78	15	27
o/w share attributable to non-controlling interests	251	237	232

Accounting policies

The functional currency of foreign operations located outside the euro area is usually the local currency, unless the major cash flows are made with reference to another currency (such as the Orange entities in Romania – euros and in the Democratic Republic of the Congo – US dollars).

The financial statements of foreign operations whose functional currency is neither the euro nor the currency of a hyper-inflationary economy are translated into euros (the Group's presentation currency) as follows:

- assets and liabilities are translated at the year-end rate;
- items in the income statement are translated at the average rate for the year;
- the translation adjustment resulting from the use of these different rates is included in other comprehensive income.

The translation adjustments are reclassified to profit or loss when the entity disposes or partially disposes (loss of control, loss of joint control, loss of significant influence) of its interest in a foreign operation through the sale, liquidation, repayment of capital or abandon of all, or part of, that activity. The reduction in the carrying amount of a foreign operation, either because of its own losses or because of the recognition of an impairment loss, does not lead to a reclassification to profit or loss of the accumulated translation adjustment.

Recycling of translation adjustment is presented in the consolidated income statement within:

- consolidated net income of discontinued operations, when a line of business or major geographical area is disposed of;
- gains (losses) on disposal of investments and activities, when other businesses are disposed of;
- reclassification of translation adjustment from liquidated entities, in the event of the liquidation or abandonment of an activity without disposal.

14.6 Non-controlling interests

(in millions of euros)	2019	2018	2017
Credit part of net income attributable to non-controlling interests (a)	291	271	278
o/ w Sonatel group	191	188	203
o/ w Orange Belgium group	16	15	18
o/ w Côte d'Ivoire subgroup	36	25	28
o/ w Jordan Telecom group	12	12	15
o/ w Orange Polska group	12	-	-
Debit part of net income attributable to non-controlling interests (b)	(71)	(67)	(81)
o/ w Orange Bank	(65)	(59)	(33)
o/ w Orange Polska group	-	(2)	(43)
Total part of net income attributable	999	20.4	407
to non-controlling interests (a) + (b)	220	204	197
Credit part of comprehensive income attributable to non-controlling interests (a)	300	297	229
o/ w Sonatel group	181	195	180
o/ w Orange Belgium group	16	15	18
o/ w Côte d'Ivoire subgroup	36	26	25
o/ w Jordan Telecom group	15	20	-
o/ w Orange Polska group	13	-	-
Debit part of comprehensive income attributable to non-controlling interests (b)	(69)	(84)	(73)
o/ w Orange Bank	(62)	(62)	(32)
o/ w Orange Polska group	-	(17)	(17)
o/ w Jordan Telecom group	-	-	(7)
Total part of comprehensive income attributable			
to non-controlling interests (a) + (b)	232	213	156
(in millions of euros)	2019	2018	2017
Dividends paid to minority shareholders	248	246	234
o/ w Sonatel group	192	190	185
o/ w Médi Telecom	22	20	16
o/ w Orange Belgium group	14	14	14
o/ w Jordan Telecom group	13	14	11

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Credit part of equity attributable to non-controlling interests (a)	2,701	2,594	2,542
o/ w Orange Polska group	987	973	988
o/ w Sonatel group	736	744	731
o/ w Orange Belgium group	275	273	268
o/ w Jordan Telecom group	166	164	156
o/ w Médi Telecom	148	153	143
Debit part of equity attributable to non-controlling interests (b)	(13)	(14)	(5)
Total equity attributable to non-controlling interests (a) + (b)	2,688	2,580	2,537

Accounting policies

Commitments to purchase non-controlling interests (put options)

When the Group grants firm or contingent commitments to purchase non-controlling interests, the carrying amount of non-controlling interests is reclassified to financial debt.

When the amount of the commitment exceeds the amount of the non-controlling interests, the difference is recorded as a reduction in equity attributable to the owners of the parent company. Financial debt is re-measured at the end of each reporting period in accordance with the contractual arrangement (at fair value or at present value if fixed price) and, in the absence of any guidance provided by IFRS, against finance income or expense.

Non-controlling interests that are debtors

Total comprehensive income of a subsidiary is attributed to the owners of the parent company and to the non-controlling interests. In accordance with IFRS 10, this can result in the non-controlling interests having a deficit balance.

Transactions with owners

Each transaction with non-controlling interests of an entity controlled by the Group, when not resulting in a loss of control, is accounted for as an equity transaction with no effect on the total comprehensive income.

14.7 Earnings per share

Net income

Net income, Group share, used for calculating basic and diluted earnings per share is determined according to the following method:

(in millions of euros)	2019	2018	2017
Net income of continuing operations Effect of subordinated notes	3,006 (268)	1,954 (293)	1,843 (267)
Net income attributable to the owners of the parent company – basic (adjusted)	2,738	1,661	1,576
o/w net income of continuing operations o/w net income of discontinued operations Impact of dilutive instruments: TDIRA	2,738 - 12	1,661 - -	1,547 29 33
Net income attributable to the owners of the parent company – diluted	2,749	1,661	1,609
o/w net income of continuing operations o/w net income of discontinued operations	2,749 -	1,661 -	1,580 29

Number of shares

The weighted average number of shares used for calculating the basic and diluted earnings per share is presented below:

(number of shares)	2019	2018	2017
Weighted average number of ordinary shares outstanding Impact of dilutive instruments on number of ordinary shares:	2,652,532,564	2,656,683,856	2,659,421,767
TDIRA Free share award plan	33,780,544 1,662,103		52,079,350 435,150
Weighted average number of shares outstanding – diluted	2,687,975,211	2,658,103,271	2,711,936,267

The average market price of the Orange share in 2019, 2018 and 2017 is greater than the fair value adopted under the Orange Vision 2020, LTIP 2018 – 2020 and LTIP 2019-2021 free share award plans (see Note 6.3). The number of shares corresponding to this difference was dilutive at December 31, 2019, December 31, 2018 and December 31, 2017.

The *TDIRA* were included in the calculation of diluted net earnings per share at December 31, 2019 and December 31, 2017, since they are dilutive.

The stock option plans granted to employees are expired at December 31, 2017 (see Note 6.3).

Earnings per share

(in euros)	2019	2018	2017
Earning per share – basic	1.03	0.63	0.59
o/w earning per share of continuing operations o/w earning per share of discontinued operations	1.03 -	0.63 -	0.58 0.01
Earning per share diluted	1.02	0.62	0.59
o/w earning per share of continuing operations o/w earning per share of discontinued operations	1.02 -	0.62 -	0.58 0.01

Accounting policies

Earnings per share

The Group discloses both basic earnings per share and diluted earnings per share for continuing operations and discontinued operations:

- basic earnings per share are calculated by dividing net income for the year attributable to the equity holders of the Group, after deduction of the interests of subordinated notes net of tax, by the weighted average number of ordinary shares outstanding during the period;
- diluted earnings per share are calculated based on the same net income, adjusted for the finance cost of dilutive debt instruments, net of the related tax effect. The number of shares used to calculate diluted earnings per share takes into account the conversion into ordinary shares of potentially dilutive instruments outstanding during the period. These instruments are considered to be dilutive when they have the effect of reducing earnings per share of continuing operations.

When basic earnings per share are negative, diluted earnings per share are identical to basic earnings per share. In the event of an issuance of shares at a price lower than the market price, and in order to ensure comparability of the reporting period shown, the weighted average numbers of shares outstanding from current and previous periods are adjusted. Treasury shares owned, which deducted from the consolidated equity, do not enter into the calculation of earnings per share.

Note 15 Unrecognized contractual commitments (excluding Orange Bank)

At December 31, 2019, Orange is not aware of having entered into any commitment involving entities controlled by the Group, that may have a material effect on its current or future financial position, other than the commitments described in this Note.

The amount of unrecognized contractual commitments as of December 31, 2019 has been significantly reduced compared to December 31, 2018 as a result of the application of IFRS 16 (see Note 2.3.1).

15.1 Operating activities commitments

(in millions of euros)	Total	Less than one year	From one to five years	More than five years
Operating activities commitments	12,450	3,943	4,441	4,066
Operating leases commitments	730	119	313	298
Handsets purchase commitments	395	393	2	-
Transmission capacity purchase commitments	572	185	189	198
Other goods and services purchase commitments	2,816	1,300	1,107	409
Investment commitments	1,878	620	820	438
Public initiative networks commitments	4,928	1,114	1,855	1,959
Guarantees granted to third parties in the ordinary course of business	1,131	212	155	764

Lease commitments

Lease commitments are mainly comprised of property lease commitments associated to contracts with underlying assets available after December 31, 2019 and contracts that are excluded from the scope of IFRS 16 (see Note 2.3.1). The other leases are leases relating to general expenses (equipment, vehicles and other assets).

(in millions of euros)	Discounted value of future lease payments	
Property lease commitments	665	692
o/w technical activities o/w shops/offices activities	117 548	135 557

Maturities are set forth below:

(in millions of euros)	Minimum future lease payments	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than five years
Property lease commitments	692	102	90	85	63	56	296

The Group may choose whether or not to renew these leases upon expiration or replace them by other leases with renegotiated terms and conditions. For some of them, a provision for onerous contracts has been booked (see Note 5.3).

The lease commitments correspond to the outstanding minimum future lease payments until the normal date of renewal of the leases or the earliest possible notice date. After periodic revaluation of the leases, these amounts are discounted. The rate used corresponds to the marginal cost of debt.

The information relative to operating leases is provided in accordance with the currently-applicable standards and interpretations. The first application of IFRS 16 as of January 1, 2019 will cause the Group to provide different information, mainly due to:

- different application scopes: the Group will designate a contract as a leasing contract when it gives the lessee the right to control the use of a given asset, including when a service contract includes a lease component (excluding off-balance-sheet commitments for operating leases). The Group has also chosen to use the two exemptions authorized under IFRS 16, namely contracts with a duration of less than 12 months and those for which the new value of the underlying asset is less than 5,000 euros (see Note 2.3.1);
- assessment of rents: the off-balance-sheet commitments use a minimum duration without factoring in extension options that the lessee has the reasonable certainty of exercising, including a periodic revaluation of the rents and the rent-free periods based on minimum future payments.

The property lease commitments in France and Europe (excluding Spain) represent respectively 67% and 14% of the total property lease commitments.

Transmission capacity purchase commitments

Transmission capacity purchase commitments as of December 31, 2019 represented 572 million euros. These include 225 million euros for the provision of satellite transmission capacity (comprising contracts with different commitment maturities up to 2028).

Other goods and services purchase commitments

The Group's other goods and services purchase commitments are primarily related to the network and the purchase of content.

At December 31, 2019, these commitments include:

- the purchase of broadcasting rights for an amount of 671 million euros;
- "TowerCo" (site management) contracts in Africa: these commitments amounted to 276 million euros. On January 1, 2019, the lease contracts for the sites will lead to supplying different information on the valuation of these commitments;
- the network maintenance for 305 million euros;
- the maintenance of submarine cables for which Orange has joint ownership or user rights, for an overall amount of 220 million euros.

Furthermore, on November 28, 2019, the Group signed a "Built to suit" agreement relating to the construction and deployment by Orange for ATC France of a minimum of 900 mobile sites between 2020 and

2024. These sites will be transferred to ATC as and when they are completed. As part of this agreement, Orange has made a 20-year commitment to using the hosting services of its active equipment from the date of the first transfer of the mobile sites.

At December 31, 2019, given the existing uncertainty regarding the nature and temporality of the sites transferred, the amount of the commitment given with regard to the service contract has no value in the table above.

Investment commitments

At the end of December 2019, investment commitments amounted to 1,878 million euros.

In addition to these commitments, which are expressed in monetary terms, the Group made certain commitments to the National Regulatory Authorities such as ensuring certain coverage of the population concerning by fixed or mobile networks, particularly in the context of assignment of licenses and quality of service. These commitments will require investment expenditure in future years to roll out and enhance the networks. They are not shown in the table above if they have not been expressed in monetary terms, which is usually the case. The Group has accordingly agreed to meet the following conditions:

In France:

- pursuant to the provisions of Article L. 33-13 of the French Postal & Electronic Communications Code regarding coverage in lightly inhabited areas:
 - Orange proposed that it commit to ensuring that, within its FTTH deployment scope in the AMII area, unless refused by third parties, that 100% of homes and professional premises would have access to FTTH sales offers by the end of 2020 (including a maximum 8% of premises connectable on demand) and that 100% of homes and professional premises would be made connectable by the end of 2022. Subsequent to the Arcep opinion, these proposals were accepted by the government in July 2018,
 - outside of the AMII area, Orange proposed that it make deployment commitments within the AMEL area the Vienne, Haute-Vienne, Deux-Sèvres and Lot-et-Garonne departments,
 - lastly, Orange proposed to make commitments outside of the AMII and AMEL areas in the following departments: Orne, Hautes-Pyrénées, Yvelines, Territoire-de-Belfort, Guadeloupe, Martinique;
- on January 14, 2018, the Orange Group and the other French mobile operators signed an agreement (the "New Deal") to ensure better mobile coverage of French territory, particularly rural areas. This agreement includes enhanced coverage obligations, which are included for the period 2018-2021 in our licenses in force in the bands 900 MHz, 1,800 MHz and 2,100 MHz, and for the post 2021 period, in the new licenses for 900 MHz, 1,800 MHz and 2,100 MHz awarded on November 15, 2018:
 - targeted programs for the improvement of coverage, with the coverage of 5,000 areas by operators by 2029,
 - the generalization of 4G by the end of 2020 on almost all existing mobile sites.

- the acceleration of the coverage of the transport routes, ensuring that the main road and rail routes have 4G coverage,
- the supply of a fixed 4G service and the extension of the service to 500 additional sites upon request from the government by 2020,
- the widespread use of telephone coverage inside buildings, proposing voice over Wi-Fi and SMS over Wi-Fi offers and offers involving the *indoor* coverage of buildings upon request,
- the improvement of reception quality throughout the country, particularly in rural areas, with good coverage (according to the Arcep decision No. 2016-1678 relative to publications giving information on mobile coverage) by 2024/2027;
- in order to cope with the exceptional deterioration that affected its network in 2018 (storms, theft of cables, deterioration due to the recent protest movements, etc.), and be sure to fulfill its commitments in terms of universal service provision, Orange set up a plan involving a 17% increase in the maintenance budget compared to 2017 and hired 200 additional technicians;
- in 2015, in France, when the frequencies in the 700 MHz band were allocated:
 - coverage obligations in "priority deployment areas" (40% of the country within 5 years, 92% within 12 years and 97.7% within 15 years) and in "white area" not yet covered by a broadband network (100% within 12 years), at the level of priority road routes (100% within 15 years) and at the level of the national rail network (60% within 7 years, 80% within 12 years and 90% within 15 years);
- in 2011, in France, when the frequencies in the 2.6 GHz and 800 MHz bands were allocated:
 - an optional commitment to host mobile virtual network operators (MVNOs) on certain technical and pricing terms under Full MVNO schemes,
 - an obligation to provide mobile coverage with theoretical maximum download speeds of at least 60 Mbps per user (25% of the country within 4 years and 75% within 12 years for the 2.6 GHz band, 98% of the country within 12 years and 99.6% within 15 years for the 800 MHz band) which can be met by using both the allocated frequencies and other frequencies,
 - for the 800 MHz band, specifically: a coverage obligation in priority areas (40% of the country within 5 years, 90% within 10 years) with no obligation to provide roaming services, a coverage obligation in each department (90% within 12 years, 95% within 15 years) and an obligation to pool resources in communities covered by the "white area" program.

In Africa & Middle East:

- in 2016, in Senegal, when the 4G license was awarded and the license for mobile 2G and 3G was renewed:
 - a coverage obligation of 90% of the population in 3 years;
- an obligation to cover in 5 years all territory in the inhabited border areas of Senegal whose number of inhabitants is equal to or greater than 200:
- a coverage obligation on national roads and highways in 2 years;
- in 2016, in Egypt, when the 4G license was granted:
 - an obligation to provide 4G coverage of 11% of the population in one year, 42.5% in four years, 69.5% in six years and 70% within ten years.

Non-compliance with these obligations could result in fines and other sanctions ultimately including the withdrawal of licenses awarded. Management believes that the Group has the ability to fulfill these commitments towards government authorities.

Commitments related to Public Initiative Networks

As part of the deployment of the High and Very High Speed network in France, the Group entered into contracts via Public Initiative Networks (mainly public service delegation and public-private partnerships contracts as well as public design, construction, operation and maintenance contracts). The commitments relating to these network construction, concession and operation contracts amounted to 4,928 million euros as of December 31, 2019. In addition to the guarantees given by Orange on behalf of the Public Initiative Networks, the commitments will result in the recognition of 1,739 million euros of intangible assets, 2,488 million euros of expenses and 701 million euros of financial receivables. Maturities are staggered out to 2043.

Guarantees granted to third parties in the ordinary course of business

Commitments made by the Group to third parties in the ordinary course of business represented 1,131 million euros as of December 31, 2019. They included performance guarantees amounting to 425 million euros granted to certain Enterprise customers, in particular as part of the securing of networks and remote access.

The amount of guarantees granted by the Group to third parties (financial institutions, partners, customers and government agencies) to cover the performance of the contractual obligations of non-consolidated entities is not significant. Guarantees granted by the Group to cover the performance of the contractual obligations of the consolidated subsidiaries are not considered as unrecognized contractual commitments, as they would not increase the Group's commitments in comparison to the underlying obligations of the consolidated subsidiaries.

15.2 Consolidation scope commitments

Asset and liability warranties granted in relation to disposals

Under the terms of agreements between certain Group companies and the acquirers of certain assets, the Group is subject to warranty clauses relating to assets and liabilities. Nearly all material sale agreements provide for ceilings on these warranties.

At December 31, 2019, the main warranties in effect were the following:

- the uncapped warranties granted to the EE joint venture when contributing the operations in the United Kingdom, concerning the restructuring of equity investments and assets done prior to the contribution expiring in 2022;
- a warranty given to BT as part of the EE sale, backed 50/50 by Orange Group and Deutsche Telekom as tax and operating warranties, except for events ascribable solely to one or the other, and capped at the contractually fixed sale price of 5.1 billion pounds sterling (6 billion euros converted at the exchange rate on December 31, 2019) as Orange's share, which will expire in 2023. Information on the final terms of EE's disposal is presented in Note 3.2;
- standard warranties granted to Vivendi as part of the disposal of its 90% stake in Dailymotion in 2015 and the remaining 10% in 2017.
 These warranties will expire at the end of the statutory limitation period;
- miscellaneous standard warranties granted to buyers of real estate sold by the Group.

Orange believes that the risk of these warranties being enforced is remote and that the potential consequences of their being called are not material with respect to the Group's results and financial position.

Commitments relating to securities

Under the terms of agreements with third parties, Orange can make or receive commitments to purchase or to sell securities. The on-going commitments at December 31, 2019 are not likely to have material impacts on the Group's financial position.

Orange Tunisie

Under the terms of the shareholders' agreement with Investec dated May 20, 2009, Orange has a call option giving it the right to purchase at market value 1% of the share capital of Orange Tunisie plus one share, subject to regulatory authorizations. If this option were to be exercised, Orange would take control of Orange Tunisie. Investec would then have the right to sell to Orange 15% of the share capital of Orange Tunisie at market value.

Orange Bank

In accordance with the December 18, 2019 renegotiation of the shareholders' agreement:

 the commitment by Orange and Groupama to invest at the level of their percentage ownership in the capital increase of Compagnie Financière d'Orange Bank necessary to finance its working capital requirements (per the CET1 ratio) expired. The financial liability recognized in this connection was therefore extinguished; the promise to buy (put option) granted to Groupama on 20% of the Orange Bank equity as well as the promise to sell (call option) granted by Groupama on the remainder of its equity interest in Orange Bank became null and void.

15.3 Financing commitments

The Group's main commitments related to borrowings are set out in Note 13.

Orange has pledged certain investment securities and other assets to financial institutions or used them as collateral to cover bank borrowings and credit lines.

Guarantees granted to some lending institutions to finance consolidated subsidiaries are not set out below.

Assets covered by commitments

The items presented below do not include the impact of the regulation on the transferability of the assets or the possibility of contractual restrictions in network asset sharing agreements.

As of December 31, 2019 Orange has no material pledge on its subsidiaries' securities.

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Assets held under finance leases	636	574	528
Non-current pledged, mortgaged or receivership assets ⁽¹⁾	366	453	107
Collateralized current assets	2	21	19
Total	1,004	1,048	654

(1) Non-current pledged, mortgaged or receivership assets are shown excluding cash collateral deposits, which are presented in Note 12.7.

Non-current pledged or mortgaged assets comprise the following assets given as guarantees:

December 31, 2019 (in millions of euros)	Total in statement of financial position (a)	Amount of asset pledged, mortgaged or receivership (b)	Percentage (b)/(a)
Intangibles assets, net (excluding goodwill) Property, plant and equipment, net Non-current financial assets Other(1)	14,788 28,423 2,466 35,689	19 1 346	0% 0% 14%
Total	81,366	366	0%

⁽¹⁾ This item mainly includes net goodwill, interests in associates, net deferred tax assets and non-current derivatives assets.

Note 16 Activities of Orange Bank

16.1 Financial assets and liabilities of Orange Bank

The financial statements of Orange Bank were put into the format of Orange group's consolidated financial statements and therefore differ from a presentation that complies with the banking format.

In order to improve the readiness of financial statements and to be able to distinguish the performance of telecom activities from the performance of Orange Bank, the notes related to financial assets and

liabilities as well as financial income or expenses are split to respect these two business areas.

Note 12 presents the financial assets, liabilities and related gains and losses specific to telecom activities and Note 16 concerns the activities of Orange Bank with regard to its assets and liabilities, with net financial income being not material.

The following table reconciles the contributive balances of assets and liabilities for each of these two areas (intra-group transactions between telecom activities and Orange Bank are not eliminated) with the consolidated statement of financial position as of December 31, 2019.

(in millions of euros)	Orange consolidated financial statements	O/w telecom activities	Note	O/w Orange Bank	Note	O/w eliminations telecom activities/ bank
Non current loans						
and receivables of Orange Bank	1,259	-		1,259	16.1.1	-
Non-current financial assets	1,208	1,235	12.7	-		(27) (1)
Non-current derivatives assets	562	562	12.8	-	16.1.3	-
Current financial assets						
related to Orange Bank activities	3,095	-		3,098	16.1.1	(3)
Current financial assets	4,766	4,766	12.7	-		(O)
Current derivatives assets	12	12	12.8	-	16.1.3	-
Cash and cash equivalents	6,481	6,112		369		-
Non current debts related						
to Orange Bank operations	-	-		27	16.1.2	(27) (1)
Non-current financial liabilities	33,148	33,148	12.3	-		
Non-current derivatives liabilities	487	413	12.8	74	16.1.3	-
Current financial liabilities related						
to Orange Bank liabilities	4,279	-		4,280	16.1.2	(O)
Current financial liabilities	3,925	3,928	12.3	-		(3)
Current derivatives liabilities	22	22	12.8	-	16.1.3	-

⁽¹⁾ Loan granted by Orange SA to Orange Bank.

Accounting policies

Classification of the bank's balance sheet items as current and non-current was done to match the Group's financial statements as part of the acquisition of the bank in 2016.

Since the concept of current or non-current is non-existent in bank accounting, financial assets and liabilities related to loans and borrowings to customers or credit institutions (the ordinary activities of a bank) have since 2017 all been classified as current for all periods presented.

With regard to other financial assets and liabilities, classification as current and non-current has been made in light of both the original intention of management and the nature of the assets and liabilities in question. For instance, with regard to Orange Bank's other financial assets, since investments are managed by portfolio, only the transaction portfolios (financial assets at fair value through profit or loss) have been recognized in current financial assets.

16.1.1 Financial assets related to Orange Bank transactions (excluding derivatives)

After application of IFRS 9 on January 1, 2018, the financial assets in connection with the transactions of Orange Bank break down as follows:

(in millions of euros)	Dece	December 31, 2019			January 1, 2018 ⁽¹⁾
	Non-current	Current	Total	Total	Total
Financial assets at fair value through other					
comprehensive income that will not be reclassified					
to profit or loss	2	-	2	1	0
Investments securities	2	-	2	1	0
Financial assets at fair value through other					
comprehensive income that may be reclassified					
to profit or loss	653	3	656	925	786
Debt securities	653	3	656	925	786
Financial assets at fair value through profit or loss	100	79	179	152	242
Investments at fair value	-	79	79	72	171
Cash collateral paid	76	-	76	57	62
Others	25	-	25	23	9
Financial assets at amortized cost	504	3,016	3,519	3,614	3,857
Fixed-income securities	504	3	506	614	615
Loans and receivables to customers	-	1,937	1,937	2,000	2,147
Loans and receivables to credit institutions	-	1,073	1,073	1,000	943
Others	-	3	3	-	152 ⁽²⁾
Total financial assets related					
to Orange Bank activities	1,259	3,098	4,357	4,692	4,885

For the period 2017, for which IFRS 9 was not applied as authorized, the financial assets relating to Orange Bank transactions broke down as

(in millions of euros)	December 31, 2017
Assets available for sale ⁽¹⁾	795
Assets held to maturity	615
Financial assets at fair value	233
Investments at fair value	171
Cash collateral paid	62
Other financial assets	3,248
Loans and receivables of Orange Bank	3,096
Other	152 (2)
Total Assets related to Orange Bank's activities	4,891

Debt securities at fair value through other comprehensive income that may be reclassified subsequently to profit or loss

(in millions of euros)	2019	2018
Debt securities measured at fair value through other comprehensive income that may be reclassified to profit or loss – in the opening balance	925	786
Acquisitions Repayments and disposals Changes in fair value Other items	165 (442) 9 (1)	487 (333) (8) (7)
Debt securities measured at fair value through other comprehensive income that may be reclassified to profit or loss – in the closing balance	656	925
(in millions of euros)	2019	2018
Profit (loss) recognized in other comprehensive income during the period Reclassification in net income during the period	8	(8)
Other comprehensive income related to Orange Bank	9	(8)

⁽¹⁾ Figures have been adjusted for the impact of application of IFRS 9.
(2) Loan granted in 2017 by Orange Bank to Orange SA within the framework of the Repurchase agreement of OATs securities between Orange SA and Orange Bank. This loan has been reimbursed in 2018.

 ⁽¹⁾ Debt securities only.
 (2) Loan granted by Orange Bank to Orange SA within the framework of the Repurchase agreements of OATs securities between Orange SA and Orange Bank.

The data below is presented according to IAS 39 (formerly "Assets available for sale").

(in millions of euros)	2017
Debt securities measured at fair value through other comprehensive income that may be reclassified to profit or loss – in the opening balance	745
First integration of Orange Bank Acquisitions Repayments and disposals	15 325 (301)
Changes in fair value Other items	3 8
Debt securities measured at fair value through other comprehensive income that may be reclassified to profit or loss – in the closing balance	795
(in millions of euros)	2017
Profit (loss) recognized in other comprehensive income during the period Reclassification in net income during the period	3 -
Other comprehensive income related to Orange Bank	3

Current loans and receivables of Orange Bank

Loans and receivables of Orange Bank are composed of loans and receivables to customers and credit institutions.

In the context of adapting the bank's accounts into the Group's financial statements, the following have been considered as loan and advances to customers: clearing accounts and other amounts due, as well as amounts related to securities transactions on behalf of customers.

(in millions of euros)	December 31,	December 31,	January 1st,	December 31,
	2019	2018	2018 ⁽¹⁾	2017
Overdrafts Housing loans Investment loans Current accounts Other	869	910	1,000	1,000
	876	824	765	765
	163	206	246	246
	17	21	31	31
	12	39	105	111
Total loans and receivables to customers	1,937	2,000	2,147	2,153
Overnight deposits and loans	945	850	830	830
Loans and receivables	85	85	55	55
Other	43	65	58	58
Total loans and receivables to credit institutions	1,073	1,000	943	943

⁽¹⁾ Figures have been adjusted for the impact of application of IFRS 9.

Accounting policies

Financial assets

- Financial assets at fair value through profit/loss (FVR)

Certain investment securities which are not consolidated or equity-accounted, and cash investments such as negotiable debt securities, deposits and mutual funds (UCITS), that are compliant with the Group's risk management policy or investment strategy, may be designated by Orange Bank as being recognized at fair value through profit or loss. These assets are recognized at fair value at inception and subsequently. All changes in fair value are recorded in profit or loss.

- Financial assets at fair value through other comprehensive income that may not be reclassified to profit or /loss (FVOCI)

Investment securities which are not consolidated or equity-accounted are, subject to exceptions, recognized as assets at fair value through other comprehensive income that may not be reclassified to profit or loss. They are recognized at fair value at inception and subsequently. Temporary changes in value and gains (losses) on disposals are recorded in other comprehensive income that may not be reclassified to profit or loss.

- Financial assets at fair value through other comprehensive income that are or may be reclassified subsequently to profit or loss (FVOCIR)

Assets at fair value through other comprehensive income that are or may be reclassified subsequently to profit or loss mainly include investments in debt securities. They are recognized at fair value at inception and subsequently. Temporary changes in value are recorded in other comprehensive income that are or may be reclassified subsequently to profit or loss. In case of disposal, the cumulative profit (or loss) recognized in other comprehensive income is reclassified to profit or loss.

- Financial assets at amortized cost (AC)

This category primarily comprises miscellaneous loans and receivables as well as fixed-income securities held with the aim of collecting contractual flows. These instruments are recognized at fair value at inception and are subsequently measured at amortized cost using the effective interest method. Impairment and provisions are recorded as soon as loans are granted or commitments are concluded, without waiting for the appearance of an objective indication of impairment. Impairment and provisions are updated as the credit risk evolves (see below "Impairment of financial assets").

Impairment of financial assets

In accordance with IFRS 9, debt instruments classified as financial assets at amortized cost or as financial assets at fair value through other comprehensive income, rental receivables, financing commitments and financial guarantees given are systematically subject to impairment or a provision for expected credit loss. These impairments and provisions are recorded as soon as loans are granted, commitments are concluded or bond securities are acquired, without waiting for the appearance of an objective indication of impairment.

To do this, the financial assets concerned are split into three categories according to the change in credit risk observed since their initial accounting and a depreciation is recorded on the amount outstanding of each of these categories as follows:

- performing loans: the calculation of losses expected is made on a 12-months basis, and the financial income (interest) is calculated on the basis of the instrument's gross amount;
- impaired loans: if the credit risk has significantly worsened since the debt has been booked to the balance sheet, the expected losses, estimated over the duration of the loan, are recognized and the financial income (interest) is calculated based on the gross amount of the instrument;
- doubtful loans: the expected loss, estimated over the duration of the loan, is depreciated. The financial income is calculated on the basis of the amount of the instrument net of the depreciation.

As a reminder, before the application of IFRS 9, the accounting policies relative to financial assets of banking activities were as follows:

Loans and receivables related to Orange Bank

Assets related to Orange Bank activities are classified in the IAS 39 category of "loans and receivables". They are initially recorded at fair value or its equivalent, which is, as a general rule, the net amount originally issued, and which should include the origination costs directly related to the transaction as well as the commissions received or paid, analyzed as an adjustment to the effective return on the loan.

The loans and receivables are subsequently valued at amortized cost, and interests, as well as transactions costs and commissions included in the initial value of the credits contribute to the net income for these transactions over the term of the credit, calculated on the basis of effective interest rate.

In accordance with IAS 39, loans and receivables are impaired when one or more evidences of depreciation have occurred after the recognition of these receivables. The receivables thus identified are then impaired on an individual basis or on a collective basis. Expected losses are accounted for as impairments, equal to the difference between the carrying amount of the loans (amortized cost) and the total of estimated future cash flows, discounted with the initial effective interest rate, or in the form of discounts for restructured loans due to default from customers.

Impairment is measured as the difference between the carrying value prior to impairment and the discounted value, at the initial rate of the receivable, of the components deemed to be recoverable (principal, interest, guarantees, etc.). The changes in the value of the loans impaired are recorded in the income statement under "Cost of risk" included in other operating expenses. When these changes in value are positive, reflecting a subsequent improvement, they are reversed in the income statement, within the same account.

The "Cost of risk" account dedicated to Orange Bank and part of the "other operating expenses", corresponds to provisions and reversals related to banking risks (in particular, counterparty risks and operational risks).

Assets available for sale

The assets available for sale include fixed income securities or variable income securities that do not fall within the definition of other categories of financial assets. They are recognized at fair value at inception and subsequently.

Temporary changes in value are recorded as "Gains (losses) on assets available for sale" within other comprehensive income.

The long term impairments associated with the assets available for sale are recorded under "Cost of risk" (within other operating expenses) when the assets are fixed rate securities, but they are recorded in "Net Gains (losses) on financial assets available for sale" when the assets are floating-rate securities.

Assets held to maturity

This category includes fixed- rate securities that the bank intends to hold until their maturity. They must not be disposed of prior to maturity and they are accounted for at amortized cost.

Impairment is recognized on these securities as soon as there is an objective evidence of the existence of an event subsequent to the acquisition of the security that is likely to generate a measurable loss as a result of counterparty risk. Impairment is measured as the difference between the carrying value prior to impairment and the discounted value, with the initial rate, of the components deemed to be recoverable (principal, interest, guarantees, etc.). The changes in value thus impaired are recorded in the income statement, under the "Cost of risk" account (within other operating expenses). When these changes in value are positive, reflecting a subsequent improvement, they are reversed in the income statement under "Cost of risk" within other operating expenses.

16.1.2 Financial liabilities related to Orange Bank transactions (excluding derivatives)

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Payables to customers Debts with financial institutions Deposit certificate Other	3,357 448 475 28	,	3,685 975 281 27
Total Financial liabilities related to Orange Bank's activities (1)	4,307	4,862	4,968

⁽¹⁾ o/w 27 million of euros of non current financial liabilities in 2019, 2018 and 2017.

Debts related to Orange Bank transactions are composed of customer deposits and bank debts with financial institutions.

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Current accounts Passbooks and special savings accounts Other	2,546	2,538	2,800
	781	776	716
	30	82	169
Customers borrowings and deposits	3,357	3,396	3,685
Term borrowings and advances	448	467	466
Securities delivered under repurchase agreements	-	636	509
Total debts with financial institution	448	1,103	975

16.1.3 Derivatives of Orange Bank

Derivatives qualified as fair value hedges

The main unmatured fair value hedges at the end of 2019 and put in place by Orange Bank concern the following interest rate swaps:

- 535 million euros notional (of which 154 million euros maturing in 2020, 24 million euros maturing between 1 and 5 years and 357 million euros at more than 5 years), globally hedging a portion of the housing loans portfolio (notional amount of 385 million euros) and consumer loans (notional amount of 150 million euros). The fair value of these derivatives as of December 31, 2019 is (9) million euros;
- 210 million euros notional hedging a portfolio of French inflation-indexed fungible Treasury bonds (Obligations Assimilables du Trésor indexées sur l'inflation française - OATi), with the same amount and the same maturity, i.e. in 2023. The fair value of these swaps as of December 31, 2019 is (55) million euros;
- 117 million euros notional (of which 35 million euros maturing in 2020, 82 million euros maturing between 1 and 5 years), hedging a portfolio of fungible Treasury Bonds (Obligations Assimilables du Trésor – OAT) with the same amount and identical maturities. The fair value of these swaps as of December 31, 2019 is (5) million euros;
- 20 million euros notional hedging a portfolio of European inflation-indexed fungible Treasury bonds (Obligations Assimilables du Trésor indexées sur l'inflation Européenne - OAT€i), with the same amount and the same maturity, i.e. in 2030. The fair value of these swaps as of December 31, 2019 is (4) million euros;

 5 million euros notional hedging the securities portfolio, the fair value of which was nearly zero at December 31, 2019.

The ineffective portion related to these hedging strategies recognized in the 2019 income statement is not material.

Trading Derivatives

- Orange Bank has set up interest rate swaps as economic hedges (not designated as hedges under IFRS) of negotiable debt securities issued by the bank for a total notional amount of 289 million euros, maturing between 2020 and 2022 and with a total fair value as of December 31, 2019 of nearly zero;
- Orange Bank has set up interest rate swaps as economic hedges (not designated as hedges under IFRS) of BEI securities for a total notional amount of 10 million euros maturing in 2029, the fair value of which was nearly zero as of December 31, 2019. The net impact of this hedge in profit or loss was not material;
- Orange Bank has a portfolio of trading swaps with a total notional amount of 33 million euros (of which 5 million euros maturing in 2020, 12 million euros maturing between 2 and 5 years and 16 million euros at more than 5 years) with a total fair value as of December 31, 2019 was nearly zero. The net effects of this hedging strategy on the income statement are not material;
- Orange Bank put into place futures with a notional amount of 648 million euros. The notional amount of these derivatives only gives an indication of the volume of outstanding contracts on the financial instruments markets and does not reflect the market risks associated with such instruments or the nominal amount of the hedged instruments.

16.2 Information on market risk management with respect to Orange Bank activities

"Orange Bank" operating segment has its own risk management system, in accordance with the French banking regulation. In terms of banking regulation, Orange Bank is under the supervision of the French Prudential Supervision and Resolution Authority (Autorité de contrôle prudentiel résolution ACPR) and must at all times comply with capital requirements in order to withstand the risks associated with its

Orange Bank's activities expose it to all of the risks defined by the order of November 3, 2014, relating to the internal control of companies in the sectors of banking, payment services and investment services subject to the control of the ACPR:

- credit risk: risk of loss incurred in the event of default of a counterparty or counterparties considered as the same beneficiary;
- market risk: risk of loss due to movements in market prices;
- operational risk: risk resulting from an inadequacy or a failure due to procedures, staff, IT systems or to outside events, including events that are unlikely to occur but that would imply a risk of material loss. Operational risk includes risks of internal and external fraud;
- interest rate risk: risk related to changes in interest rates on the on-balance sheet and off-balance sheet transactions, excluding, as applicable, transactions exposed to market risks;
- liquidity risk: risk that the company would not be able to meet its commitments or not be able to unwind or offset a position due to the market situation;
- inter-mediation risk on investment service providers: risk of default by a customer or counterparty in the context of a financial instrument transaction in which the company provides a performance guarantee.

The size of the bank and its moderate risk profile led to a choice of standard methods regarding the application of Regulation No. 575/2013 of the European Parliament and Council on June 26, 2013.

Orange Bank does not intervene on complex products. For market operations, the strategy defines, on one hand, the limits implemented and controlled and, on the other hand, the quality of the authorized signatories. In addition, the Bank has defined and regularly tests its business continuity system. The Bank has also undertaken, as completely as possible, the identification and assessment of its operational risks, for which it also follows occurrences.

With regard to regulations, and in particular Titles IV and V of the Order of November 3, 2014, the Bank's Executive Committee has set, upon recommendation of the Risk Management Division, a risk policy in particular regarding customers and risks, modalities and rules for offering credits and for delegations of authority.

The Risk Management Department analyzes and monitors risks, carries out the necessary controls and produces reports for various committees: the Credit Committee (management of counterparty risk), Risks and Audit Committee (management of operational risks), ALM Committee (management of market, interest rate and liquidity risks) and the Executive Committee.

16.2.1 Remaining term to maturity

The following table details the remaining terms of Orange Bank's financial assets and liabilities, calculated on the basis of the contractual maturity dates:

- maturity-by-maturity for amortizable transactions;
- for roll-over loans, since renewals cannot be presumed, the renewal dates are taken to be the final maturity dates;
- since derivatives are interest rate swaps, they are not subject to any exchange of notional. Their fair value has been broken down by maturity.

(in millions of euros)	Note	December 31, 2019	2020	2021 to 2024	2025 and beyond
Investments securities	16.1.1	2	_	_	2
Debt securities	16.1.1	656	129	485	42
Investments at fair value	16.1.1	79	76	3	-
Fixed-income securities	16.1.1	506	109	289	108
Loans and receivables to customers	16.1.1	1,937	491	872	574
Loans and receivables to credit institutions	16.1.1	1,073	1,073	-	-
Other financial assets and derivatives		103(1)	78	-	25
Total financial assets		4,357	1,956	1,649	751
Payable to customers	16.1.2	3,357	3,357	-	-
Debts with financial institutions	16.1.2	448	438	8	2
Deposit certificate	16.1.2	475	325	150	-
Other financial liabilities and derivatives		102 (2)	1	61	40
Total financial liabilities		4,381	4,121	219	42

Including the bank cash collateral paid for 76 million euros and securities for 25 million euros.
 Including derivatives liabilities for 74 million euros and loan from Orange SA to Orange Bank for 27 million euros.

16.2.2 Fair value of financial assets and liabilities of Orange Bank

(in millions of euros)	Note	Classification	, , , , , ,					
	unde	under IFRS 9 ⁽¹⁾	Book value	Estimated fair value	Level 1 and cash	Level 2	Level 3	
Loans and receivables	16.1.1	AC	3,010	3,010	-	3,010	-	
Financial assets at amortized cost Financial assets at fair value	16.1.1	AC	509	501	501	-	-	
through profit or loss	16.1.1	FVR	179	179	179	-	-	
Debt securities	16.1.1	FVOCIR	656	656	628	28	-	
Equity securities	16.1.1	FVOCI	2	2	2	-	-	
Cash and cash equivalent (2) Financial liabilities related	16.1.1	AC	369	369	369	-	-	
to Orange Bank's activities	16.1.2	AC	(4,307)	(4,307)	-	(4,307)	-	
Derivatives, net amount (3)	16.1.3		(74)	(74)	-	(74)	-	

^{(1) &}quot;AC" stands for "amortized cost", "FVR " stands for "fair value through profit or loss", "FVOCI" stands for "fair value through other comprehensive income that will not be reclassified to profit or loss", "FVOCIR" stands for "fair value through other comprehensive income that may be reclassified to profit or loss".

(2) Includes only cash.

(3) The classification for derivatives instruments depends on their hedging qualification.

(in millions of euros)	Note	Classification under IFRS 9 ⁽¹⁾	December 31, 2018					
			Book value	Estimated fair value	Level 1 and cash	Level 2	Level 3	
Loans and receivables	16.1.1	AC	3,000	3,000	-	3,000	-	
Financial assets at amortized cost Financial assets at fair value	16.1.1	AC	614	641	605	36	-	
through profit or loss	16.1.1	FVR	152	152	152	-	-	
Debt securities	16.1.1	FVOCIR	925	925	862	63	-	
Equity securities	16.1.1	FVOCI	1	1	1	-	-	
Cash and cash equivalent (2) Financial liabilities related	16.1.1	AC	553	553	553	-	-	
to Orange Bank's activities	16.1.2	AC	(4,862)	(4,862)	-	(4,862)	-	
Derivatives, net amount (3)	16.1.3		(46)	(46)	-	(29)	(17)	

^{(1) &}quot;AC" stands for "amortized cost", "FVR" stands for "fair value through profit or loss", "FVOCI" stands for "fair value through other comprehensive income that will not be reclassified to profit or loss", "FVOCIR" stands for "fair value through other comprehensive income that may be reclassified to profit or loss".

(2) Includes only cash.

(3) The classification for derivatives instruments depends on their hedging qualification.

(in millions of euros)	Note	Classification	December 31, 2017					
		under IAS 39 ⁽¹⁾	Book value	Estimated fair value	Level 1 and cash	Level 2	Level 3	
Loans and receivables Financial assets,	16.1.1	L&R	3,096	3,096	-	3,096	-	
excluding derivatives	16.1.1		1,795	1,785	1,482	303	-	
Assets held to maturity		HTM	615	605	581	24	-	
Assets available for sale		AFS	795	795	730	65	-	
Investments at fair value		FVR	171	171	171	-	-	
Other		L&R	214	214	-	214	-	
Cash and cash equivalent			477	477	477	-	-	
Trade payables		LAC	(93)	(93)	-	(93)	-	
Debts related to Orange Bank			. ,	` '		` ,		
operations	16.1.2	LAC	(4,660)	(4,660)	-	(4,660)	-	
Financial liabilities,								
excluding derivatives		LAC	(308)	(308)	-	(252)	(56)	
Derivatives, net amount (2)	16.1.3		(60)	(60)	-	(73)	13	

^{(1) &}quot;HTM" stands for "held to maturity", "AFS " stands for "available for sale", "L&R" stands for "loans and receivables", "FVR" stands for "fair value through P&L", "LAC" stands for "liabilities at amortized costs".

⁽²⁾ IAS 39 classification for derivatives instruments depends on their hedging qualification.

16.3 Orange Bank's unrecognized contractual commitments

As of December 31, 2019, Orange Bank is not aware of having entered into any commitment that may have a material effect on its current or future financial position, other than the commitments mentioned below.

Commitments given

(in millions of euros)	December 31,	December 31,	December 31,
	2019	2018	2017
Financing commitments ⁽¹⁾ Guarantee commitments ⁽²⁾ On behalf of banks On behalf of customers Property lease commitments	421	444	465
	8	12	17
	4	8	9
	4	4	8
	23	37	31
Total	452	493	513

⁽¹⁾ Includes 101 million euros of documentary credits and 320 million euros of confirmed credit lines in 2019

Commitments received

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Guarantee commitments	896	834	778
Received from banks ⁽¹⁾	747	681	577
Received from customers	149	153	201
Total	896	834	778

⁽¹⁾ Relates to guarantees received in order to counter-guarantee the distributed loans.

Assets covered by commitments

(in millions of euros)	December 31, 2019	December 31, 2018	December 31, 2017
Assets pledged as security to lending financial institutions as guarantees for bank loans	1,126	715	838
Total	1,126	715	838

Note 17 Litigation

This note presents all of the significant disputes in which the Group is involved with the exception of litigation relating to disputes between Orange and the tax or social administrations in relation to operational or income taxes or social contributions. These disputes are described, respectively, in Notes 10 and 6.2.

As of December 31, 2019, the provisions for risks recorded by the Group for all the disputes (except those presented in Notes 10 and 6.2) amounted to 643 million euros (versus 572 million euros at December 31, 2018 and 779 million euros at December 31, 2017). Orange believes that any disclosure on a case-by-case basis could seriously harm the Group's position. The balance and overall movements on provisions are presented in Note 5.2.

France

Mobile services

In parallel with the judicial inquiry for which on December 17, 2015 a final verdict was reached by the French Competition Authority fining Orange 350 million euros for having implemented four anti-competitive practices in the "Enterprise" market segment and imposing injunctions, SFR brought an action on June 18, 2015, for damages suffered because of Orange's practices. SFR, after several

raises in a row in April 2016 and September 2018, raised its claim from the initial 512 million euros to 3 billion euros in July 2019. The Group believes this claim represents a risk. In the wake of this decision, BT Group, Céleste and Adista also brought actions against Orange before the Paris Commercial Court for damages. To date, the overall claims of SFR, BT Group, Celeste and Adista represent a total of 3.3 billion euros. These cases are currently being investigated by the judge before trial.

Following the ruling by the French Competition Authority on December 13, 2012 imposing fines of 117 million euros against Orange reduced to 93 million euros by the Paris Court of Appeal and of 66 million euros against SFR for having implemented, as part of their abundance offers launched in 2005, excessive price discrimination between calls made within their own networks and calls made to competitor networks, Oméa Telecom (Virgin Mobile and Tele2 Mobile), Euro-Information Telecom (NRJ Mobile) and Outremer Telecom each brought action against Orange in June 2013 before the Paris Commercial Court for damages they claim to have suffered due to said practices. In November 2016 and June 2019, the Commercial Court officially acknowledged the withdrawal of Omea Telecom and Euro-Information Telecom. The dispute with Euro-Telecom is closed and only the Outremer Telecom proceedings remain pending.

⁽²⁾ Given to credit institutions and customers

- Concurrently to their complaints filed with the French Competition Authority, regarding practices of Orange in the mobile and fixed-to-mobile markets in the French Caribbean and in French Guyana, for which Orange was definitively ordered to pay a fine of 63 million euros in December 2009 reduced to 60 million euros by the Paris Court of Appeal in July 2013, Digicel and Outremer Telecom initiated before the Paris Commercial Court respectively in March 2009 and October 2010, legal actions for alleged damages stemming from these practices, in an amount which Digicel had assessed at 329 million euros increased to 493 million euros in November 2015 and Outremer at 75 million euros. After it was ordered by the Paris Commercial Court in March 2015 that 8 million euros should be paid to Outremer Telecom, the Paris Court of Appeal decreased the amount of the fine to 3 million euros in May 2017, noting inter alia that the damages should be discounted at the statutory rate of interest. On December 18, 2017 the Paris Commercial Court ordered Orange to pay to Digicel the sum of 180 million euros, to be discounted from March 2009 until the date of payment at a rate of interest higher than that adopted by the Paris Court of Appeal in the Outremer Telecom litigation, i.e. a total amount in addition to the notional amount that Digicel assesses at 520 million euros as of December 31, 2019. Orange filed an appeal and, at the same time, obtained from the Paris Court of Appeal on February 6, 2018, the right to escrow only the notional amount of the penalty until the court ruled on the merits of the case. Orange has re-evaluated the risk in light of the course of the proceedings. On April 19, 2018, Digicel petitioned the Paris Court of Appeal to dispute the amount of the escrow made by Orange in application of the judgment of the Paris Commercial Court. The Court confirmed the amount of the escrow by a ruling dated October 10, 2018.

Fixed-line services

- In 2010, SFR and then Verizon summoned Orange SA to appear before the Paris Commercial Court demanding the reimbursement of alleged overpayments on interconnection services provided by Orange, the price of which allegedly did not reflect their cost. On June 18 and 25, 2013, the Paris Commercial Court dismissed their claims but ordered Orange to pay Verizon 0.5 million euros with respect to services provided in 2008. Orange paid this amount in 2013. SFR and Verizon filed appeals against these decisions. In December 2015, the Paris Court of Appeal dismissed in full the claims made by SFR and confirmed the first instance decision. In September 2017, the French Supreme Court rejected SFR's appeal. Furthermore, in April 2017, the Paris Court of Appeal dismissed Verizon completly and reversed the compensation of 0.5 million euros granted for services provided in 2008. On June 5, 2019, the French Supreme Court annulled the decision of the Paris Court of Appeal and restored the parties to the situation they were in following the first instance court's decision rendered on June 25, 2013. The proceedings are still ongoing.
- In 2012, SFR brought an action against Orange SA before the Paris Commercial Court denouncing its retail offers for the secondary residences market and claiming 218 million euros for losses allegedly suffered. In February 2014, the trial court ruled that Orange had abused its dominant position and ordered it to pay 51 million euros in damages to SFR. In October 2014, the Paris Court of Appeal annulled this decision which was then reversed by the French Supreme Court on April 12, 2016. Orange had then to pay 53 million euros to SFR pursuant to the trial court's ruling. SFR had raised its claim to 257 million euros before the Court of Appeal. On June 8, 2018, the Court of Appeal sentenced Orange to pay 54 million euros. Orange paid the balance following the cancellation of the previous ruling from the Court of Appeal and appealed to the French Supreme Court. The French Supreme Court proceedings are still ongoing.

Other proceedings in France

- In June 2018, Iliad brought summary proceedings against Orange SA before the presiding judge of the Paris Commercial Court, aiming to ban some of its mobile telephony offers proposing mobile handsets at attractive prices accompanied by a subscription package, on the grounds that they constituted consumer credit offers. The case is currently being investigated by the judges deciding on the merits of the case.
- In December 2018 the administrators of former UK indirect retailer Phones 4U, (which is in administration and no longer trading), filed a claim against the three main UK mobile network operators, including EE, and their respective existing or former parent companies including Orange. The claim (of an unquantified amount) is currently being disputed before the High Court of England and Wales. Orange challenges vigorously the allegations raised by Phones 4U which include collusion.
- Orange Bank is the object of two historic lawsuits whereby the plaintiffs claim in total about 480 million euros in financial damages that they allege to have suffered. As Orange Bank believes these claims to be without merit and is contesting them strongly, the Group has recognized no financial liability.
- On December 20, 2019 the Paris criminal court ordered the Company to pay a criminal fine of 75,000 euros as part of the France Telecom employee-related crisis trial and, jointly and severally with the individuals natural persons charged, to pay the civil parties the sum of 5.5 million euros. As Orange did not appeal this decision, the ruling against Orange is final. The appeal proceeding by the natural persons convicted is still ongoing. The decision leaves open the possibility for anyone working at the company between January 1, 2007 and December 31, 2008 to obtain compensation based on the findings of harassment if the conditions of compensation for direct, certain and personal harm are met. Orange is in the process of executing the judgment towards the civil parties; and further, the Evaluation and Compensation Committee established by Orange continues to analyze and process the requests received. To date about 190 individual requests have been received, about 90 of which have been closed subsequent to an agreement or a declaration of inadmissibility.

Poland

- In 2011, the Polish Competition Authority (UOKiK) sanctioned the four major Polish mobile operators, including Orange Polska, for collusion to delay the development of new services in the mobile television market. This sanction was nullified in 2015 by the Court for the protection of competition and consumers. In 2017, the Court of Appeal dismissed the appeal of the UOKiK, who appealed to the Supreme Court. On November 26, 2016, the company Magna Polonia brought suit jointly and severally against the operators to the Warsaw Commercial Court and claimed 618 million zlotys (144 million euros) for the damages it allegedly sustained due to these practices. On February 9, 2018, the Warsaw Commercial Court examined the Magna Polonia claim and decided to postpone its ruling until after the Polish Supreme Court had come to a decision. On October 31, 2019, the Supreme Court confirmed the inexistence of collusive practices, thus rendering the claim made by Magna Polonia to the Warsaw Commercial Court without merits.
- In 2013, the UOKiK opened an investigation on the country's three main mobile operators, including Orange Polska, for abuse of a dominant position in relation with the retail rates imposed by these three operators on the calls made to the network of the polish P4 operator. On January 2, 2018, UOKIK suspended the proceedings against the three operators as there were no longer anti-competitive grounds. In addition, in 2015 P4 issued two claims for damages for a total amount of 630 million zlotys (147 million euros) against the

three operators jointly, as compensation for the loss it alleged to have suffered in relation to the contested pricing practices. Following the dismissal by the court of the first claim for compensation and its refusal to separate the two proceedings initiated by P4, the latter appealed the decision.

Romania

On March 29, 2016, investigators from the Romanian Competition Council made an investigation at the headquarters of Orange Romania, concerning possible discriminatory practices in the mobile payment and advertising markets. Following the investigation, the Competition Council fined Orange Romania 65 million leu (approx. 14 million euros) on December 18, 2018. Orange Romania was notified of this decision on April 15, 2019 and filed an appeal on May 9, 2019.

Middle East and Africa

In September 2008 and December 2009, the Egyptian National Telecommunications Regulatory Authority (NTRA), following a complaint filed by Telecom Egypt (TE), issued two decrees imposing interconnection rates different from those set out in the bilateral agreements between TE and Orange Egypt. In June 2010, the administrative courts granted Orange Egypt a stay of execution of these decrees until the issuance of a decision on the merits of the case. However, on June 21, 2016, the Administrative Court of Cairo ruled that the decrees from NTRA were valid. In August 2016, Orange Egypt filed an appeal with the Administrative Court of the

Egyptian State Council. The parties have withdrawn from the various proceedings. The dispute is now closed.

- A number of shareholder disputes are ongoing between the joint venture company made up of Agility and Orange, on the one hand, and its Iraqi co-shareholder in the share capital of Iraqi operator Korek Telecom on the other hand. These disputes, which notably relate to the exercise of Korek Telecom's 7% call option, are the subject of preliminary procedures and arbitrational and judicial litigation. Moreover, on March 19, 2019, an Administrative Decree issued by the Iraqi Kurdistan Regional Government enforced the decision made by the Iraqi regulatory authority (CMC) in 2014 to cancel the partnership of March 2011 between Korek Telecom, Agility and Orange. Consequently, the return of the shares in Korek was forced to the original shareholders. Orange was thus unlawfully expropriated of its investment and addressed, on March 24, 2019, a notice of dispute to the Republic of Iraq based on the Bilateral Investment Treaty between the French Republic and the Republic of Iraq with respect to the loss of its investment in Korek Telecom.

Other Group litigation

Other than proceedings that may be initiated in respect of tax audits (see Note 10), there are no other administrative, legal or arbitration proceedings, including any proceedings that are pending, suspended or threatened, of which Orange is aware of, which may have or have had in the last 12 months a material impact on the Company's and/or Group's financial position or profitability.

Note 18 Subsequent events

TDIRA Buyback

On January 28, 2020, Orange bought 12,749 perpetual bonds redeemable for shares ("TDIRA") for a notional amount of 180 million euros. Taking into account this purchase, 45,232 TDIRA remain outstanding for a total notional amount of 638 million euros.

Early loan repayment

On February 6, 2020 the Group made early repayment of the 150 million euro loan issued in 2018 by SecureLink, bearing interest at the 3-month Euribor plus 5.5% and originally maturing February 6, 2023.

Public buy-out offer followed by a compulsory squeeze-out of Business & Decision SA

On February 12, 2020, Orange announced a public buy-out offer followed by a compulsory squeeze-out of Business & Decision SA, at price of 7.93 euros per share. As of December 31, 2019, Orange through its subsidiary Orange Business Services SA, holds a stake of 93.6% of the capital of Business & Decision SA. The offer is submitted to the notice of compliance of the French Financial Markets Authority (Autorité des marchés financiers – AMF).

Note 19 Main consolidated entities

At December 31, 2019, the scope of consolidation consisted of 420 entities.

The main changes in the scope of consolidation in 2019 are set out in Note 3.

As regards subsidiaries with minority interests:

- financial statements for Orange Polska Group, Sonatel Group, Jordan Telecom Group, Orange Belgium Group and Business & Decision Group are respectively published to the Warsaw Stock Exchange, the Regional Stock Exchange (BRVM), the Amman Stock Exchange, the Brussels Stock Exchange and the Paris Stock Exchange, those companies being quoted; the others subsidiaries are not significant compared to Orange's financial data. Consequently, financial information is not presented for these subsidiaries in the notes to Orange's consolidated financial statements.

Pursuant to ANC Regulation No. 2016-09 of December 2, 2016, the complete list of the companies included in the scope of consolidation, the companies excluded from the scope of consolidation and the non-consolidated equity investments, is available on the Group's website (https://www.orange.com/en/Investors/Regulated-information).

The list of the principal operating entities shown below was determined based on their contributions to the following financial indicators: revenue and reported EBITDAaL.

Company		Country
Orange SA	Parent company	France
Main consolidated entities		
France	% Interest	Country
Orange SA – Business Unit France Orange Caraïbe Générale de Téléphone	100.00 100.00 100.00	France France France
Spain	% Interest	Country
Orange Spain and its subsidiaries	100.00	Spain
European	% Interest	Country
Orange Belgium Orange Communications Luxembourg Orange Moldova Orange Polska and its subsidiaries Orange Romania Orange Slovensko	52.91 52.91 94.41 50.67 99.20 100.00	Belgium Luxembourg Moldova Poland Romania Slovakia
Africa & Middle East	% Interest	Country
Orange Burkina Faso Orange Cameroon Orange RDC Orange Côte d'Ivoire Orange Egypt for Telecommunications and its subsidiaries Orange Guinée ⁽¹⁾ Orange Bissau ⁽¹⁾ Jordan Telecom and its subsidiaries Orange Mali ⁽¹⁾ Médi Telecom Sonatel ⁽¹⁾ Sonatel Mobile ⁽¹⁾ Enterprise Orange SA – Business Unit Enterprise Globecast Holding and its subsidiaries Orange Business Services SA and its subsidiaries Business & Decision and its subsidiaries Basefarm and its subsidiaries Orange Business Services Participations and its subsidiaries SecureLink and its subsidiaries	51.00 29.65 49.00 42.33 42.33 % Interest 100.00 100.00 93.62 100.00 100.00	Burkina Faso Cameroon Congo Côte d'Ivoire Egypt Guinea Guinea-Bissau Jordan Mali Morocco Senegal Senegal Country France France France France Norway United Kingdom Netherlands
International Carriers & Shared Services	% Interest	Country
Orange SA – Business Unit IC&SS FT IMMO H Orange Marine Orange Studio OCS Orange Brand Services	100.00 100.00 100.00 100.00 66.67	France France France France France France United Kingdom
Orange Bank	% Interest	Country
Orange Bank	65.00	France

⁽¹⁾ Orange SA controls Sonatel and its subsidiaries, which are fully consolidated, under the terms of the shareholders' agreement as supplemented by the Strategic Committee Charter dated July 13, 2005 (Orange SA owns and controls 100% of Orange MEA, which owns and controls 42.33% of Sonatel Group).

Note 20 Auditors' fees

As required by Decree no. 2008-1487 of December 30, 2008, the following table shows the amount of fees of the auditors of the parent company and their partner firms in respect of the fully consolidated subsidiaries.

(in millions of euros)		Audit a	nd related services			Other services	Total
	Statutor certification, au	y audit fees, diting of the accounts	Services require	ed by the law	Sub-total fu	rendered by auditors' networks to illy-consolidated	
		o/w issuer		o/w issuer		subsidiaries	
EY							
2019 %	10.2 94%	5.1 48%	0.3 3%	-	10.5 97%	0.4 3%	10.8 100%
2018 %	10.6 94%	5.4 <i>4</i> 8%	0.3 2%	- 0%	10.8 96%	0.4 <i>4</i> %	11.3 <i>100</i> %
2017 %	11.6 95%	7.1 58%	0.0 <i>0</i> %	0.0 <i>0</i> %	11.6 95%	0.6 5%	12.2 100%
KPMG							
2019 %	9.8 95%	5.1 49%	0.4 4%	0.2 2%	10.2 99%	0.1 1%	10.3 100%
2018 %	10.9 <i>95%</i>	6.3 <i>5</i> 5%	0.5 <i>4%</i>	0.3 2%	11.4 99%	0.1 1%	11.5 100%
2017	11.4 97%	6.9 <i>5</i> 8%	0.3 3%	0.2 2%	11.7 99%	0.1 1%	11.8 100%

The services provided by the statutory auditors were authorized pursuant to the rules adopted by the Audit Committee and updated each year since October 2016. No fiscal services were provided by the statutory auditors.

3 — Financial Report

Consolidated financial statements

3.4 Separate Annual financial statements of Orange SA

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3.4.1 Separate annual financial statements of Orange SA

The separate annual financial statements of Orange SA for the year to December 31, 2019 were approved by the Board of Directors at its meeting of February 12, 2020 and will be submitted to the Shareholders' Meeting of May 19, 2020 for approval.

Financial statements

Income statement

Revenue 2019 Revenue 2.1 22,790 Capitalized costs 1,789 Other income and expense reclassifications 1,098 Financial provision reversals 187 Total operating income 25,864 Consumption of goods and merchandise (2,417) Other external expenses (7,939) Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406) Operating Income 3,458	2018 23,071 1,870 1,143 222 26,306 (2,477) (7,999) (1,162) (6,513) (763) (3,615)
Capitalized costs 1,789 Other income and expense reclassifications 1,098 Financial provision reversals 187 Total operating income 25,864 Consumption of goods and merchandise (2,417) Other external expenses (7,939) Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) (766) Depreciation and amortization (3,671) (207) Total operating expense (22,406)	1,870 1,143 222 26,306 (2,477) (7,999) (1,162) (6,513) (763)
Other income and expense reclassifications Financial provision reversals Total operating income Consumption of goods and merchandise Other external expenses (7,939) Taxes other than income tax Labor expenses Other operating expense Depreciation and amortization Provisions Total operating expense (1,057) (1,057) (2,417) (1,057) (3,671) (3,671) (207) (207) (207)	1,143 222 26,306 (2,477) (7,999) (1,162) (6,513) (763)
Financial provision reversals 187 Total operating income 25,864 Consumption of goods and merchandise (2,417) Other external expenses (7,939) Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	222 26,306 (2,477) (7,999) (1,162) (6,513) (763)
Total operating income 25,864 Consumption of goods and merchandise (2,417) Other external expenses (7,939) Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	26,306 (2,477) (7,999) (1,162) (6,513) (763)
Consumption of goods and merchandise (2,417) Other external expenses (7,939) Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	(2,477) (7,999) (1,162) (6,513) (763)
Other external expenses (7,939) Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	(7,999) (1,162) (6,513) (763)
Taxes other than income tax 2.2 (1,057) Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	(1,162) (6,513) (763)
Labor expenses 2.3 (6,349) Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	(6,513) (763)
Other operating expense (766) Depreciation and amortization (3,671) Provisions (207) Total operating expense (22,406)	(763)
Depreciation and amortization Provisions (207) Total operating expense (22,406)	,
Provisions (207) Total operating expense (22,406)	(3.615)
Total operating expense (22,406)	(5,5.0)
	(266)
Operating Income 3,458	(22,796)
	3,510
Financial income 3,112	2,436
Financial provision reversals 1,879	1,749
Total financial income 4.991	4,184
Interest and similar expense (3,710)	(3,299)
Provisions (1,015)	(198)
Total financial expense (4,725)	(3,497)
Finance cost, net 2.4 266	687
Income before tax and exceptional items 3,723	4,197
Exceptional income 1,997	1,700
Exceptional expense (2,387)	(2,793)
Exceptional income and expense 2.5 (390)	(1,093)
Exceptional income and expense 2.5 (590)	(1,093)
Employee profit-sharing (141)	(144)
Income taxes 2.6 (333)	
Net income 2,859	(426)

Balance sheet - Assets

(in millions of euros)	Note	December 31, 2019)	December 31, 2018
		Cost	Depreciation, amortization & impairment	Net	Net
Fixed assets					
Intangible Assets Property, plant and equipment financial liabilities Financial assets Total non-current assets (a)	3.1 3.1 3.2	32,576 60,761 50,690 144,027	(5,876) (44,249) (6,580) (56,705)	26,700 16,512 44,110 87,322	15,672 42,871
Current assets					
Inventories Trade receivables Other receivables Marketable securities Cash Prepaid expenses Total current assets (b) Unrealized foreign exchange loss (c)	3.3 3.4 3.4 3.5	480 2,821 961 8,229 1 378 875 14,744 499	(19) (313) (19) - - (351)	461 2,508 942 8,229 1,378 875 14,393	938 5,123 1,433 1,247 11,599
Total assets (a+b+c)		159,270	(57,056)	102,214	97,657

Balance Sheet – Equity and liabilities

(in millions of euros)	Note	December 31, 2019	December 31, 2018
Shareholders' equity			
Share capital Additional paid-in capital Statutory reserve Retained earnings Net income Government grants Accelerated depreciation Total equity (a) Other shareholders' equity (b) Provisions (c)	4.1 4.2 4.3	10,640 15,872 1,064 6,780 2,859 466 2,397 40,078 6,483 4,542	10,640 15,872 1,064 6,104 2,533 490 2,090 38,793 6,416 5,116
Payables			
Financial liabilities Trade payables Other current liabilities Deferred income Total liabilities and deferred income (d) Unrealized foreign exchange gain (e)	4.4 4.6 4.7 3.6	35,629 4,931 7,953 1,656 50,169 942	30,543 5,156 7,986 2,416 46,101 1,231
Total equity and liabilities (a+b+c+d+e)		102,214	97,657

Statement of cash flows

(in millions of euros)	Note	2019	2018
Operating activities			
Net income		2,859	2,533
Non-cash items		0.050	0.570
Depreciation of property, plant and equipment and intangible assets (1) Net loss/(gain) on asset sales		3,658 (206)	3,579 (133)
Change in provisions and other non-cash items (2)		(1,121)	(1,000)
Change in working capital requirement			(4.44)
Decrease/(increase) in inventories Decrease/(increase) in trade receivables		57 (194)	(144) (60)
Decrease/(increase) in other receivables and prepaid expenses	3.3 and 3.5	443	130
Increase/(decrease) in trade payables (excluding fixed assets)		(135)	73
Increase/(decrease) in other payables and deferred income Increase/(decrease) in unrealized exchange gains/losses	4.6 and 4.7 3.6	(731) 297	(170)
Net cash provided by operating activities	3.0	4,927	(1) 4,807
Investing activities		,-	,
Purchases of property, plant and equipment and intangible assets		(4,975)	(4,547)
Increase (decrease) in fixed assets payables		1	(334)
Proceeds from sales of property, plant and equipment and intangible assets Subscription to Orange Participations capital increase	3.2	846 (100)	584 (250)
Subscription to Orange Business Services SA capital increase	3.2	(581)	(397)
Other acquisitions and capital (increases)/reductions of subsidiaries and equity interests		(15)	(78)
Purchase of treasury shares-free share plans Other present (aurehoses) from treasury shares	3.4 3.4	(27)	(101)
Other proceeds (purchases) from treasury shares Decrease/(increase) in marketable securities and other non-current financial assets	3.4	(7) (301)	(565)
Net cash used in investing activities	0.2	(5,159)	(5,685)
Net cash used in financing activities			
Long-term debt issue	4.4	9,499	4,734
Repayment of long-term debt	4.4	(4,474)	(2,928)
Increase/(decrease) in other current financial liabilities Change in cash collateral		(973) 605	(420) 200
Partial Buyback of TDIRA	4.2.2		(443)
Issue of subordinated notes ⁽³⁾	4.2.1	496	(4, 000)
Dividends paid Change in Group current accounts	4.1.2 3.3 et 4.6	(1,857) (48)	(1,860) 1,385
Net cash provided by/(used in) financing activities	0.0 0. 4.0	3,248	668
Net change in cash and marketable securities		3,016	(210)
Cash and marketable securities at beginning of period (4)		6,451	6,661
Cash and marketable securities at end of period ⁽⁴⁾		9,467	6,451

Including net reversals of government grants and provisions.
 Consists mainly of variations in provisions for depreciations of securities and staff benefits.
 Of which (4) million euros of additional paid-in capital.
 Excluding treasury shares.

Note 1 Description of business and status

Orange SA ("the Company") is the parent company of the Orange group ("the Group"). It is engaged in both operational activities and subsidiary financing activities for the Orange group. The Company provides consumers, businesses and other telecommunications operators with a wide range of services including fixed telephony and mobile telecommunications, data transmission, Internet and multimedia, and other value-added services.

Orange SA is governed by French corporate law, subject to specific laws governing the Company, particularly French law 90-568 of July 2, 1990 relating to the organization of public postal and telecommunications services, and Ordinance 2014-948 of August 20, 2014 on the governance and capital transactions of companies with public shareholding. Orange SA is also regulated by its Bylaws.

The activities of the Company are governed primarily by European Union directives and by the French Postal and Electronic Communications Code (Code français des postes et des communications électroniques).

Orange SA has been listed on Euronext Paris (symbol ORA) and on the New York Stock Exchange (symbol ORAN) since 1997.

Note 2 Notes to the income statement

2.1 Revenue

(in millions of euros)	2019	2018
Convergence services	5,030	4,873
Mobile services only	2,757	2,910
Fixed-line services only	7,148	7,254
IT & integration services	676	691
Other carrier services	5,280	5,450
Equipment sales	1,050	1,092
Other revenue	849	801
Total ⁽¹⁾	22,790	23,071

⁽¹⁾ Revenue generated outside France is not significant.

Breakdown of revenue by product line is as follows:

- revenue of convergent services includes revenue invoiced to retail customers of convergent offers (excluding equipment sales, see the definition of this term) defined as the combination of at least a fixed broadband access (xDSL, FTTx, cable, 4G fixed) and a mobile contract;
- revenue from mobile services only includes revenue billed to mobile contract customers (incoming and outgoing calls: voice, SMS and data), excluding convergent services and equipment sales (see these definitions);
- revenue for fixed-line services only includes revenue billed to clients for fixed services excluding convergent services and equipment sales (see these definitions). It includes conventional fixed telephony, fixed broadband services, business solutions and networks (with the exception of France, for which essential business solutions and networks are supported by the Enterprise operating segment);
- revenue of IT & integration services includes income from unified communication and collaboration services (Local Area Network and telephony, consultancy, integration, project management, video-conference offers), hosting and infrastructure services (including Cloud Computing), applications services (customer relations management and other applications services), security

services, services related to Machine to Machine activities (off-line), as well as sales of equipment related to the above products and services:

- revenue from **other carrier services** includes:
 - mobile services to operators, which in particular, combine incoming mobile traffic, visitors roaming, network sharing, national roaming and mobile virtual network operators (MVNO),
 - fixed services to carriers, which especially include domestic interconnections, service to international carriers, access services to high and very high-speed broadband (fiber optic access, unbundling of telephone line, DSL access sales), and wholesale sales of telephone lines;
- equipment sales combines all fixed and mobile equipment sales, with the exception of (i) equipment sales related to providing integration and IT services, and (ii) equipment sales to external distributors and brokers;
- other revenues include, in particular, equipment sales to external distributors and brokers, revenues from portals, online advertising and the Group's cross-functional activities and other miscellaneous revenue.

Since the analytical allocation on each product line was reviewed in 2019, the 2018 data is presented on a comparable basis.

2.2 Taxes other than income tax

(in millions of euros)	2019	2018
Regional Economic Contribution, <i>IFER</i> ⁽¹⁾ and similar Other taxes and duties, including <i>COSIP</i> tax ⁽²⁾	(723) (334)	(773) (389)
Total	(1,057)	(1,162)

2.3 Labor expenses

(in millions of euros)	2019	2018
Average number of employees (full-time equivalents) (1) (2) Wages and employee benefit expenses	66,755 (6,349)	68,871 (6,513)
of which		
 Wages and salaries 	(4,055)	(4,155)
- Social Security Charges (3)	(1,767)	(1,893)
 Provision for employee incentive bonuses for the year 	(191)	(196)
- Payments to Works Council	(123)	(127)
– Other expenses (4)	(213)	(142)

⁽¹⁾ Of whom 36% were French civil service staff (compared with 40% at December 31, 2018).(2) Broken down as follows:

2.4 Finance cost, net

(in millions of euros)	Note	2019	2018
Dividends received	3.2	524	256
Orange Brand Services Limited		400	150
Orange Caraïbe		49	50
FT IMMO H		67	43
Nordnet		7	8
Other		2	5
Revenue on marketable securities		(14)	(11)
Revenue from receivables related to investment securities and current accounts		28	76
Loan interest		(1,043)	(1,095)
Interest on other equity (including subordinated notes)		(292)	(306)
Interest on derivative instruments		180	223
Net foreign exchange gain or loss		(48)	(1)
Change in impairment of investment securities	3.2	765	1,724
Orange Polska		(277)	245
Atlas Services Belgium		(658)	492
Rimcom		55	27
Globecast Holding		35	24
Orange Participations		1,635	946
Others (net variation)		(25)	(10)
Net change in provisions for subsidiaries risk	4.3	144	(144)
Other operating income/expense and changes in other provisions		22	(35)
Total		266	687

Flat-rate tax on network enterprises.
 Account to support the broadcast programming industry.

 ⁽²⁾ Broken down as follows:

 senior management and management: 58%;
 employees, technicians and supervisors: 42%.

 (3) The charge for defined contribution pension plans was 627 million euros and comprised mainly the flat-rate contribution to the pension plan for civil servant employees of Orange SA, which was 47.7% in 2019 compared with 52.4% in 2018.

⁽⁴⁾ Including:

- 77 million euros of Tax Credit for Competitiveness and Employment (CICE) for the 2018 fiscal year (a tax mechanism removed in 2019);

- 64 million euros in 2019, compared with 57 million euros in 2018, in connection with the free share award plans (see note 4.3.2 Free share award plan).

2.5 Exceptional income and expense

(in millions of euros)	Note	2019	2018
French Part-Time for Seniors plan ⁽¹⁾ Provision for risks on property leases Disposals, changes in provisions and exceptional items Change in regulated provisions ⁽²⁾	4.3	(25) (29) (29) (307)	(805) (25) 58 (320)
Total		(390)	(1,093)

Including (660) million euros linked to the extension of the mechanism in 2018. Benefits paid under this regime, which give rise to a provision reversal for the same amount, are reclassified under exceptional income through an expenses reclassification account (625 million euros transferred in 2019 compared with 690 million euros in 2018).
 Corresponds to tax depreciation.

2.6 Income taxes

(in millions of euros)	2019	2018
Income tax benefit/(expense) net of benefits generated by group tax relief	(333)	(426)

Income tax (expense)

At December 31, 2019, Orange SA registered an income tax net expense of 333 million euros. This amount mainly comprises an income tax expense of 497 million euros and income from tax consolidation of 100 million euros accruing to Orange SA, the parent company of the tax consolidation group and tax credits in the amount of 64 million euros.

Orange SA has elected for Group tax relief with various subsidiaries. At December 31, 2019, the tax group comprised 79 companies (93 companies at December 31, 2018).

Orange SA's net future tax relief reflects an amount in the order of 485 million euros at December 31, 2019, (700 million euros at December 31, 2018), which is primarily linked to the provision for employee benefits. This relief will be applied mostly during the period from 2020 to 2028.

Developments in tax disputes and audits

Tax audits

Orange SA underwent tax audits of fiscal years 2010 to 2016, which resulted in no material effect on the Company's financial statements.

Disputes in progress concerning fiscal years 2000-2006

As part of the absorption of Cogecom by Orange SA and pursuant to an adverse ruling by the Administrative Court of Montreuil on July 4, 2013, which triggered the payment of the amounts sought by the Tax authority, in 2013 Orange SA paid the remaining balance on principal and late payment interest claimed, for a total amount of 2,146 million euros.

Over the last few years, the main developments in terms of legal proceedings brought before the Versailles Administrative Court of Appeal were the following:

- concerning fiscal years 2000-2004:
 - by a ruling on July 24, 2018, the Versailles Administrative Court of Appeal upheld the request from Orange SA. As the tax administration did not appeal in cassation, this litigation is now closed. The accounting consequences were taken into account over the 2018 fiscal year;
- concerning fiscal years 2005-2006:
 - in a ruling of February 18, 2016, the Administrative Court of Appeal
 of Versailles upheld the judgment of July 4, 2013, despite the
 contrary conclusions of the appointed *Rapporteur*. The Company
 then appealed to the *Conseil d'État* on April 18, 2016 to rule on
 the substance of the case,
 - in a ruling dated December 5, 2016, the Conseil d'État annulled the February 18, 2016 ruling by the Administrative Court of Appeal of Versailles and remanded the dispute to the same Court, on the grounds argued by the Company, i.e., the principle of intangibility of the opening balance sheet of the earliest fiscal year still subject to audit,
 - in a ruling dated July 24, 2018, the Administrative Court of Appeal
 of Versailles made an adverse decision against Orange SA,
 despite the contrary conclusions of the appointed Rapporteur.
 The Company again appealed in cassation to the Conseil d'État,
 which will give a final decision.

A favorable outcome to this dispute would result in a current tax income of 2.1 billion euros, before late interest. While awaiting the new decision of the Conseil d'État, this amount is treated as a contingent asset.

Note 3 Notes to the balance sheet assets

3.1 Tangible and intangible assets

3.1.1 Intangible Assets

(in millions of euros)	2019	2018
Net value at beginning of period	26,846	26,897
Acquisitions of intangible assets	990	980
of which trademarks, patents and software	706	735
of which development costs	232	240
Depreciation, amortization and impairment	(1,139)	(1,159)
Provisions	(O)	(2)
Other effects ⁽¹⁾	4	129
Net value at end of period	26,700	26,846

⁽¹⁾ In 2018, corresponds mainly to the effect of the Equant France merger for 124 million euros.

(in millions of euros)	December 31, 2019					
	Gross value	Accumulated	Depreciation amortization	Net book value		
Development costs Concessions, similar rights, patents, licenses, trademarks, software of which licenses Businesses of which merger losses Other intangible assets	1,207 8,062 3,467 22,788 22,629 519	(567) (4,275) (1,505) (59) - (306)	(16) (16) (647) (550) (6)	640 3,771 1,946 22,082 22,079 207		
Total	32,576	(5,207)	(669)	26,700		

3.1.2 Property, plant and equipment

(in millions of euros)	2019	2018
Net value at beginning of period	15,672	14,950
Acquisitions of property, plant and equipment	4,003	3,588
of which buildings	254	236
of which plant and equipment	3,350	3,170
Disposals	(621)	(432)
Depreciation, amortization and impairment	(2,579)	(2,482)
Other effects	37	48
Net value at end of period	16,512	15,672

(in millions of euros)	December 31, 2019				
	Gross value	Accumulated	Depreciation amortization	Net book value	
Buildings Plant, machinery and equipment Other property, plant and equipment	5,954 49,638 5,169	(4,496) (36,653) (2,893)	(4) - (203)	1,454 12,985 2,073	
Total	60,761	(44,042)	(207)	16,512	

3.2 Financial assets

(in millions of euros)	Note	2019	2018
Net value at beginning of period		42,871	39,927
Additions		1,121	1,767
Disposals		(647)	(546)
Provisions for impairment of securities	2.4	(968)	(10)
Reversals of provisions for impairment of securities	2.4	1,734	1,734
Net value at end of period		44,110	42,871

In 2019, the major changes during the period relate to:

 subscription to capital increases: Orange Business Services SA for a total of 581 million euros (in order to finance, in particular, the acquisitions of SecureLink and SecureData) and Orange Digital Investment for 20 million euros (including 5 million euros not yet fully paid up). In 2018, the major changes during the period related to:

- subscription to Orange Participations capital increases for a total of 350 million euros (including 100 million euros not yet fully paid up) and Orange Business Services SA for 397 million euros (in order to finance, in particular, the acquisition of Basefarm and Business & Decision);
- consignment of 346 million euros for the Digicel litigation (see Notes 5.4 Assets covered by commitments and 6 Litigation).

(in millions of euros)	31 décembre 2019			
	Gross value	Accumulated impairment losses	Net book value	
Investment securities Amount of cash collateral paid (1) Other non-current financial assets (2)	48,966 123 1,601	(6,580) - -	42,386 123 1,601	
Total	50,690	(6,580)	44,110	

⁽¹⁾ Amount of cash collateral received comes under short term loans (see note 4.4.1 Schedule of gross financial debt, cash and marketable securities by maturity).
(2) Including receivables related to Employee profit-sharing for 1,207 million euros.

Investment securities

List of investment securities

(in millions of euros)	Share capital s	hareholders'	Percentage capital	at		Revenue at 12/31/2019 ⁽¹⁾	Net income of last	Dividends received by	Loans and advances	
		equity (1)	held	Gross	Net		fiscal year ended ⁽¹⁾	Orange SA in 2019	granted by Orange SA	
Subsidiaries (over 50% owned)									
Atlas Services Belgium	19,618	5,690	100%	26,791	25,813	NA	1,342	-	-	
Orange Participations	7,037	19	100%	9,521	9,521	NA	29	-	-	
Orange Polska	925	1,543	50.67%	6,335	1,593	2,478	22	-	-	
Orange Brand Services Limited	1,052	3,101	100%	3,153	3,153	482	288	400	-	
Orange Participations US	413	(352)	100%	440	44	NA	(3)	-	-	
Rimcom	137	1	100%	310	275	NA	4	-	-	
Orange Telecommunications										
Group Limited	9	33	100%	304	42	NA	(O)	-	-	
FT IMMO H	266	265	100%	267	267	169	99	67	-	
Orange Business Services SA	1,064	91	100%	1,222	1,222	16	(8)	-	80	
Globecast Holding	13	(4)	100%	248	118	NA	(4)	-	-	
Orange Digital Investment	175	31	100%	201	196	NA	16	-	-	
Nordnet	0	12	100%	90	59	63	4	7	-	
Other securities	na	na	na	67	67	NA	-	50	-	
Total Subsidiaries				48,949	42,369			524	80	
Non-controlling interests (less than 50% owned)										
Other securities	NA	NA	NA	17	17	NA	NA	1	-	
Total non-controlling interests				17	17			1	-	
Total investment securities				48,966	42,386			524	80	

⁽¹⁾ Figures not yet approved by the Boards of Directors.

Value in use of investment securities

The value in use of investment securities is the estimated enterprise value of the constituent entities of those investments, less their net debt (or plus their net cash), measured in their currency and converted into euros at the year-end exchange rate:

- the value in use of the Atlas Services Belgium (ASB) shares consists of the share of values in use of its directly and indirectly held operating subsidiaries, plus the cash held by ASB and its intermediate holding companies. More specifically, it includes business operations in Spain and Romania (99% owned), Slovakia and Belgium (53% owned). Up until June 28, 2019, the date of the sale by the Group of its residual 2.49% stake in the share capital of BT Group Plc, it also included the valuation of the BT Group listed shares;
- the value in use of the Orange Participations (OPA) shares consists of the share of values in use of its directly – and indirectly – held operating subsidiaries, plus the cash held by OPA and its intermediate holding companies. It mainly comprises business operations in the Africa & Middle East region, consolidated in an intermediate holding company called Orange Middle East and Africa (OMEA), as well as banking activities in France;
- the value in use of the Orange Polska shares comprises Orange SA's share (50.7%) in the enterprise value of Poland less the net debt of the Orange Polska group;
- the value in use of the shares of Orange Brand Services Ltd (OBSL) consists of the value in use of the Orange brand plus the cash held by OBSL;
- the value in use of the Orange Business Services SA (OSB SA) shares consists of the share of values in use of its directly and indirectly held operating subsidiaries, plus the cash held by OBS SA and its intermediate holding companies. It mainly includes consulting, IT integration and the service activities for companies linked to data, digital, customer experience, Internet of Things (IoT), Cloud Computing and cyberdefense.

Key assumptions used to determine value in use

In 2019, the Group updated its strategic plan. New business plans were established for all entities making up the investment securities portfolio.

The key operating assumptions used to determine the value in use are common across Group's business segments. These assumptions include:

- key revenue assumptions, which reflect market level, penetration rate of the offerings and market share, positioning of the competition's offerings and their potential impact on market price levels and their transposition to the Group's offerings bases, regulatory authority decisions on pricing of services to customers and on access and pricing of inter-operator services, technology migration of networks (e.g. extinction of copper local loops), decisions of competition authorities in terms of concentration or regulation of adjacent sectors such as cable;

- key cost assumptions, on the level of marketing expenses required to renew product lines and keep up with competition, the ability to adjust costs to potential changes in revenue or the effects of natural attrition and staff departure plans already incurred;
- key assumptions on the level of capital expenditure, which may be affected by the roll-out of new technologies, by decisions of regulatory authorities relating to licenses and spectrum allocation, deployment of fiber networks, mobile network coverage, network sharing or obligations to open up networks to competitors.

These key operational assumptions reflect past experience and expected trends: unforeseen changes have in the past had a significant effect on expectations and may continue to do so in the future.

Discount rates and growth rates to perpetuity used to determine the values in use were revised as follows in 2019:

- discount rates and growth rates to perpetuity used to determine the values in use were revised as follows at the end of December 2019:
- the discount rates, which may incorporate a specific premium reflecting increased risk in executing certain business plans or in country risks, were raised in Europe and lowered in the Middle East and Africa, where the risk premium is trending down. In Europe, Brexit is a factor of volatility for the market and economic activity that might in the future affect interest rates and therefore discount rates.
- the perpetual growth rate was higher in Poland and Slovakia and lower in the Middle East and Africa region, where we make more conservative assumptions about trajectories past the business plan horizon. In Europe, the perpetual growth rates were maintained, on the whole, as in the assessment carried out at the end of December 2019, the economic situation is not expected to lead to any change in the long-term outlook of the industry of services offered by the Group;
- as at December 31, 2019, the specific random factors were as follows:
 - in Europe:
 - the tradeoffs to be made by regulatory and competition authorities between reducing prices to consumers and stimulating business investment, or in terms of rules for awarding 5G operating licenses or of market concentration,
 - the fiercely competitive nature of the markets where the Group operates, where price pressure is strong, particularly in Spain,
 - the Group's ability to adjust costs and capital expenditures to potential changes in revenue,
 - in the Middle East and Maghreb (Jordan, Egypt, Tunisia) and some of the African countries (Mali, Democratic Republic of the Congo, Central African Republic):
 - changes in the political situation and security with their resulting negative economic impacts on overall business climate.

Other assumptions that affect the determination of value in use are as follows:

December 31, 2019	Orange SA businesses	Spain	Brands	Poland	Belgium	Romania	Egypt
Source	Internal plan						
Methodology			Discou	nted cash fl	OW		
Perpetuity growth rate	0.8%	1.5%	1.1%	1.5%	0.5%	2.3%	3.8%
Post-tax discount rate	6.0% (1)	7.3%	7.4%	8.3%	7.5%	8.3%	12.5%

⁽¹⁾ The post-tax discount rate of Orange SA businesses includes a reduction of tax rates on corporations to 25.82% through 2022.

The value in use of Orange SA's business operations serves as the reference basis for testing the valuation of Orange SA's property, plant and equipment and intangible assets including the allocated share of merger losses (see Note 9.1.5 *Impairment of property, plant and equipment and intangible assets*).

Sensitivity of values in use

Values in use are sensitive to assumptions of cash flows in the terminal year used in the internal plans (representing a significant portion of the recoverable amount), assumptions of growth rates to perpetuity and discount rates, as well as exchange rates at the closing date for entities outside the euro zone (see note 9.2 *Use of estimates*).

3.3 Other receivables

(in millions of euros)	December 31, 2019	December 31, 2018
Deductible VAT Subsidiaries cash current accounts Other	561 143 238	583 167 188
Total	942	938

3.4 Cash and marketable securities

(in millions of euros)	December 31, 2019	December 31, 2018
Marketable securities (value net of provisions) of which treasury shares Cash	8,229 <i>13</i> 9 1,378	5,123 <i>105</i> 1,433
Total	9,607	6,556

Treasury shares

As authorized by the Shareholders' Meeting of May 21, 2019, the Board of Directors instituted a new share Buyback Program (the 2019 Buyback Program) and canceled the 2018 Buyback Program, with immediate effect. This authorization is granted for a period of 18 months as from the aforementioned Shareholders' Meeting. The 2019 Buyback Program is described in the Registration Document filed with the French Financial Markets Authority (Autorité des marchés financiers – AMF) on March 21, 2019.

The share buybacks carried out during the period by Orange primarily related to the Orange Vision 2020, Long Term Incentive Plan (LTIP) 2018-2018 and LTIP 2019-2021 free share award plans

At December 31, 2019, the company held 9,742,968 treasury shares (of which 853,500 shares in connection with the liquidity contract and 8,889,468 shares in connection with the Orange Vision 2020, LTIP 2018 – 2020 and LTIP 2019 – 2021) free share award plans.

At December 31, 2018, the company held 7,214,100 treasury shares as of December 31, 2018 (of which 309,609 shares in connection with the liquidity contract and 6,904,491 in connection with the free share award plans).

3.5 Prepaid expenses

(in millions of euros)	December 31, 2019	December 31, 2018
Prepaid financial expenses (1) Operating prepaid expenses of which property leases	506 369 <i>251</i>	892 355 236
Total	875	1,247

^{(1) (428)} million euros of this variation was linked to the losses registered on the hedging instruments taken out by Orange SA as part of the sale of EE shares, recognized on the income statement (see Note 9.1.13 Derivative financial instruments) in 2019 following the sale by Atlas Services Belgium of its residual share in BT.

3.6 Translation adjustment

Foreign exchange gains and losses respectively represent unrealized gains and losses arising primarily on the translation of loans and borrowings, subordinated notes and loans denominated in foreign currencies into euros.

Foreign exchange losses were 499 million euros at the end of December 2019 (669 million euros at the end of December 2018) and relate to unrealized losses.

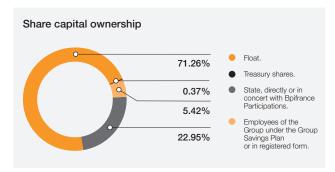
Foreign-exchange gains were 942 million euros the end of December 2019 (1,231 million euros at the end of December 2018) and relate to unrealized gains.

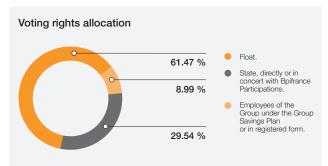
Note 4 Notes to the balance sheet equity and liabilities

4.1 Equity

No new shares were issued during the 2019 year. At December 31, 2019, Orange SA's share capital, based on the number of issued shares at this date, amounted to 10,640,226,396 euros, divided into 2,660,056,599 ordinary shares with a par value of 4 euros each.

As of December 31, 2019, the share capital and voting rights of Orange SA broke down as follows:





4.1.1 Change in equity

(in millions of euros)	Amount at January 1, 2018	Appropriation of 2018 net income	Dividend	Net income 2019	Capital increases	Other movements	Amount at December 31, 2018
Share capital	10,640	-	-	-	-	-	10,640
Additional paid-in capital	15,872	-	-	-	-	-	15,872
Statutory reserve	1,064	-	-	-	-	-	1,064
Retained earnings	6,104	2,533	(1,857)	-	-	-	6,780
Net income	2,533	(2,533)	-	2,859	-	-	2,859
Government grants	490	-	-	-	-	(24)	466
Regulated provisions	2,090	-	-	-	-	307	2,397
Total	38,793	-	(1,857)	2,859	-	283	40,078

4.1.2 Dividends

Fiscal Year	Decision	Description	Dividend per share (in euros)	Payout date	How paid	Total (in millions of euros)
2019	Board of Directors Meeting of July 24, 2019	2019 interim	0.30	December 4, 2019	Cash	796
	Shareholders' Meeting of May 21, 2019	Balance 2018	0.40	June 6, 2019	Cash	1,061
Total dividends p	aid in 2019					1,857
2018	Board of Directors Meeting of July 25, 2018	2018 Interim	0.30	December 6, 2018	Cash	796
	Shareholders' Meeting of May 4, 2018	Balance 2017	0.40	June 7, 2018	Cash	1,064
Total distribution	s of dividends in 2018					1,860

The dividend per share paid for fiscal year 2019 was 0.70 euros per share.

4.2 Other equity

(in millions of euros)	December 31, 2019	December 31, 2018
Subordinated notes ⁽¹⁾ Perpetual bonds redeemable for shares (TDIRA)	5,665 818	5,598 818
Total	6,483	6,416

(1) Variation mainly linked to the exchange rate effect on shares issued in pounds sterling and to all the movements of the period described in note 4.2.1 Subordinated notes.

4.2.1 Subordinated notes

On February 7, 2014, as part of its EMTN program, Orange SA issued the equivalent of 2.8 billion euros of deeply subordinated notes denominated in euros and pounds sterling in three tranches: 1 billion euros with a fixed-rate coupon of 4.25%, 1 billion euros with a fixed-rate coupon of 5.25% and 650 million pounds sterling with a fixed-rate coupon of 5.875%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Orange SA has a call option on each of these tranches respectively after February 7, 2020, February 7, 2024, and February 7, 2022 and upon the occurrence of certain contractually defined events.

Step-up clauses involve adjustments of 25bps in 2025 and an additional 75bps in 2040 for the first tranche; of 25bps in 2024 and an additional 75bps in 2044 for the second tranche; and of 25bps in 2027 and an additional 75bps in 2042 for the third tranche.

On October 1, 2014, as part of its EMTN program, Orange SA issued the equivalent of 3 billion euros of deeply subordinated notes denominated in euros and pounds sterling in three tranches: 1 billion euros with a fixed-rate coupon of 4%, 1.25 billion euros with a fixed-rate coupon of 5% and 600 million pounds sterling with a fixed-rate coupon of 5.75%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Both issuances were the subject of a prospectus certified by the AMF under visas no. 14-036 and 14-525.

Orange SA has a call option on each of these tranches respectively after October 1, 2021, October 1, 2026, and April 1, 2023 and upon the occurrence of certain contractually defined events.

Step-up clauses involve adjustments of 25bps in 2026 and an additional 75bps in 2041 for the first tranche; of 25bps in 2026 and an additional 75bps in 2046 for the second tranche, of 25 bps in 2028 and an additional 75bps in 2043 for the third tranche.

On April 15, 2019, as part of its EMTN program, Orange SA issued the equivalent of 1 billion euros of deeply subordinated notes denominated in euros in one tranche with a fixed-rate coupon of 2.375%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Orange has a call option on this tranche after April 15, 2025 (first date for the revision of the rates of the tranche in question) and upon the occurrence of certain contractually defined events.

Step-up clauses provide for a coupon adjustment of 0.25% in 2030 and an additional 0.75% in 2045.

In the same way, Orange has proceeded to a partial redemption of the existing subordinated notes by a contractual offer for a part of subordinated notes in the following tranches:

- 500 million euros on the nominal of 1 billion euros issued on 7 February 2014 at the rate of 4.25%;
- 500 million euros on the nominal of 1 billion euros issued on October 1, 2014 at the rate of 4.00%.

On September 19, 2019, as part of its EMTN program, Orange SA issued the equivalent of 500 million euros of deeply subordinated notes denominated in euros in one tranche with a fixed-rate coupon of 1.75%. A reset of interest rates at market conditions is provided for contractually on each call option exercise date.

Orange has a call option on this tranche after March 19, 2027 (first date for the revision of the rates of the tranche in question), and upon the occurrence of certain contractually defined events.

Step-up clauses provide for a coupon adjustment of 0.25% in 2032 and an additional 0.75% in 2047.

These issuances were the subject of a prospectus certified by the AMF under visas no 14-036, no.14-525, no.19-152 and no.19-442.

These notes, listed on Euronext Paris, are deeply subordinated notes (senior to ordinary shares): the holders will only be remunerated (whether on nominal, interest or any other amount) after all other creditors, including holders of participating loans and securities, simply subordinated or not, representing a claim on Orange SA.

At each interest payment date, settlement may be either paid or deferred, at the option of the issuer. Deferred coupons are capitalized and become due and payable in full under certain circumstances defined contractually and under the control of the issuer.

On December 12, 2019, the Group announced its intention to exercise, on 7 February 2020, in line with contractual arrangements, its purchase option on the remaining 500 million euros on the tranche with an initial nominal of 1 billion euros already partially bought in April 2019. The interest incurred on this tranche up to December 31, 2019 was 19 million euros. As a result of the commitment made by Orange SA to repurchase this tranche, the item "other equity" was reclassified as "other current loans" (see Note 4.4. Financial liabilities).

Accrued interest is recognized in income and accrued interest not yet due is included on the liabilities side of the balance sheet outside the heading "Other equity".

In 2019, Orange did not exercise its option to defer payment for the coupons related to the subordinated notes and, accordingly, paid the noteholders as follows:

- on February 7, 2019, compensation of 139 million euros (95 million euros and 38 million pounds sterling);
- on April 1, 2019, compensation of 40 million euros (35 million pounds sterling);
- on April 15, 2019, compensation of 14 million euros;
- on October 1, 2019, a compensation of 83 million euros.

4.2.2 TDIRA

On March 3, 2003, under the terms of the settlement agreement that ended business relationships with MobilCom, Orange SA issued perpetual bonds redeemable for shares (*TDIRA*), with a nominal value of 14,100 euros, reserved for members of the banking syndicate (the "Bank tranche") and for MobilCom's suppliers (the "Supplier tranche"). The *TDIRA* are listed on Euronext Paris. Their issue was described in a securities note approved by the *Commission des Opérations de Bourse* (renamed *Autorité des marchés financiers*) on February 24, 2003. Taking into account redemptions made since their issue, including a redemption of 31,417 securities in December 2018 for a nominal amount of 443 million euros, only 57,981 *TDIRA* remain in circulation for an overall nominal amount of 818 million euros.

The *TDIRA* are redeemable in new Orange SA shares, at any time at the holders' request or, under certain conditions as described in the appropriate prospectus, at Orange SA's initiative based on a ratio of 583,261 shares to one *TDIRA* (i.e., conversion price of 24,175 euros), as the initial ratio of 300 shares to one *TDIRA* has been adjusted several times to protect bondholders' rights, and may be further adjusted under the terms and conditions set out in the information memorandum.

Since January 1, 2010, the interest rate on the TDIRAs has been the three-month Euribor +2.5%.

Accrued interest is recognized in income and accrued interest not yet due is included on the liabilities side of the balance sheet outside the heading "Other equity".

4.3 Provisions

(in millions of euros)	Employee benefits and similar		Dismant- ling and	Provisions for	Provision for	Other provi- sions (2)	Total provision
	Post- employment benefits	Long- term benefits	restoring sites	litigation (1)	subsi- diaries risks	SIONS	for contin- gencies
Provision at beginning of period	604	2,402	430	501	165	1,014	5,116
Increases	62	50	-	83	-	298	493
Releases	(38)	(634)	(7)	(15)	(144)	(279)	(1,117)
Releases – unused	-	-	-	(7)	(144)	(145)	(296)
Releases – used	(38)	(634)	(7)	(8)	-	(134)	(821)
Discounting and other effects	9	(1)	40	-	-	2	50
Provision at end of period	637	1,817	463	569	21	1,035	4,542

⁽¹⁾ See the detail in Note 6 Litigation.

The impact of changes in provisions on the income statement is broken down as follows:

(in millions of euros)	Operating income	Financial income	Exceptional income	Total
Increases (including discounting)	209	33	261	504
Releases	(148)	(144)	(824)	(1,117)
Balance at December 31, 2019	61	(111)	(563)	(613)

4.3.1 Employee benefits

Types of post-employment benefits and other long-term benefits

In accordance with French laws and practices, Orange SA has obligations relating to employee benefits:

- with regard to retirement, employees are covered by defined contribution plans required by law. Civil servants employed by Orange SA are covered by the government-sponsored civil and military pension plan. Orange SA's obligation under the plan is limited to the payment of annual contributions (French law No. 96-660 dated July 26, 1996). Consequently, Orange SA has no obligation to fund future deficits of the pension plans covering its own civil servant employees or any other civil service plans;
- Orange SA also provides a defined benefit plan in the form of annuities, a plan for senior management staff in France for up to 205 million euros. The plan assets of this plan were transferred. For several years now, this plan has been closed to new members;
- Orange SA has also committed to capital-based defined benefit plans: under the laws of some countries or contractual agreements,

employees are entitled to certain lump-sum payments or bonuses on retirement depending on their years of service and end of career salary (up to 838 million euros for private sector employees and 33 million euros for government employees);

 finally, other long-term benefits relate to French Part-Time for Seniors plans (TPS) detailed below and long-term compensated absences.

The French Part-Time for Seniors plans are accessible to civil servants and employees under private contract from the French entities who are eligible for full retirement benefits within 3 to 5 years and who have at least 15 years' service within the Group. Eligible employees are those who will retire no later than January 1, 2025.

These plans give employees the opportunity to work 50% or 60% of a full-time job whilst receiving:

- a base salary between 65% and 80% of full-time employment;
- the retirement entitlement benefits of full-time employment during the period in question (both the Company's and the employee's contributions);
- a minimum salary level.

⁽²⁾ Including 132 million euros on December 31, 2019 in connection with the free share award plans (see note 4.3.2 Free share award plans).

These plans last for a period of at least 18 months and no longer than five years.

The beneficiaries may decide to invest part of their base compensation (5%, 10% or 15%) in a Time Savings Account (CET), with an additional Group contribution. The CET allows for a reduction in the amount of time worked.

At December 31, 2019 31,500 employees had signed up for TPS, 22,200 of whom have already passed through it. The number of employees who are or will be participating in the French Part-Time for Seniors plans (TPS) and thus included in the provision, is estimated at 14,200 employees at December 31, 2019.

At December 31, 2019, the provision for TPS was 1,218 million euros (versus 1,777 million euros at December 31, 2018).

Key assumptions used to calculate the amount of obligations

The assessment of post-employment benefits and other long-term benefits is based on retirement age calculated in accordance with the provisions applicable to each plan and the necessary conditions to ensure entitlement to a full pension, both of which are often subject to legislative changes.

The main capital-based defined benefit plan (retirement bonuses for employees under private-law contracts in France) is mainly sensitive to employment policy assumptions (Orange has historically had high numbers of staff at retirement age). The estimated increase in the capital of this plan is based on a long-term inflation assumption of 2% associated with the effect of a higher "GVT" (acronym for Wage drift – Seniority – Job-skills). "Wage drift – Seniority – Job-skills" refers to annual change in total payroll costs independent of general or categorical increases in wages and salaries, due to in-grade promotions, promotions out of grade and the aging of existing staff.

The valuation of the obligation of the French Part-Time for Seniors plans is sensitive to estimates of the potentially eligible population and to the sign-up rate for the plans (estimated at 70% on average), and the trade-offs that the beneficiaries will ultimately make between the different plans proposed.

The actuarial assumptions used to measure Orange SA's obligation in respect of retirement and other long-term employee benefits are the following:

	December 31, 2019	December 31,2018
Discount rates ⁽¹⁾ Average expected long-term increase in salaries Long term inflation rate	-0.25% to 0.90% 2% to 2.50% 2%	-0.05% to 1.85% 2% to 2.30% 2%

(1) A -0.25% rate was used to value the obligation regarding the French Part-Time for Seniors plans (versus -0.05% at December 31, 2018).

The discount rates are based on AA-rated Corporate bonds with the same maturity as the obligation.

The impacts on pension benefit obligations of changes in key assumptions would be as follows:

(in millions of euros)	50-point decrease in sign-up rate	50-point increase in sign-up rate
Discount rates —	(78)	72
	5% decrease in sign-up rate	5% increase in sign-up rate
Sign-up rates (1) for French Part-Time for Seniors plans ———	(42)	42

⁽¹⁾ Sensitivity is performed on future entries in French part-time for seniors plans (TPS).

Change in the value of the obligation

The table below provides details of the movements in the value of employee benefit obligations:

(in millions of euros)	Annuity- based plans	Capital- based plans	Other post employment benefits	Total post- employment benefits	Other long-term benefits
Change in the value of the obligation					
Total benefit obligations at beginning of year Service cost Interest cost Actuarial (gains)/losses Benefits paid Total benefit obligations – closing balance (a) in respect of employee benefit plans	207 1 0 8 (11) 205	709 42 12 130 (24) 869	69 1 1 (51) (3) 17	985 44 13 87 (38) 1,091	2,402 101 (1) (51) (634) 1,817
that are wholly or partly funded in respect of employee benefit plans that are wholly unfunded	205	869	- 17	205 886	- 1,817
Change in plan assets				-	
Fair value of plan assets at beginning of year Actuarial return on plan assets Gains/(losses) on plan assets Employer contributions Benefits paid by the fund Fair value of plan assets – closing balance (b)	156 5 (1) 9 (9) 160	- - - -	- - - -	156 5 (1) 9 (9) 160	- - - -
Plan assets				-	
Net funded status (a) – (b) Unrecognized actuarial gains/(losses) Unrecognized past service cost Provision/(asset) Of which Provision/(asset): Short term Of which Provision/(asset): Long term	45 (30) - 15 6 9	869 (302) 5 572 34 538	17 33 - 50 0 50	931 (299) 5 637 40 597	1,817 - - 1,817 450 1,367
Charge for the period					
Service cost Interest cost Expected return on plan assets Amortization of actuarial (gains)/losses Amortization of unrecognized past service cost Total net period pension cost	1 0 (5) 11 - 7	42 12 - 6 (0) 60	1 1 - 2 0 4	44 13 (5) 19 - 71	101 (1) - (51) - 49
Changes in provision/(Asset)				-	
Provision/(asset) at beginning of year Net period pension cost Contributions and/or benefits paid by the employer Provision/(asset) at end of year	19 7 (11) 15	536 60 (24) 572	49 4 (3) 50	604 71 (38) 637	2,402 49 (634) 1,817

Maturity dates of employee benefit obligations

The table below provides a breakdown of the ten-year maturity schedule of projected disbursements for the French Part-Time for Seniors plans, pension plans and other post-employment benefit obligations as of December 31, 2019. Provisions for time savings accounts and long-term illness are not included in the table below.

(in millions of euros)	Schedule of estimate to be paid, unc					
	At December 31, 2019	2020	2021	2022	2023	2023 to 2028
French Part-Time for Seniors plans Provisions for pensions	1,218	421	313	236	195	109
and other post-employment benefits	863	114	102	92	71	339
Total employee benefit obligations	2,081	535	415	328	266	448

4.3.2 Free share award plan

Orange Vision 2020 free share award plan

2017-2019 free share award (FSA) plan

On October 25, 2017 the Board of Directors approved the implementation of a free share award plan for employees of 9.2 million units, of which a maximum estimated at 9.1 million would be issued in the form of shares. This plan has been granted to some 144,000 employees working in 87 countries. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the plan will receive a cash value based on the exchange-traded price of Orange stock on March 31, 2020.

Vesting occurred on December 31, 2019, and the awarding of shares will occur on March 31, 2020, the shares being subject to:

- a condition of employment from September 1, 2017 to December 31, 2019; and
- internal performance conditions, specifically the adjusted EBITDA including banking activities (50%) and the organic cash-flow of telecoms activities (50%) as defined by the plan.

Each of these indicators will be compared to the budget approved by the Board of Directors for each of the three years. If the performance conditions are not met, each employee meeting the employment condition would nonetheless be awarded half of the shares initially planned.

Performance is assessed for the years 2017, 2018 and 2019 in relation to the budget for each of these three years, as approved in advance by the Board of Directors. As such, satisfaction of each performance condition is recorded year on year and entitlement to final allocation is a percentage based on the sum of performances assessed over the course of the vesting period. The definitive number of shares allocated will be announced on March 31, 2020, following confirmation by the Board of Directors of achievement or non-achievement of the performance conditions of the past year.

Long Term Incentive Plan (LTIP) 2017 - 2019

In addition to the free share award plan, the Board of Directors' Meeting on July 26, 2017 approved the implementation of a free share award plan (Long Term Incentive Plan or LTIP) reserved for the Executive Committee, Corporate Officers, executives and leaders involving 1.6 million free shares units. This plan was granted to approximately 1,200 employees. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the International Plan will receive an amount in cash equal to the price of Orange stock on March 31, 2020.

Vesting occurred on December 31, 2019, and the awarding of shares will occur on March 31, 2020, the shares being subject to:

- a condition of continued employment from January 1, 2017 with respect to Corporate Officers and members of the Executive Committee and from July 15, 2017 with respect to the qualifying senior executives, until December 31, 2019;
- performance conditions, internal and external respectively, namely the organic cashflow of telecoms activities (50%) as defined in the plan, assessed annually in comparison with the budget, and the Total Shareholder Return (TSR) (50%). TSR performance is measured by comparing the change between January 1, 2017 and December 31, 2019 in Orange's TSR based on the relative performance of the total return to an Orange shareholder over the three years with the change in TSR calculated on the average values

of the Stoxx Europe 600 Telecommunications reference index or any other index having the same purpose and therefore a substitute for the duration of the Plan.

Accounting effect

In 2017, all performance criteria were achieved with the exception of that relating to the organic cashflow in 2018.

The provision as of December 31, 2019, for this plan was recognized at 118 million euros (see 9.1.16 *Principles for financial statement reporting*), compared to 65 million euros as of December 31, 2018 (see Note 4.3 *Provisions*).

Long Term Incentive Plan (LTIP) 2018 - 2020

The Board of Directors' Meeting on July 25, 2018 approved the implementation of a free share award plan (Long Term Incentive Plan or LTIP) reserved for the Executive Committee, Corporate Officers, and Leaders involving 1.7 million free share units. This plan was granted to approximately 1,200 employees. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the International Plan will receive an amount in cash equal to the price of Orange stock on March 31, 2021.

Vesting will occur at December 31, 2020, and the awarding of shares on March 31, 2021, the shares being subject to:

- continued employment from January 1, 2018, until December 31, 2020;
- performance conditions, internal and external respectively, namely the organic cashflow of telecoms activities (50%) as defined in the plan, assessed annually in comparison with the budget, and the Total Shareholder Return (TSR) (50%). TSR performance is measured by comparing the change between January 1, 2018 and December 31, 2020 in Orange's TSR based on the relative performance of the total return to an Orange shareholder over the three years with the change in TSR calculated on the average values of the Stoxx Europe 600 Telecommunications reference index or any other index having the same purpose and therefore a substitute for the duration of the Plan.

Accounting effect

 $\ln 2018,$ the performance criteria related to the organic cash-flow was not met.

In 2019, all the performance criteria were met.

The provision as of December 31, 2019 for this plan was recognized at 10 million euros compared with 3 million euros as of December 31, 2018 (see Note 4.3 *Provisions*).

Long Term Incentive Plan (LTIP) 2019 - 2021

The Board of Directors' Meeting on July 24, 2019 approved the implementation of a free share award plan (Long Term Incentive Plan or LTIP) reserved for the Executive Committee, Corporate Officers, and Leaders involving 1.7 million free share units. This plan was granted to approximately 1,200 employees. In countries where the regulations, tax codes or labor laws do not permit awards of stock, the beneficiaries of the International Plan will receive an amount in cash equal to the price of Orange stock on March 31, 2022.

Vesting will occur at December 31, 2021, and the awarding of shares on March 31, 2022, the shares being subject to:

 continued employment from January 1, 2019, until December 31, 2021: - performance conditions, internal and external respectively, namely the organic cashflow of telecoms activities (50%) as defined in the plan, assessed annually in comparison with the budget, and the Total Shareholder Return (TSR) (50%). TSR performance is measured by comparing the change between January 1, 2019 and December 31, 2021 in Orange's TSR based on the relative performance of the total return to an Orange shareholder over the three years with the change in TSR calculated on the average values of the Stoxx Europe 600 Telecommunications reference index or any other index having the same purpose and therefore a substitute for the duration of the Plan.

Accounting effect

In 2019, all the performance criteria were met.

The provision as of December 31, 2019 for this plan over the fiscal year was recognized at 4 million euros (see Note 4.3 Provisions).

4.4 Financial liabilities

4.4.1 Schedule of gross financial debt, cash and marketable securities by maturity

(in millions of euros)	December 2018	December 2019	2020	2021	2022	2023	2024	Beyond
Long-term and medium-term financial liabilities								
Bonds ⁽¹⁾ Bank loans and loans	26,529	30,076	1,330	3,275	2,150	1,377	1,900	20,044
from multilateral lending institutions. Other medium- and long-term deb	,	2,361 1,500	421	190	-	750	- 1,500	1,000
Total (a)	28,560	33,937	1,751	3,465	2,150	2,127	3,400	21,044
Other current financial liabilities								
Neu Commercial Papers (3)	1,115	157	157					
Bank overdrafts		- 1	1					
Other current loans (4)	213	876	876					
Accrued interest not yet due (ICNE	E) ⁽⁵⁾ 655	659	659					
Total (b)	1,983	1,693	1,693	-	-	-	-	-
Total gross financial								
liabilities (A)	(a)+(b) 30,543	35,630	3,444	3,465	2,150	2,127	3,400	21,044
Marketable securities Cash	5,123 1,433	,	8,229 1,378					
Total cash, cash equivalents								
and marketable securities (B)	6,556	9,607	9,607					
Total gross financial debt less cash and marketable								
securities at year-end	(A)-(B) 23,987	26,023	(6,163)					

- (1) Includes EMTN (Euro Medium Term Notes) private placements and the bonds exchangeable for BT equity, which transaction is described below.
- Credit line taken out with Atlas Services Belgium (see note 4.6 Other current liabilities). Negotiable European Commercial Papers (formerly called "commercial papers").
- (4) Of which cash collateral received of 261 million euros at December 31, 2019 (82 million euros on December 31, 2018) and reclassification for 500 million euros of the subordinated notes tranche which will be reimbursed on February 7, 2020 (see note 4.2.1. Subordinated notes).

 (5) Includes accrued interest of 530 million euros on bonds.

As at December 31, 2019, Orange SA bonds were redeemable at maturity, and no specific guarantee had been given in relation to their issuance. Some bonds may be redeemed in advance, at the request of the issuer.

As a reminder, on June 27, 2017 the Company issued bonds exchangeable into BT shares for a notional amount of 517 million pounds sterling (585 million euros at the ECB daily reference rate), bearing a coupon of 0.375% and having an underlying 133 million of BT shares based on a reference price of 2.88 pounds sterling per share. The Bonds mature in June 2021 and have been redeemable on demand by investors since August 7, 2017 in cash, in BT stock or in a combination of the two, at the choice of Orange. The amount redeemed will equal the par value plus any improvement in BT stock beyond 3.89 pounds sterling per share (or 135% of the reference price).

The covenants on borrowings and credit lines are presented in Note 4.5.3 Liquidity risk management.

4.4.2 Financial debt by currency

The table below provides a breakdown of Orange SA's gross financial debt less cash and marketable securities by currency before currency derivatives.

Equivalent value in millions of euros at the closing rate	December 31, 2019	December 31, 2018
EUR	16,168	12,886
USD	4,555	7,350
GBP	3,840	2,812
CHF	459	(2)
HKD	234	123
NOK	131	130
JPY	(7)	60
Other currencies	(16)	(27)
Total before accrued interest	25,364	23,332
Accrued interest	659	655
Total before currency derivatives	26,023	23,987

4.5 Exposure to market risks

4.5.1 Interest rate risk management

Orange SA seeks to manage its fixed-rate/variable-rate exposure in euros in order to minimize interest costs by using firm and conditional interest rate derivatives such as swaps, futures, caps and floors.

Derivative financial instruments

Derivatives are used to manage Orange SA's fixed-rate/variable-rate exposure at December 31, 2019 and breakdown as follows:

(in millions of euros)	2020	2021	2022	2023	Beyond	Notional amount
Instruments designated as hedges						
Interest rate swaps Cross currency swaps	609 322	443 1,297	-	- 107	100 6,793	1,152 8,519
Instruments designated as hedges but that do not qualify for hedge accounting						
Interest rate swaps Cross currency swaps	125 -	122 -	- 855	- 766	-	247 1,621

Management of fixed-rate/variable-rate debt

The fixed-rate portion of outstanding gross financial debt excluding cash collateral deposits received, compared to the fixed-rate debt, is estimated at 91% at December 31, 2019, as against 90% in 2018.

Sensitivity analysis of the Orange SA's position to changes in interest rates

The sensitivity to interest rate risk is only analyzed for interest rate derivatives that are in standalone open position and therefore exposed to interest rate risk. A 1% rise in interest rates would result in a 2 million euro increase in annual financial expenses and a 1% fall in interest rates would result in a 1 million euro decrease.

4.5.2 Currency risk management

Orange SA generally hedges its foreign currency issues with derivatives or with assets in the same currency.

The table below shows the notional amounts of currencies to be delivered and received under off-balance sheet currency instruments (currency swaps, forward currency transactions and currency options)

held by Orange SA.

(in millions of currency units)		In c	currency ⁽¹⁾			Other
_	EUR	GBP ⁽²⁾	USD	CHF	HKD	currencies in euro equi- valent value
Rate swaps and cross currency swaps						
borrower legs	3,008	4,530	5,223	500	2,049	3,507
Rate swaps and cross currency swaps						
lender legs	(13,121)	(12)	-	-	-	(3,376)
Currencies receivable under forward						
currency contracts	1,109	68	218	17	93	977
Currencies payable under forward						
currency contracts	(1,260)	(40)	(113)	(11)	-	(967)
Currency option receivable	-	-	50	-	-	-
Currency option payable	(45)	-	-	-	-	-
Total	(10,309)	4,546	5,378	506	2,142	141
Equivalent value in euros						
at year-end closing rate	(10,309)	5,343	4,787	466	245	141

- (1) Positive amounts represent currencies receivable and negative amounts represent currencies deliverable.
- (2) Of which economic hedge of subordinated notes denominated in pounds sterling for 1,250 million pounds sterling (equivalent 1,469 million euros).

4.5.3 Liquidity risk management

Credit lines with banking institutions

Since December 21, 2016, Orange SA has had a 6 billion euro syndicated loan. This loan has been subjected to two one-year extension requests from the initial maturity date. These requests were

approved by the banks in such a way that the final maturity date for the credit was extended to December 2023.

As at December 31, 2019, Orange's liquidity position exceeds the redemptions of gross financial debt scheduled in 2020.

(in millions of euros)	Available amount
Cash Marketable securities Drawdown available on lines of credit	1,378 8,229 6,000
Liquidity position	15,608

Changes in Orange's credit rating

Orange's credit rating is an additional performance indicator used to assess the Group's financial policy and risk management policy and, in particular, its solvency and liquidity risk, and is not a substitute for an analysis carried out by investors. Rating agencies revise the ratings they assign on a regular basis. Any change in the rating could produce an impact on the cost of future financing or restrict access to liquidity.

 one Orange SA bond with an outstanding amount of 2.5 billion dollars maturing in 2031 (equivalent to 2.2 billion euros as at December 31, 2019) is subject to a Step-up clause in the event that Orange's rating changes. This clause was triggered in 2013 and early 2014: the coupon due in March 2014 was thus computed on the basis of an interest rate of 8.75% and since then, the bond bears interest at the rate of 9%;

 the margin of the syndicated credit line of 6 billion euros signed on December 21, 2016 might be modified in light of changes to Orange's credit rating, upwards or downwards. As at December 31, 2019, the credit facility was not drawn.

At December 31 2019, Orange's credit ratings and its outlook have not changed since December 31, 2018:

	Standard & Poor's	Moody's	Fitch Ratings	Japan Credit Rating
Non-current debt	BBB+	Baa1	BBB+	А
Outlook	Stable	Stable	Stable	Stable
Current debt	A2	P2	F2	not applicable

4.5.4 Financial covenants

Commitments with regard to financial ratios

Orange SA does not have any credit line or loan subject to specific covenant with regard to financial ratios.

Commitments related to instances of default or material adverse changes

Most of Orange SA's financing agreements, in particular the 6 billion euros syndicated credit facility, as well as bond issues, are not subject to early redemption obligations in the event of a material adverse change, or cross default provisions. Most of these contracts include cross acceleration provisions. Thus, the mere occurrence of events of default in other financing agreements would not automatically trigger an accelerated repayment under such contracts.

4.5.5 Credit risk and counterparty risk management

Orange SA may be exposed to counterparty risk through trade receivables, cash and cash equivalents, investments and derivative financial instruments.

Orange SA considers that it has limited credit risk with respect to trade accounts receivables due to its large and diverse customer base (residential, professional and large business customers) operating in varied industries and located in many French regions and foreign countries. In addition, the maximum value of the counterparty risk on these financial assets is equal to their recognized net carrying value.

Orange SA is exposed to bank counterparty risk through its investments and derivatives. Therefore, it performs a strict selection based on the credit rating of public, financial or industrial institutions in which it invests or with which it enters into derivatives agreements:

 for each non-bank counterparty selected for investments, limits are set based on credit ratings and maturity;

- for each counterparty bank selected for investments and derivatives, limits are based on equity, rating, CDS (Credit Default Swap, an accurate indicator of potential default risk) as well as on periodic analyses carried out by the Treasury Department;
- theoretical limits and consumption limits are monitored and reported on a daily basis to the Group treasurer and the head of the trading room. These limits are adjusted regularly depending on credit events.

For derivatives, master agreements relating to financial instruments (French Banking Federation) are signed with all counterparties and provide for a net settlement of debts and receivables, in case of failure of one of the parties, as well as for calculation of a final balance to be received or paid. These agreements include a CSA (Credit Support Annex) cash collateral clause that can lead to either a deposit (collateral paid) or collection (collateral received), on a daily basis. These payment amounts correspond to the change in market value of all derivative instruments.

As a rule, investments are negotiated with high-grade banks.

4.5.6 Notional amount and fair value of derivative financial instruments

Notional contracts or amounts do not represent the amounts to be paid or received and consequently do not represent the risk incurred by Orange SA associated with the use of derivative financial instruments.

The fair value of the currency swaps and interest-rate swaps is estimated by discounting future expected cash flows using the year-end market exchange rates and interest rates for the remaining term of the contracts.

The fair value of over-the-counter options is estimated using generally accepted market measurement models.

(in millions of euros)	December	December 31, 2019 December 31, 20		
	Notional amount	Fair value	Notional amount	Fair value
Off-balance sheet financial instruments				
Interest rate swaps Cross currency swaps Forward currency contracts Futures	4,649 11,862 2,382	(48) 228 -	4,015 13,668 4,070 226	(16) (422) -
Total firm commitments	18,893	180	21,979	(438)
Swaptions Options	- 45	-	250 57	(4)
Total contingent commitments	45	-	307	(4)
Total	18,938	180	22,286	(442)

4.6 Other current liabilities

(in millions of euros)	Note	December 31, 2019	December 31, 2018
Subsidiaries cash current accounts		5,910	5,982
of which Atlas Services Belgium (1)	7	2,565	2,728
of which Equant		805	956
of which Orange Participations UK	7	611	612
of which Atlas Countries Support		94	40
of which Orange Espagne		138	90
of which Orange Brand Services Limited		108	244
of which Orange Telecommunications Group Limited		42	42
of which Orange Participations		186	101
of which Orange Middle East & Africa		147	108
Tax and social security liabilities		1,454	1,531
Payables to submarine cable consortium members		169	131
Others		420	342
Total		7,953	7,986

⁽¹⁾ Change in the period due primarily to the credit line taken out with Atlas Services Belgium for (1,500) million euros (see note 4.4 Financial liabilities), dividends received of 723 million euros, and the sale of its residual share of BT shares for 543 million euros.

4.7 Deferred income

(in millions of euros)	December 31, 2019	December 31, 2018
Deferred financial income	867	1,567
of which instruments eligible for hedge accounting ⁽¹⁾	409	1,065
of which equalization payments received on unwinding derivatives,		
and deferred until the maturity of the underlying instrument	458	502
Deferred operating income	789	849
of which General Public contract	205	206
of which the spreading over 20 years of the invoicing for civil works services		
as part of the cable networks contribution	103	148
Total	1,656	2,416

⁽¹⁾ Variation linked to the gains registered on the hedging instruments taken out by Orange SA as part of the sale of EE shares, recognized on the income statement (see note 9.1.13 Derivative financial instruments) in 2019 following the sale by Atlas Services Belgium of its residual share in BT (see note 3.5 Prepaid expenses and note 9.1.13 Derivative financial instruments).

4.8 Maturity of non-financial receivables and payables

At December 31, 2019, the share of receivables or non-financial liabilities payable beyond one year is not significant.

Note 5 Contractual debt securities and off-balance sheet commitments

On December 31, 2019, Management believes that, to the best of its current knowledge, there are no commitments likely to have a significant effect on the current or future financial situation of Orange SA, other than those mentioned in this note.

5.1 Commitments related to operating activities

(in millions of euros)	Total commitment	Less than one year	From one to five years	More than five years
Commitments related to operating activities	8,161	1,863	3,393	2,905
Operating and financial leases (1)	4,096	878	1,902	1,316
Handset purchases	200	200		
Commitments related to transmission capacity purchases	278	59	44	175
Other goods and services purchase commitments	1,067	363	384	320
Investment commitments in property, plant and equipment and intangible as	ssets 1,112	165	559	388
Guarantees granted to third parties in the ordinary course of business	1,408	198	504	706

⁽¹⁾ Including operating property leases for 3,564 million euros, financial leases expenses for 443 million euros and vehicle rentals for 68 million euros.

Lease commitments

The main operating leases correspond to the present value of fixed and fixed in-substance payments not paid at that date, plus any amounts that Orange SA is reasonably certain to pay at the end of the lease, such as the exercise price of a purchase option (where it is reasonably certain to be exercised), or penalties payable to the lessor for terminating the lease (where the termination option is reasonably certain to be exercised).

Orange SA systematically determines the lease term as the period during which leases cannot be canceled, plus periods covered by any

extension options that the lessee is reasonably certain to exercise and by any termination options that the lessee is reasonably certain not to exercise.

For each contract, the Group applies a discount rate based on the loan yield specific to each contract, according to the term and currency, plus the Group's credit spread.

Operating lease maturities are presented below:

(in millions of euros)	Minimum future lease payments	Less than one year	From one to five years	More than five years
Operating lease commitments (1)	3,564	620	1,782	1,162

(1) Lease payments in respect of operating property leases, except for those entered into with FT IMMO H (an Orange SA subsidiary), amounted to 3,099 million euros.

Orange SA may choose whether or not to renew these commercial leases upon expiration or replace them by other leases with renegotiated terms and conditions.

Other goods and services purchase commitments

The main goods and services purchase commitments relate to property lease expenses for 443 million euros and broadcast rights for 148 million euros.

In addition, on November 28, 2019 the Group signed a "Built to suit" agreement relating to the construction and deployment by Orange for ATC France of at least 900 mobile sites between 2020 and 2024. These sites will be transferred as they are built to ATC.

As part of this agreement, Orange made a commitment over 20 years to use the hosting services of its facilities active on the date of the first transfers of mobile sites.

On December 31, 2019, given the existing uncertainty regarding the nature of the sites transferred and their permanence, the amount of the commitment given with regard to the service provision contract is not valued in the table above.

Investment commitments

In addition to these commitments, which are expressed in monetary terms, the Group made certain commitments to the National Regulatory Authorities such as ensuring certain coverage of the population concerning by fixed or mobile networks, particularly in the context of assignment of licenses and quality of service. These commitments will require investment expenditure in future years to roll out and enhance the networks. They are not shown in the table above since they are not expressed in monetary terms:

- under the provisions of article L. 33-13 of the Postal and Electronic Communications Code regarding coverage of sparsely populated areas;
 - Orange proposed that it commit to ensuring that, within its FTTH deployment scope in the AMII area, and excluding refusals by third parties, 100% of homes and professional premises would have access to FTTH sales offers by the end of 2020 (including a maximum 8% of premises connectable on demand), and 100% of homes and professional premises would be made connectable by the end of 2022. After the opinion from Arcep, the Government accepted these commitment proposals in July 2018,
 - outside the AMII zone, Orange has made deployment commitments, within the AMEL framework, in the departments of Vienne, Haute-Vienne, Deux-Sèvres and Lot-et-Garonne, with the latter having been accepted by Arcep,

- finally, Orange has offered to make commitments outside the AMII and AMEL zones in the following departments: Orne, Hautes-Pyrénées, Yvelines, Territoire-de-Belfort, Guadeloupe and Martinique;
- on January 14, 2018, the Orange Group and the other French mobile operators signed an agreement (the "New Deal") to ensure better mobile coverage of French territory, particularly rural areas. This agreement includes enhanced coverage obligations, which are included for the period 2018-2021 in our licenses in force in the bands 900 MHz, 1,800 MHz and 2,100 MHz, and for the post 2021 period, in the new licenses for 900 MHz, 1,800 MHz and 2,100 MHz awarded on November 15, 2018:
 - targeted programs for the improvement of coverage, with the coverage of 5,000 areas by operators by 2029,
 - the generalization of 4G by the end of 2020 on almost all existing mobile sites.
 - the acceleration of the coverage of the transport routes, ensuring that the main road and rail routes have 4G coverage,
 - the supply of a fixed 4G service and the extension of the service to 500 additional sites upon request from the Government by 2020.
 - the widespread use of telephone coverage inside buildings, proposing voice over Wi-Fi and SMS over Wi-Fi offers and offers involving the *indoor* coverage of buildings upon request,
 - the improvement of reception quality throughout the country, particularly in rural areas, with good coverage (according to the Arcep decision No. 2016-1678 relative to publications giving information on mobile coverage) by 2024/2027;
- in 2015, in France, when the frequencies in the 700 MHz band were allocated, Orange took:
 - coverage obligations in "priority deployment areas" (40% of the country within 5 years, 92% within 12 years and 97.7% within 15 years) and in "white area" not yet covered by a broadband network (100% within 12 years), at the level of priority road routes (100% within 15 years) and at the level of the national rail network (60% within 7 years, 80% within 12 years and 90% within 15 years);
- in 2011, in France, when the frequencies in the 2.6 GHz and 800 MHz bands were allocated, Orange took:
 - an optional commitment to host mobile virtual network operators (MVNOs) on certain technical and pricing terms under Full MVNO schemes,

- an obligation to provide mobile coverage with theoretical maximum download speeds of at least 60 Mbps per user (25% of the country within 4 years and 75% within 12 years for the 2.6 GHz band, 98% of the country within 12 years and 99.6% within 15 years for the 800 MHz band) which can be met by using both the allocated frequencies and other frequencies,
- for the 800 MHz band, specifically: a coverage obligation in priority areas (40% of the country within 5 years, 90% within 10 years) with no obligation to provide roaming services, a coverage obligation in each department (90% within 12 years, 95% within 15 years) and an obligation to pool resources in communities covered by the "white area" program.

In addition, in order to cope with the exceptional deterioration that affected its network in 2018 (storms, theft of cables, deterioration due to the recent protest movements, etc.), and be sure to fulfill its commitments in terms of universal service provision, Orange set up a plan involving a 17% increase in the maintenance budget compared to 2017 and the hiring of 200 additional technicians.

Non-compliance with these obligations could result in fines and other sanctions ultimately including the withdrawal of licenses awarded. Management believes that Orange SA has the ability to fulfill these commitments towards government authorities.

Guarantees granted to third parties in the ordinary course of business

As a parent company of the Orange Group, Orange SA grants guarantees to third parties in order to cover the contractual obligations of its direct or indirect subsidiaries. These guarantees totaled 1,408 million euros at December 31, 2019.

In the context of deploying the High-speed and Very High-speed Broadband network in France, the Group signed contracts through the Public Initiative Network (mainly public service delegation contracts or public-private partnerships and procurement contracts for design, realization, operation and maintenance), under terms which Orange SA counter-guaranteed for an overall amount of 337 million euros at December 31, 2019, a portion of the commitments being made by its affiliates with public entities, particularly for performance guarantees and rehabilitation of infrastructure.

It also includes performance guarantees granted to certain clients of subsidiaries of the Enterprise Division, for a total of 356 million euros.

In addition, Orange SA provides certain guarantees to third parties

(financial institutions, customers, partners and government agencies) to ensure the fulfillment of its contractual obligations in the ordinary course of its business. These guarantees are not shown in the table above, as they do not increase the amount of its commitments.

5.2 Other commitments

Warranties given on disposals

Under the transfer agreements for certain assets, subsidiaries or equity investments entered into by its subsidiaries, the Company guarantees that those subsidiaries will fulfill their obligations under the asset and liability warranties they have granted. Nearly all material sale agreements provide for ceilings on these warranties.

At December 31, 2019, the main warranties in effect were the following:

- the uncapped warranties granted to the EE joint venture when contributing the operations in the United Kingdom, concerning the restructuring of equity investments and assets done prior to the contribution expiring in 2022;
- a warranty, expiring in 2023, given to BT as part of the EE sale, backed 50/50 by Orange Group and Deutsche Telekom as tax and operating warranties, except for events ascribable solely to one or the other, and capped at the contractually fixed sale price of 5.1 billion pounds sterling (6 billion euros converted at the exchange rate on December 31, 2019) as Orange's share;
- miscellaneous standard warranties granted to buyers of real estate sold by the Group.

The Company believes that the risk that all these warranties will be enforced is remote and that the potential consequences of their being called are not material with regard to Orange SA's results and financial position.

5.3 Financing commitments

Orange SA's main commitments relating to borrowings are set out in Note 4.4 Financial liabilities and Note 4.5 Exposure to market risks.

5.4 Assets covered by commitments

(in millions of euros)	Note	December 31, 2019
Other non-current financial assets	3.2 and 6	346

Note 6 Litigation

This note presents all of the significant legal disputes in which Orange SA is involved, with the exception of those related to disagreements between Orange SA and the tax or social security authorities concerning levies, income tax or employer contributions. These disputes are described respectively in Notes 2.6 *Income taxes* and 4.3 *Provisions*.

As at December 31, 2019, the provisions recognized by Orange SA for all disputes in which it is involved (other than those in Note 2.6 *Income taxes* and Note 4.3 *Provisions*) amounted to 569 million euros, compared with 501 million euros at December 31, 2018. Orange believes that any disclosure on a case-by-case basis could seriously harm the Group's position. The balances and total changes in provisions are presented in Note 4.3 *Provisions*.

Litigation related to competition law

Mobile services

- In parallel with the judicial inquiry for which on December 17, 2015 a final verdict was reached by the French Competition Authority fining Orange 350 million euros for having implemented four anti-competitive practices in the "Enterprise" market and imposing injunctions, SFR brought an action on June 18, 2015, for damages suffered because of Orange's practices. SFR, after several raises in April 2016 and September 2018, raised its claim from the initial 512 million euros to 3 billion euros in July 2019. The Group believes this claim represents a risk. In the wake of this decision, BT Group, Céleste and Adista also brought actions against Orange before the Paris Commercial Court for damages. To date, the overall claims of SFR, BT Group, Celeste and Adista represent a total of 3.3 billion euros. These cases are currently being investigated by the judges.
- Following the decision of ruling by the French Competition Authority on December 13, 2012 imposing fines of 117 million euros against

Orange reduced to 93 million euros by the Paris Court of Appeal, and of 66 million euros against SFR for having implemented, as part of their abundance offers launched in 2005, excessive price discrimination between calls made within their own networks and calls made to competitor networks, Oméa Telecom (Virgin Mobile and Tele2 Mobile), Euro-Information Telecom (NRJ Mobile) and Outremer Telecom each brought action against Orange in June 2013 before the Paris Commercial Court for damages they claim to have suffered due to said practices. In November 2016 and June 2019, the Commercial Court officially acknowledged the withdrawal of Omea Telecom and Euro-Information Telecom. The dispute with Euro-Telecom is closed and only the Outremer Telecom proceedings remain pending.

- Concurrently to their complaints filed with the French Competition Authority, regarding practices of Orange in the mobile and fixed-to-mobile markets in the French Caribbean and in French Guyana, for which Orange was definitively ordered to pay a fine of 63 million euros in December 2009 reduced to 60 million euros by the Paris Court of Appeal in July 2013, Digicel and Outremer Telecom initiated before the Paris Commercial Court respectively in March 2009 and October 2010, legal actions for alleged damages stemming from these practices, in an amount which Digicel had assessed at 329 million euros increased to 493 million euros in November 2015 and Outremer at 75 million euros. After it was ordered by the Paris Commercial Court in March 2015 that 8 million euros should be paid to Outremer Telecom, the Paris Court of Appeal decreased the amount of the fine to 3 million euros in May 2017, noting inter alia that the damages should be discounted at the statutory rate of interests. On December 18, 2017 the Paris Commercial Court ordered Orange to pay to Digicel the sum of 180 million euros, to be discounted from March 2009 until the date of payment at a rate of interest higher than that adopted by the Paris Court of Appeal in the Outremer Telecom litigation, i.e. a total amount, in addition to the notional amount, that Digicel assesses at 520 million euros as of December 31, 2019. Orange filed an appeal and, at the same time, obtained from the Paris Court of Appeal on February 6, 2018, the right to escrow only the notional amount of the penalty until the court ruled on the merits of the case. Orange has re-evaluated the risk in light of the course of the proceedings. On April 19, 2018, Digicel petitioned the Paris Court of Appeal to dispute the amount of the escrow made by Orange in application of the judgment of the Paris Commercial Court. The Court confirmed the amount of the escrow by a ruling dated October 10, 2018.

Fixed-line services

In 2010, SFR and then Verizon summoned Orange SA to appear before the Paris Commercial Court demanding the reimbursement of alleged overpayments on interconnection services provided by Orange, the price of which allegedly did not reflect their cost. On June 18 and 25, 2013, the Paris Commercial Court dismissed their claims but ordered Orange to pay Verizon 0.5 million euros with respect to services provided in 2008. Orange paid this amount in 2013. SFR and Verizon filed appeals against these decisions. In December 2015, the Paris Court of Appeal dismissed in full the claims made by SFR and confirmed the first instance decision. In September 2017, the French Supreme Court rejected SFR's appeal. Furthermore, in April 2017, the Paris Court of Appeal dismissed Verizon completely and reversed the compensation of 0.5 million euros granted for services provided in 2008. On June 5, 2019, the French Supreme Court annulled the decision of the Paris Court of

Appeal and restored the parties to the situation they were in following the first instance court's decision rendered on June 25, 2013. The proceedings are still ongoing.

In 2012, SFR brought an action against Orange SA before the Paris Commercial Court denouncing its retail offers for the secondary residences market and claiming 218 million euros for losses allegedly suffered. In February 2014, the trial court ruled that Orange had abused its dominant position and ordered it to pay 51 million euros in damages to SFR. In October 2014, the Paris Court of Appeal annulled this decision which was then reversed by the French Supreme Court on April 12, 2016. Orange had then to pay 53 million euros to SFR pursuant to the trial court's ruling. SFR had raised its claims to 257 million euros before the Court of Appeal. On June 8, 2018, the Court of Appeal sentenced Orange to pay 54 million euros. Orange paid the balance following the cancellation of the previous ruling from the Court of Appeal and appealed to the French Supreme Court. The French Supreme Court proceedings are still ongoing.

Other proceedings in France

- In June 2018, Iliad brought summary proceedings against Orange SA before the presiding judge of the Paris Commercial Court, aiming to ban some of its mobile telephony offers proposing mobile handsets at attractive prices accompanied by a subscription package, on the grounds that they constituted consumer credit offers. The case is currently being investigated by the judges deciding on the merits of the case.
- In December 2018 the administrators of former UK indirect retailer Phones 4U, (which is in administration and no longer trading), filed a claim against the three main UK mobile network operators, including EE, and their respective existing or former parent companies including Orange. The claim (of an unquantified amount) is currently being disputed before the High Court of England and Wales. Orange challenges vigorously the allegations raised by Phones 4U which include collusion.
- On December 20, 2019, the Paris criminal court ordered the Company to pay a criminal fine of 75,000 euros as part of the France Telecom employee-related crisis trial and, jointly and severally with the individuals charged, to pay the civil parties the sum of 5.5 million

As Orange did not appeal this decision, the ruling against Orange is final. The appeal proceeding by the natural persons convicted is still on going.

The decision leaves open the possibility for anyone working at the company between January 1, 2007 and December 31, 2008 to obtain compensation based on the findings of harassment if the conditions of compensation for direct, certain and personal harm are met. Orange is in the process of executing the judgment towards the civil parties; and further, the Evaluation and Compensation Committee established by Orange continues to analyze and process the requests received. To date about 190 individual requests have been received, about 90 of which have been closed subsequent to an agreement or a declaration of inadmissibility.

Other than proceedings that may be initiated in respect of tax audits (see Note 2.6 *Income taxes*), there are no other administrative, legal or arbitration proceedings, including any proceedings that are pending or threatened, of which Orange is aware, which may have or have had in the last 12 months a material impact on the Company's and/or Group's financial position or profitability.

Note 7 Transactions with related companies and parties

The main related-party transactions with associates are summarized below and carried out in the ordinary course of business.

The additional related party transactions cover the main transactions carried out in the ordinary course of business with companies that belong to the Group and that are not wholly owned (directly or indirectly) by Orange SA and companies in which the Chairman of Orange SA's Board of Directors is a member of the Board of Directors, Supervisory Board or Executive Committee.

Telecommunications services provided to French governmental authorities, which are one of Orange SA's largest customers, as well as those to its various local and regional authorities, are provided on an arm's length basis.

Main amounts are shown in the table below:

(in millions of euros)	Receivables	Payables	Operating expenses	Operating income	Financial expenses	Financial income
Related companies						
Atlas Services Belgium		(1) 4,065	1		251	243
FT IMMO H	22	534	170	1	3	78
Groupe Equant	82	692	72	102	5	14
Orange Brand Services Limited	58	195	272	78	2	402
Orange Participations UK		611				1

⁽¹⁾ Of which positive current account balance of 2,565 million (see note 4.6 Other current liabilities and 4.4.1 Schedule of gross financial debt, cash and marketable securities by maturity).

Note 8 Subsequent events

On January 28, 2020, Orange bought 12,749 perpetual bonds redeemable for shares ("TDIRA") for a notional amount of 180 million euros. Taking into account this purchase, only 45,232 TDIRA outstanding for a total notional amount of 638 million euros.

Note 9 Accounting policies applied to the financial statements

The separate annual financial statements of Orange SA have been prepared in accordance with generally accepted accounting principles in France and with the provisions of the French General Accounting Plan (*Plan Comptable Général*).

9.1 Accounting policies

The financial statements were prepared in accordance with ANC regulation No. 2014-03 of June 5, 2014, regarding the amended version of the French General Accounting Plan.

General accounting practices were used in accordance with the French General Accounting Plan, in line with the principle of prudence, and following the basic assumptions below:

- going concern;
- independence of fiscal years;
- consistency of accounting methods from one fiscal year to the next.

and in accordance with general rules for the preparation and presentation of the annual accounts.

The historical cost method was adopted as the basic method of accounting. Only material information is provided.

The principal methods used are presented below.

9.1.1 Transactions in foreign currencies

Sales in foreign currencies are recorded under revenue at the price on the day of sale. The effect of hedging is, where applicable, accounted for under the same heading as revenue.

Monetary assets and liabilities in foreign currencies are translated at the year-end exchange rate. Losses or gains arising on the translation of receivables and payables at the year-end rate are recognized in the balance sheet respectively as "unrealized foreign exchange losses" on the assets side or "unrealized foreign exchange gains" on the liabilities side.

For financial transactions, unrealized gains or losses on all balance sheet and off-balance sheet positions are determined by currency and by year of due date. For commercial transactions, unrealized gains or losses are determined by currency.

A provision is recorded for any net unrealized exchange losses other than those backed by an underlying instrument that is part of a hedge of investment securities in foreign currencies.

Translation adjustments for operating payables and receivables (provisioned or realized) are entered under operating income. Translation adjustments for financial payables and receivables (provisioned or realized) are entered under financial income.

9.1.2 Revenue recognition

The main revenue from Orange SA's activities is recognized as follows:

Provision of equipment

Revenue from the sale of handsets and accessories are recognized when delivered. Installation fees are recognized in revenue when the line is activated.

Equipment lease revenue is recognized on a straight-line basis over the term of the lease agreement.

Service revenue

Revenue from telephone and Internet access contracts are recognized in revenue on a straight-line basis over the period of the service.

Revenue from incoming and outgoing telephone communications are recognized when the service is provided.

Revenue related to the use of leased lines and to medium-speed and broadband data transmission are recognized on a straight-line basis over the term of the contract.

Revenue related to the sale of transmission capacity on terrestrial and submarine cables are recognized on a straight-line basis over the term of the contract.

Revenue from Internet advertising are recognized over the period over which the advertising service is provided.

Separable components of a bundled offer and related offers

Many service offers available on the Group's main markets are comprised of two components: an equipment component (e.g. a mobile handset) and a service component (e.g. a talk plan).

Hence, for bundled offers including a handset sold at a discounted price and a telecommunication service, revenue recognized for the handset sale is limited to the amount of the arrangement that is not contingent upon the rendering of telecommunication services, i.e. the amount paid by the customer for the terminal: this amount is usually the amount paid at the delivery, or the discounted amounts paid over a 12 or 24-month period with respect to the offers paid by installments.

Where separable, revenue from equipment sales is recognized when the significant risks and rewards of ownership are transferred to the buyer. The provision of an Internet box does not constitute either a separable component of the Internet access service offer nor a rental because Orange maintains control of the box and its usage.

For certain offers, revenue from connection to service are fully recognized when billing the first connection, even if this service is not a separately identifiable transaction from subscription and communications.

Sales of content

Revenue from revenue and cost-sharing arrangements ("contact numbers" service) are recognized gross. Amounts due to service providers are recognized in operating expenses.

Revenue from the sale or supply of content (audio, video, games, etc.) through the various communication systems (mobile, PC, TV, fixed-line telephony, etc.) are recognized gross, so payments to content publishers are therefore recognized in operating expenses. When Orange SA is acting as agent in the sale or supply of content, the related transactions are recognized in third-party accounts and only Orange SA's fees are recognized in net income.

Customer acquisition and loyalty program costs

Subscriber acquisition and retention costs, other than loyalty program costs, are recognized in profit and loss in the period in which they are incurred, that is, on acquisition or renewal.

The accounting treatment of rights to loyalty discounts granted to customers is defined by CNC Urgent Issues Committee Opinion 2004–E dated October 13, 2004. When the right to a benefit is granted, the Company undertakes to provide cash discounts or benefits in kind to its customers. The equivalent value in euros of loyalty discounts granted to customers is recognized under deferred income. It is estimated on the basis of assumptions on cancellation rates and utilization rates of the rights by subscribers and is deferred until such time as it is converted into revenue when a future sale is made. This principle is applied to Orange SA's existing PCM (Change Your Mobile) program, under which customers can get a new mobile phone providing that they enter into a new contractual obligation.

9.1.3 Intangible assets

Pursuant to ANC Regulation 2015-06 of November 23, 2015, at the opening of the fiscal year starting January 1, 2016 the technical losses recognized in the financial statements were allocated, transaction by transaction, to the underlying assets on which there were unrealized

gains. The residual amount of losses not allocated to components of identified assets remain in commercial goodwill and are subject to impairment tests as described in Note 9.1.5 Impairment of property, plant and equipment and intangible assets.

Thus, intangible assets mainly include technical merger losses not allocated to identified assets, licenses, patents, usage rights, software and leasehold rights, or development costs.

Gross value

Intangible assets are recognized at acquisition or production cost.

The cost of mobile network operating licenses consists of a fixed portion, which is capitalized, and a variable portion, which is expensed (equal to 1% of eligible revenue). The amortization period for the licenses begins as from the date on which the network is technically ready for effective marketing of service and ends on the license expiration date, with the exception of the first block of frequencies under the UMTS license, for which the amortization period is effective as from the award date.

Development costs are capitalized when the following can be demonstrated:

- the intention and the technical and financial capacity to complete the development project;
- the project will generate probable future economic benefits for the Company; and
- the cost can be measured reliably.

Research and development costs not fulfilling the above criteria are expensed as incurred.

Amortization

Intangible assets are amortized on a basis that reflects the pattern in which their future economic benefits are expected to be consumed according to their probable use.

The straight-line basis is usually applied over the following estimated useful lives:

Mobile network licenses
Patents
15 to 20 years
14 years
Rights of Use of submarine and terrestrial cables
IT (applications, software, licenses),
customer service platforms, R&D
3 to 5 years

9.1.4 Property, plant and equipment

Property, plant and equipment mainly comprise network facilities and equipment.

Gross value

The gross value of property, plant and equipment corresponds to their acquisition or production cost, including costs directly attributable to bringing the asset to the location and condition necessary for its operation

The cost of property, plant and equipment includes, where appropriate, the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, representing the obligation incurred by Orange SA.

The cost of networks includes design and construction costs, as well as capacity improvement costs.

Maintenance and repair costs are expensed as incurred, except where they serve to increase the asset's productivity or prolong its useful life.

The roll-out of assets by stage, especially for network assets, does not generally require a substantial period of preparation for the Group. As a consequence, Orange SA does not generally capitalize the interest expense incurred during the construction and acquisition phase for its property, plant and equipment and intangible assets. Interest is entered under charges of the fiscal year during which it is incurred, independently of how the borrowed capital is used.

Pursuant to the component-based approach, the total cost of an asset is allocated among its different components and each component is accounted for separately when different components have different useful lives, or when the pattern in which their future economic benefits are expected to be consumed by the entity varies, thereby requiring the use of different rates and methods of depreciation.

Amortization

Property, plant and equipment are depreciated on a basis that reflects the pattern in which the future economic benefits of each of their components are expected to be consumed according to their probable use.

The straight-line basis is usually applied over the following estimated useful lives:

Buildings (including lightweight construction),
leasehold improvements and equipment 5 to 30 years
Infrastructure (civil works, copper and optical cables,
telephone poles, masts, mobile site research
and engineering costs) 8 to 30 years
Equipment (switching, transmission, etc.)
and fixed and mobile network installations,
including inseparable underlying software 5 to 20 years
Computer hardware, handsets 3 to 5 years
Other property, plant and equipment 3 to 10 years

Land and fixed asset in progress are not depreciated.

The depreciable amount of an asset corresponds to its gross value minus its residual value less disposal costs.

Orange SA makes use of accelerated depreciation allowed under the tax regulations in force. The difference between accelerated depreciation and straight-line depreciation is recorded as a regulated provision on the balance sheet.

9.1.5 Impairment of tangible and intangible fixed assets

An impairment loss is recognized, on a case-by-case basis, when the fair value of an asset falls sustainably below its carrying amount due to events or circumstances arising during the period (such as obsolescence, wear and tear, significant changes to the manner in which the asset is used, worse than expected economic performance, a drop in revenue or other external indicators, revision of operating cash flows, etc.).

Fair value is the higher of recoverable amount and value in use.

For assets which are to be held and used, fair value is usually determined on the basis of value in use, which is the estimated present value of the future economic benefits expected to be derived from the use and disposal of the asset. For assets held for sale, fair value is determined on the basis of realizable value assessed by reference to market prices.

In addition, property, plant and equipment and intangible assets, including the commercial goodwill allocated to businesses in France, are tested overall for impairment relating to all activities and sites in France.

Potential reversal of impairment is examined at each closing date. Impairment on goodwill is definitive.

9.1.6 Financial assets

Investment securities are recorded at historical purchase cost plus the share, if any, of the merger loss allocated to them pursuant to ANC Regulation 2015-06. Transaction costs are expensed as incurred.

To determine whether an impairment loss should be recognized, the historical cost of the equity interest (including any share of merger losses allocated thereto) is compared to its fair value.

Fair value is equal to value in use for strategic interests. However, when an interest is due to be sold, it is measured at market value.

The value in use of investment securities is the estimated enterprise value of the component entities of those investments, less their net debt (or plus their net cash), as calculated in their currency and converted into euros at the year-end exchange rate.

Due to the short-term volatility of market value and the strategic nature of its investments, Orange SA uses the discounted cash flow method to assess enterprise value (excluding for banking activity). Cash flow projections are based on economic and regulatory assumptions, license renewal assumptions and forecast trading conditions drawn up by Orange SA's management, as follows:

- cash flows are taken from business plans covering a timeframe of three to five years;
- beyond that timeframe, cash flows are extrapolated by applying a perpetual growth rate specific to each business activity;
- the cash flows obtained are discounted using appropriate rates for the type of business.

Market value is the best estimate of the amount obtainable from the sale of an asset in an arm's length transaction less costs to sell. This estimate is made on the basis of available market information, taking into account any specific circumstances.

Other criteria, such as market value (assessed based on average share price over the last 20 trading days), growth and profitability prospects, parent company equity, proportionate share in the investment (historic basis) can be taken into account, separately or in addition to value in use, when calculating fair value according to the type of each investment.

Receivables related to investment securities

Receivables related to investment securities comprise medium- or long-term loan agreements with Group companies. They are recognized separately from current accounts with Group subsidiaries, which are used for the daily management of their cash surpluses and requirements. Impairment is recognized according to the risk of non-recovery.

Cash collateral

Orange SA has negotiated cash collateral agreements with its main bank counterparties, which fluctuate according to the valuation of off-balance sheet transactions with these counterparties. The amount of this collateral is strongly correlated to movements in foreign exchange rates

Collateral paid is recorded in Financial assets and collateral received is recognized in Other current loans.

9.1.7 Inventories

Network maintenance equipment and equipment intended for sale to customers are measured at the lower of cost or likely realizable value. The cost corresponds to the purchase or production cost determined by the weighted average cost method.

When the probable net realizable value is lower than the cost of entry, a provision for depreciation is recorded that amounts to the ascertained difference.

9.1.8 Trade receivables

Due to its broad range of customers (consumers, large companies, small businesses and MVNOs), Orange SA does not consider itself to be exposed to a concentration of customer risk. Impairment is recognized according to the risk of non-recovery of the receivables. It is calculated either on an individual basis or on a statistical assessment of the risk according to customer segment.

Receivables assigned to installment payments

Trade receivables may include installment payments over at most a two-year period for mobile phone purchases. In 2018 Orange SA established a program with a bank of non-recourse sales of its deferred payment receivables. Receivables thus assigned are not recognized on the balance sheet. This assignment is considered as a pure and simple assignment of receivables related to the company's day-to-day business. The difference between the par value and the assignment price of the receivable is recorded in operating income.

9.1.9 Marketable securities

Marketable securities are stated at cost. An impairment provision is recognized for each line of securities of the same nature equal to the difference between their carrying amount and the average stock market price during the previous month or, in the case of unlisted securities, their probable trading value. However, in line with CRC Rule no. 2008-15 of December 4, 2008, no impairment losses are recognized on marketable securities comprising shares purchased or held in respect of free share award plans: any loss arising from their removal from the balance sheet without a counterbalancing entry is accounted for by recognizing a provision (see Note 9.1.16 Other employee benefits).

9.1.10 Other equity

When, based on the terms of the contract or the economic conditions at the time of issuance, an interest bearing-financial instrument is not redeemable at the lender's option or it is redeemable in equity instruments, it is recognized in *Other equity*.

9.1.11 Government grants

Orange SA may receive non-repayable Government grants, presented in Shareholders' equity, in the form of direct or indirect funding for capital projects, mainly provided by local and regional authorities. They are recycled to the income statement at the same rate and over the same period as the depreciation of the fixed assets financed.

9.1.12 Bond issuance costs

Bond issuance costs are recorded in operating expenses in the fiscal year in which the bonds were issued. Issue premiums are recognized in financial expenses over the term of the bond.

9.1.13 Derivative financial instruments

Orange SA manages the market risks related to changes in interest and exchange rates using financial instruments (derivatives), and particularly cross currency interest rate swaps, interest rate swaps, caps, and floors, futures contracts in organized markets, forward currency contracts, currency swaps, and currency options. These instruments are used for hedging purposes.

Gains and losses arising on these derivatives are recorded in the income statement on a symmetrical basis with the losses and gains on the hedged items:

- differences in interest receivable or payable on interest rate derivatives, and any premiums or discounts on these transactions are recorded in the income statement on a symmetrical basis over the term of the hedged item;
- gains and losses arising on currency derivatives used to hedge balance sheet items are recorded as adjustments to the foreign exchange gain or loss of the hedged item; if the hedging instrument is unwound or matures before the hedged item, any associated gains or losses are retained on the balance sheet, as deferred income or prepaid expenses, until the transaction is unwound, and are then reclassified as income;
- gains and losses arising on derivatives designated as hedges of identifiable firm commitments or identifiable future transactions are deferred and recognized in the valuation of the transaction when it is unwound;
- some transactions which comply with Orange SA's hedging policy do not qualify for hedge accounting. In accordance with ANC Regulation 2015-05 of July 2, 2015 concerning forward financial instruments and hedging transactions, changes in the value of these transactions in open stand-alone position appear on the balance sheet as contra accounts to transitional accounts: On the asset side of the balance sheet with respect to changes from unrealized losses; on the liabilities side with respect to changes from unrealized gains;
- unrealized gains are not entered on the statement of profit and loss;
- if a transaction creates an unrealized loss, a provision is expensed in net financial income in the amount of that unrealized capital loss.

9.1.14 Provisions

Provisions are entered if at the end of the fiscal year, Orange SA has a present obligation towards a third party resulting from a past event and it is probable that an outflow of resources embodying economic benefits without compensation will be required to settle the obligation and the amount of that liability can be quantified or estimated within a reasonable range.

The obligation may be legal, regulatory or contractual; or it may represent a constructive obligation deriving from Orange SA's actions where, by an established pattern of past practice, published policies have created a valid expectation on the part of other parties that Orange SA will discharge certain responsibilities.

The amount of the provision corresponds to the amount of resource outflow that will probably be required for Orange SA to settle the obligation.

Contingent liabilities are disclosed in the notes to the financial statements. They correspond to:

- probable obligations arising from past events that are not recognized because their existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the Company's control; or
- present obligations arising from past events that are not recognized because it is not probable that an outflow of resources embodying economic benefits without at least equivalent compensation will be required to settle the obligation or because the amount of the obligation cannot be measured with sufficient reliability.

Litigation

In the ordinary course of business, Orange SA is involved in a number of legal and arbitration proceedings and administrative actions. The costs may result from these proceedings are only accrued when it is probable that a liability will be incurred and the amount of that liability can be quantified or estimated within a reasonable range. The amount of provision recorded is based on a case-by-case assessment of the risk level, and events arising during the course of legal proceedings may require a reassessment of this risk.

Dismantling and restoring sites

Orange SA is required to dismantle technical equipment and restore technical sites.

The provision is based on dismantling costs (on a per-unit basis for public phones, mobile antenna sites and mobile network electrical and electronic equipment, or per metric ton for telephone poles and fixed-line electrical and electronic equipment) incurred by Orange SA to meet its environmental commitments and annual estimated asset dismantling and site restorations.

The provision is assessed on the basis of the identified costs for the current fiscal year, extrapolated for future years using the best estimate of the commitment settlement. It is discounted at a risk-free rate. This estimate is revised annually and adjusted where appropriate against the asset to which it relates.

The asset to which it relates is depreciated over the forecast duration of the dismantling plan, which in theory is equal to the useful life of the asset concerned (e.g.: 28 years for posts), except for restoring sites for which an occupation duration assumption for leased sites has been made.

9.1.15 Long-term employee benefit obligations

Employee benefits are offered through:

- defined contribution plans: contributions are expensed in the year in which the employee service is rendered; or
- defined benefit plans: the obligation is measured by the units of projected credit method in line with CNC recommendation No. 2003-R. 01 and ANC recommendation No. 2013-02 (method 1 chosen).

In accordance with this recommendation:

- the obligation is measured on the basis of demographic assumptions concerning staff turnover rates, mortality, etc., and financial assumptions concerning rates of future salary increases, inflation rate, etc.;
- the resulting obligation is then discounted; discount rates are determined on a plan by plan basis by reference to yields on top-rated long-term corporate bonds; they have been calculated based on external indices commonly used as a reference, and after analysis by Orange SA of their relevance, particularly in terms of their composition (the quality of the issuers);
- actuarial gains and losses related to post-employment benefits are recognized in the income statement of the fiscal year using the corridor method, i.e. gains or losses exceeding 10% of the higher of (i) the present value of the obligation in respect of defined benefits, and (ii) the fair value of plan assets, deferred over the remaining service lives of the employees concerned.

Orange SA's defined benefit plans are not generally funded. Only one plan is funded and as its assets are listed securities, their fair value is equal to their market value on the reporting date. The expected long-term return on these plan assets has been determined on the basis of a plan-by-plan analysis taking account of the expected return on each type of asset in the portfolio. The expected return rate on each type of asset in the portfolio is estimated using an analysis of changes in the rate of inflation, long-term interest rates and the associated risk premium. These factors are combined and compared to the market to determine long-term return assumptions.

Employee benefits include post-employment benefits (essentially pension obligations), retirement bonuses and other long-term benefits.

Post-employment benefits

Pension plan for French civil servants

Civil servants employed by Orange SA are covered by the government-sponsored civil and military pension plan. Orange SA's obligation under the plan is limited to the payment of annual contributions (French law No. 96-660 dated July 26, 1996). Consequently, Orange SA has no obligation to fund future deficits of the pension plans covering its own civil servant employees or any other civil service plans.

The civil servant pension plan is a defined contribution plan.

Retirement bonuses and other similar benefits

The retirement bonuses paid by Orange SA to its employees, either as a lump sum or as an annuity, in an amount determined by their final salary and retirement age, can be considered as a defined benefit plan.

Other post-employment benefits

The benefits Orange SA offers retired employees, such as telephones and coverage of certain healthcare costs, can be considered as a defined benefit plan.

Other long-term benefits

Other long-term benefits offered by Orange SA concern primarily long-term compensated absences and the French Part-Time for Seniors plans.

Actuarial differences observed during the course of the year are immediately recognized in the income statement.

9.1.16 Other employee benefits

Stock option plans

In line with CRC rule No. 2008-15 of December 4, 2008, no expense is recognized in respect of stock option plans that do not lead to an outflow of resources for Orange SA.

Free share award plans

In accordance with CRC Rule no. 2008-15, where the award of free shares is conditional on the recipient's continued employment over a given period, the award results in the recognition in employee expenses of a provision that accrues over the qualifying period.

The amount of the provision corresponds to the cost of the shares on the date of their allocation to the plan (purchase price of the shares) or, for shares that have not yet been purchased, the probable cost of purchasing the shares measured on the reporting date (i.e. the Orange SA share price on December 31).

9.1.17 Trade payables

Supplier payment terms are mutually agreed between the suppliers and Orange in accordance with the rules in force. However, some of the key suppliers and Orange SA agreed to extend the payment term for the Company, which may be up to six months for some invoices.

9.1.18 Tax regime

The company is at the head of a tax consolidation group under Articles 223 A et seq. of the CGI. Income tax expenses are calculated and paid by the company as if there was no tax consolidation. Tax savings or add-ons stemming from corrections made to overall taxable income are recognized as income or expenses at the level of consolidating parent company, Orange SA.

9.1.19 Consolidating company identification

Orange SA, whose headquarters are located at 78 rue Olivier de Serres 75015 Paris (SIREN 380 129 866) prepares the consolidated financial statements of the larger group which the company is part of. A copy of the aforementioned consolidated financial statements is available on the Group website (https://www.orange.com/fr/Investisseurs/Information-reglementee).

9.2 Use of estimates

In preparing Orange SA's accounts, Management makes estimates, insofar as many elements included in the financial statements cannot

be measured with precision. Management revises these estimates if the underlying circumstances evolve or in light of new information or more experience. Consequently, the estimates made at December 31, 2019 may subsequently be changed. The assumptions on which the main estimates are based mainly relate to:

- provisions (see notes 4.3.1 Employee benefits, 6 Litigation and 9.1.15 Long-term employee benefit obligations);
- tangible and intangible assets (see note 9.1.5 Impairment of tangible and intangible fixed assets);
- investment securities (see note 3.2 Financial assets);
- revenue recognition, where the exercise of judgment is needed to identify the components of a package offer or to analyze complex contracts which may have an effect on several accounting periods (see note 9.1.2 Revenue recognition);
- off-balance sheet operating lease commitments, where the exercise of judgment is necessary, particularly to determine the commitment period (see note 5. Contractual debt securities and off-balance sheet commitments).

Note 10 Compensation paid to members of Orange SA's Board of Directors and Executive Committee

The total gross amount of compensation, (gross salaries, bonuses, benefits in kind, attendance fees, incentive bonuses, employee profit-sharing and employer's contributions, Long Term Incentive Plan (LTIP)), excluding employer social security contributions, paid by Orange SA and the companies it controls during fiscal year 2019, to persons who were members of Orange SA's Board of Directors or Executive Committee on December 31, 2019, or during the fiscal year

ending on December 31, 2019, amounted to 13.3 million euros, compared with 13.7 million euros paid in 2018.

No termination benefits were paid in 2019.

The amount of these compensation items recognized in 2019 was 15.6 million euros, versus 16.1 million euros in 2018.

3.4.2 Other information on the financial statements

The financial information appearing in Section 3.4.2 supplements the information contained in the separate annual financial statements and forms an integral part of the Report of the Board of Directors.

Comments on the change in revenue are to be read in conjunction with the analysis of revenue detailed in Section 3.4.1 *Financial statements* and notes to the financial statements, Note 2.1.

3.4.2.1 Comments on the change in revenue

Orange SA's revenue amounted to 22.8 billion euros in 2019 after 23.1 billion euros in 2018, i.e. a year-on-year decline of 1.2%.

Convergence services

Revenue from convergent services grew by 3.2%, particularly as a result of growth in the customer base.

Mobile services only

Mobile services only revenue recorded a decline of 5.3%, a change mostly driven by both the prepaid and contract segments of the Retail market.

Fixed-line services only

The fall in fixed services only revenue of 1.5% is mostly linked to the continuing erosion of classic telephony and of business connectivity activities.

IT & integration services

Revenue of IT and integration services was down 2.1%, particularly on the Cloud.

Other carrier services

Revenue from other carrier services was down 3.1%, marked by the fall in revenue from national roaming and services to international operators under the effect of the reduction in traffic.

Equipment sales

The 3.8% fall in equipment sales can be explained by the marked slowdown in a global market hit by a fall in prices (mainly on top-of-the-range terminals) and volumes (less frequent renewals), against the backdrop of a reduction in innovation.

Other revenue

Compared with 2018, growth of other revenue slowed down to 6.0%.

Operating indicators

Total at December 31,	2019	2018
(quantitative data in thousands)		
Mobile services		
Number of mobile services customers ⁽¹⁾	34,308	33,108
Number of contract customers ⁽¹⁾	31,958	30,617
Number of prepaid customers	2,350	2,491
Fixed-line services		
Number of fixed telephone lines managed by Orange SA ⁽¹⁾	29,278	31,042
Number of Consumer telephone lines	15,137	15,480
Number of Carrier telephone lines	11,916	13,102
o/w Number of fully unbundled lines	9,739	10,799
Number of Enterprise telephone lines	2,190	2,424
Number of fixed broadband service customers	11,909	11,710
Enterprise services		
Number of IP-VPN accesses in France	302	299

⁽¹⁾ Customers in "France" and "Enterprise" operating segments.

3.4.2.2 Add-back of operating expenses and extravagant expenses

No operating expenses within the meaning of Article 223 quinquies of the French General Tax Code were added back during fiscal year 2019. Non-deductible vehicle leases, which were included under extravagant expenses on tax return form 2058-A, were added back.

3.4.2.3 Significant equity investments

No equity investment as defined in Article L. 233-6 of the French Commercial Code was made in 2019.

3.4.2.4 Payment periods - receivables and payables

The information presented below concerning ranges of days outstanding of payables and receivables only reflect net assets invoices received or issued and do not include invoices not received or uninvoiced sales.

In addition, trade receivables are presented in gross value (write downs of receivables amounted to 313 million euros at year-end 2019).

Trade payables	Invoices received and unpaid at the reporting date					Total
(in millions of euros)	Not past due	1 to 30 days past due	31 to 60 days past due	60 to 90 days past due	Past due 91 days or more	past due(1)
Late payment range						
Number of Invoices	134,663					50,760
Total including tax % of period purchases including tax	1,762 13.1%	(5) 0.0%	61 0.5%	16 0.1%		171 1.3%

Trade receivables	Invoices issued and unpaid at the reporting date					Total
(in millions of euros)	Not past due	1 to 30 days past due	31 to 60 days past due	60 to 90 days past due 9	Past due 91 days or more ⁽²⁾	past due ⁽¹⁾
Late payment range						
Number of Invoices	8,143,106					3,957,628
Total including tax	1,586	188	52	52	777	1,068
% of revenue for the period including ta	x 5.7%	0.7%	0.2%	0.2%	2.8%	3.8%

⁽¹⁾ Concerning the roaming calls with international operators, where offsetting payables and receivables is a common practice, questioning neither the payability of the debts, nor the collection of corresponding receivables, trade payables and receivables over 90 days past due represent an amount on the order of 62 million euros.

(2) Including intragroup receivables of 115 million euros.

3.4.2.5 Five-year summary of results

Description	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015
Share capital at end of period					
Share capital (in euros) Number of ordinary shares outstanding	10,640,226,396 2,660,056,599	10,640,226,396 2,660,056,599	10,640,226,396 2,660,056,599	10,640,226,396 2,660,056,599	10,595,541,532 2,648,885,383
Operations and results for the period (in millions of euros) – convention: income/(charge)					
Revenue before sales tax Income before income tax, employee profit-sharing, depreciation,	22,790	23,071	23,203	23,390	23,603
amortization and provisions	5,936	5,713	4,602	5,711	5,836
Income tax	(333)	(426)	79	(200)	(169)
Employee profit-sharing	(141)	(144)	(145)	(146)	(160)
Income after tax, employee profit-sharing					
depreciation, amortization and provisions		2,533	2,634	2,328	4,506
Net income distributed	(1)	1,858	1,729	1,596	1,594
Earnings per share (in euros)					
Income after tax and employee profit-sharing, but before depreciation,					
amortization and provisions Income after tax, employee profit-sharing	2.05	1.93	1.71	2.02	2.08
depreciation, amortization and provisions	1.07	0.95	0.99	0.88	1.70
Dividend per share	(1)	0.70	0.65	0.60	0.60
Employees (in millions of euros, except employee	numbers)				
Average number of employees for the per	riod				
(full-time equivalent)	66,755	68,871	72,098	76,301	80,741
Total payroll costs for the period	4,055	4,155	4,184	4,222	4,277
Amount paid in respect of employee bene	efits				
(social security, social welfare, so on) (2)	2,294	2,358	2,285	2,285	2,268

⁽¹⁾ Subject to approval by the Shareholders' Meeting of May 19, 2020.
(2) Includes incentive bonuses (the amount of payroll used to calculate incentive bonuses paid by Orange SA was 4,055 million euro for the 2019 fiscal year).

3.5 Statutory Auditors

3.5.1 Identity of Statutory Auditors

3.5.1.1 Principal Statutory Auditors

Ernst & Young Audit

Represented by Yvon Salaün – Tour First – TSA 14444 – 1/2, place des Saisons 92400 Courbevoie – Paris-La Défense 1 – France

Ernst & Young Audit was appointed by inter-ministerial decree dated September 18, 1991, and this appointment was renewed by Government decrees of May 14, 1997 and May 27, 2003, and then by decisions of the Ordinary Shareholders' Meeting of May 26, 2009 and the Combined Ordinary and Extraordinary Shareholders' Meeting of May 27, 2015, for a period of six fiscal years.

KPMG SA

Represented by Marie Guillemot – Tour Eqho – 2, avenue Gambetta 92066 Paris-La Défense Cedex – France.

KPMG SA was appointed by the Combined Ordinary and Extraordinary Shareholders' Meeting of May 27, 2015, for a period of six years.

3.5.1.2 Alternate Statutory Auditors

Auditex

Tour First – TSA 14444 – 1/2, place des Saisons 92400 Courbevoie – Paris-La Défense 1 – France

Auditex was appointed by inter-ministerial decree of May 27, 2003, and this appointment was renewed by decisions of the Ordinary Shareholders' Meeting of May 26, 2009 and the Combined Ordinary and Extraordinary Shareholders' Meeting of May 27, 2015, for a period of six fiscal years.

Salustro Reydel

2, avenue Gambetta 92066 Paris-La Défense Cedex - France

Salustro Reydel was appointed by the Shareholders' Meeting of May 27, 2015, for a period of six years.

The terms of office of all the Statutory Auditors will expire following the Ordinary Shareholders' Meeting convened to approve the financial statements for the year ended December 31, 2020.

3.5.2 Reports on the financial statements

These are translations into English of the statutory auditors' reports on the consolidated and annual financial statements of the Company issued in French and they are provided solely for the convenience of English speaking users. These auditors' reports include information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the Management Report and other documents provided to shareholders. These reports should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

3.5.2.1 Statutory Auditors' Report on the consolidated financial statements

Year ended December 31, 2019

To the Annual General Meeting of Orange SA

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of Orange SA (hereinafter "the Company") for the year ended December 31, 2019.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and the financial position of the Group as at December 31, 2019 and of the results of its operations for the year then ended, in accordance with International Financial Reporting Standards, as adopted by the European Union.

The opinion expressed above is consistent with the contents of our report to the Audit Committee.

Basis for Opinion

Accounting Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the section Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of this report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2019 to the date of our report, and we did not provide any prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No 537/2014 or in the French Code of Ethics (Code de déontologie) for statutory auditors.

Observation

Without qualifying our opinion, we draw your attention to the accounting method change in Note 2.3 to the consolidated financial statements, "New standards and interpretations applied as of January 1, 2019" related to the adoption of IFRS 16 "Leases".

Justification of Assessments: Key Audit Matters

In accordance with the requirements of Article L. 823-9 of the French Commercial Code (Code de commerce) relating to the justification of our assessments, we draw your attention to the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance for the audit of the consolidated financial statements for the year, as well as the response that we have provided for these risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole and were used to form the opinion we expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Revenue recognition for telecommunications activities and for certain contracts with third-party operators

(Notes 4.1 of the notes to the consolidated financial statements)

The Company recognized in the consolidated income statement €42 238 million of revenue for the year ended December 31, 2019.

The Company's telecommunications business involves a wide range of frequently changing services and large volumes of data processing. This requires various revenue recognition methods according to the type of product or service sold, and complex IT systems for revenue recognition.

In addition, certain contracts may be entered into with third-party operators. Procedures for applying accounting standards to these agreements may be complex and require judgments and estimates, especially with regard to the estimation of certain variable considerations for revenue recognition.

Revenue recognition principles are disclosed in Note 4.1 of the notes to the consolidated financial statements.

Revenue recognition of telecommunications business and for certain contracts with third-party operators is a key audit matter due to the complexity of the associated IT systems, and the judgments and estimates required for the determination of the revenue.

Audit Response

For the telecommunications business, we gained insight into the accounting processes used to recognize various revenue streams, from contract signature and initial communication to invoicing and receiving payment.

We took into account the high level of integration of the various IT systems involved in revenue recognition by including IT specialists in our audit team and testing the design, implementation and effectiveness of automated system controls affecting revenue recognition.

As part of our work, we:

- identified the main controls set up by Orange that are relevant to our audit;
- tested the functionalities of business and commercial applications used to prepare accounting and financial information, the configuration and interfaces of accounting systems;
- performed analytical procedures and tested a selection of manual entries at year end, by comparing our revenue estimates, based on a combination of internal data and publicly available external data, with revenue recorded;
- evaluated the relevance and reliability of the internal and external data used to develop our expectations.

We examined the accounting treatment applied for certain contracts with third-party operators. We also assessed key judgments and estimates made by the Company after obtaining and inspected the related contractual documentation and analyses performed by Company Management.

We have also assessed the appropriateness of the information presented in Notes 2.3.2, 4.1 and 4.4 of the notes to the consolidated financial statements.

Valuation of goodwill, intangible assets and property, plant and equipment

(Notes 7 and 8 of the notes to the consolidated financial statements)

As at December 31, 2019, goodwill, intangible assets and property, plant and equipment balances in the statement of financial position were €27,644 million, €14,737 million and €28,423 million respectively, as of December 31, 2019. The impairment loss recognized for goodwill, other intangible assets, and property, plant, and equipment for the year ended December 31, 2019 amounted to €54 million.

As stated in Note 7.1, Orange performs some impairment testing when there is an indication of impairment, and at least once a year. These tests are performed at the level of each cash-generating unit (CGU) or group of CGUs, which generally correspond to the operating segment, or each country in Africa and the Middle East. An impairment loss is recognized if the recoverable amount is lower than the carrying value. Orange most often determines recoverable value as value in use, which is the estimated current value of expected future cash flows.

To assess value in use, Orange uses various estimates and judgments as described in Note 7, particularly: the assessment of the competitive, economic and financial landscape in the countries where Orange does business; its ability to generate operating cash flows as a result of strategic plans; planned capital expenditures; and the discount and perpetual growth rates used to calculate recoverable values.

To assess the reliability of data from the business plans that is used to calculate recoverable value, we:

- compared the 2019 business plans projections with business plans from prior financial years;
- compared the business plans from prior financial years with actual results of the related years;
- interviewed operational and finance managers at Orange to gain insight into the key assumptions used in business plans and assess assumptions based on the explanations obtained;
- examined the sensitivity analyses performed by Orange and performed our own sensitivity analyses on key assumptions to assess the potential effect of a change in these assumptions on the conclusions of impairment tests (including operating cash flows, discount and perpetual growth rates);
- reconciled the data included in the valuation models used by the Group in the determination of recoverable values to the plans submitted to the Board of Directors.

Relating to the models used for the determination of recoverable values, we involved our valuation professionals with specialized skills and knowledge, who assisted in evaluating the discount and growth rates used in the valuations by comparing them against rate ranges that were independently developed using publicly available market data for comparable entities.

We have also assessed the appropriateness of the information presented in Notes 7 and 8 to the consolidated financial statements.

We believe that the measurement of these assets is a key audit matter, given their sensitivity to assumptions made by management and the material amount of goodwill, other intangible assets and property, plant and equipment in the consolidated financial statements.

Recognition of deferred tax assets associated with tax loss carryforwards

(Notes 10.2.1 and 10.2.3 of the notes to the consolidated financial statements)

At December 31, 2019, \in 992 million was recognized in the consolidated financial statements for deferred tax assets. At that date unrecognized deferred tax assets amounted to \in 3,661 million and mainly comprised tax losses that can be carried forward indefinitely.

As stated in Note 10.2.3, deferred tax assets are only recognized when it is probable that the tax entity will have sufficient future taxable profit to recover them. The recoverability of deferred tax assets is assessed based on the business plans used for impairment testing, which may be adjusted for tax specificities related to each jurisdiction.

We believe that the recognition of deferred tax assets associated with tax loss carryforwards is a key audit matter, given their sensitivity to assumptions made by the Group, particularly relating to Orange ability to achieve the performance forecasts in the business plans and to the feasibility of the Group tax planning assumptions.

We tested certain controls implemented by the Group on the deferred tax valuation process notably relating to assumptions used and applicable tax regulations for the determination of future taxable profit, which consisted in:

- determining whether the tax loss carryforwards could be used before they expire to offset deferred tax liabilities in the same tax jurisdiction; and
- determining the capacity of each entity to generate future taxable profit enabling the utilization of tax loss carryforwards.

We assessed the method used by the Group to assess tax loss carryforwards to be used in the future.

To assess future taxable profit, we analyzed the reliability of the processes used to prepare the business plan to assess the probability of each entity recovering its deferred tax assets by:

- analyzing the procedure used to develop and approve the latest business plans used for those estimates;
- comparing forecast performance from previous years with actual results for the years concerned;
- comparing revenue growth rate to the Group's peer companies' analyst reports and market research reports;
- examining the consistency of assumptions made to assess deferred tax assets with those used for impairment testing (namely forecasted cash-flows and revenue growth rates);
- assessing the application of tax law and the feasibility of the Group tax planning assumptions.

We also assessed the appropriateness of the information presented in Notes 10.2.1 and 10.2.3 to the consolidated financial statements.

Evaluation of provisions for competition and regulatory disputes

(Notes 5.2, 5.7 and 17 of the notes to the consolidated financial statements)

Orange is involved in a number of legal disputes in France and abroad relating to competition issues and national and European Commission regulations.

As stated in Note 5.2 of the notes to the consolidated financial statements, expenses arising from these proceedings are recorded when the Group has a present obligation towards a third party arising from a past event, and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, which can be quantified or estimated on a reasonable basis.

A provision of \in 643 million was recorded, a portion of which relates to competition and regulatory disputes involving the Group as of December 31, 2019.

Given the Company's exposure to competition issues in the telecommunications sector and the high level of judgment required by Management to estimate risks relating to legal disputes, we have identified the subject as a key audit matter.

To assess the extent of risk of estimates used to record provisions for competition and regulatory disputes, our work included:

- gaining insight into procedures implemented by Management to identify risk and where appropriate, record provisions;
- testing certain controls set up by Management, which we believe to be the most relevant to our audit. That includes controls related to the assessment of data provided by the Legal Department and external counsels;
- understanding the risk analyses performed by Management;
- interviewing the Legal Department and the Secretary General of your Group and analyzing the documentation available (specifically the minutes of court hearings) to assess the basis of assumptions used to determine the provisions for litigation;
- examining the responses to third party confirmations requests: legal opinions of external counsels and underlying information including ongoing proceedings and the probable financial consequences;
- assessing whether any subsequent events to the reporting date for the year ended December 31, 2019 have been taken into account to estimate provisions and the information provided in the consolidated financial statements;
- comparing historical provision estimates to actual amounts paid.

We also assessed the appropriateness of the information presented in Notes 5.2, 5.7 and 17 to the consolidated financial statements.

Evaluation of the adoption of IFRS 16 Leases

(Notes 2.3.1, 8.5, and 9 of the notes to the consolidated financial statements)

The Company adopted IFRS 16 Leases on January 1, 2019 using the modified retrospective approach. As of December 31, 2019, the Group recognized right of use assets of \in 6,263 million, and total lease liabilities of \in 6,492 million. The lease arrangements mainly related to land and buildings, and network infrastructures.

We identified the evaluation of the adoption of IFRS 16, effective as of January 1, 2019, as a key audit matter due to the nature, the complexity, and the significance on the Group's consolidated financial statements, and given the high degree of judgment required in the adoption of the standard (namely its applicability to certain complex contracts, lease terms and discount rates determination).

Our audit approach consisted in evaluating the criteria and the methodology used by the Group to identify leases, determine discount rates and lease terms, including the consideration given by the Group to the November 2019 IFRS IC decision on lease terms. We:

- gained insight into the Group's process to adopt IFRS 16, account for lease contracts and assess key controls;
- tested certain controls related to identifying leases in certain complex contracts, and determining lease terms and discount rates;
- performed an analysis of the contractual documentation on a sample of lease contracts to assess the reliability of the data used to determine the related assets and liabilities.
- reconciled the data used for discount rates with contractual documentation on a sample of lease contracts;
- involved valuation professionals with specialized skills and knowledge to evaluate the Group's discount rates by comparing them to discount rates ranges that were independently developed using publicly available market data for comparable entities;
- analyzed the completeness of the underlying lease population by comparing off balance sheet commitments relating to operating leases as per previous lease standard as at 31 December 2018 with lease liabilities recorded as 1 January 2019 according to IFRS 1, and by carrying out an analysis of the residual rental expenses;
- assessed the consideration given by the Group to the November 2019 IFRS IC decision on lease terms, as disclosed in Note 2.3.1 to the consolidated financial statements.

In addition, we assessed the adequacy of the information disclosed in Notes 2.3.1, 8.5 and 9 to the consolidated financial statements.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law on the information pertaining to the Group presented in the Management Report prepared by the Board of Directors.

We have no matter to report as to the fair presentation and the consistency of the information with the consolidated financial statements.

We hereby attest that the consolidated statement of non-financial performance required under Article L. 225-102-1 of the French Commercial Code is included in the Group Management Report. However pursuant to Article L. 823-10 of the same code, we point out that we did not verify that this statement gives a true and fair view or matches the consolidated financial statements. The information in the statement requires a report from an independent third party.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed statutory auditors of Orange SA by the Shareholders' Meeting held on May 27, 2015 for KPMG and by the inter-ministerial decree of September 18, 1991 for Ernst & Young Audit.

As at December 31, 2019, KPMG were in the fifth year of their total uninterrupted engagement and Ernst & Young Audit were in their twenty-ninth year, which is the fifth year and twenty-third year respectively since the Company's securities were admitted to trading on a regulated market.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). Management is also responsible for such internal control that it determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and where applicable, internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements have been approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code (Code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risk of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for the audit opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his Audit Report. However, future events or conditions may cause the company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the Audit Report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;

- evaluates the overall presentation of the consolidated financial statements and assesses whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- with regard to the financial information on persons or entities included in the consolidation scope, the statutory auditor obtains audit evidence considered to be sufficient and appropriate to provide a basis for the audit opinion. The statutory auditor is responsible for managing, supervising and performing the audit of the consolidated financial statements as well as the opinion on the financial statements.

Report to the Audit Committee

We submit a report to the Audit Committee, which includes a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore key audit matters we have the duty to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set out by Articles L. 822-10 to L. 822-14 of the French Commercial Code (Code de commerce) and in the French Code of Ethics (Code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris-La Défense, February 13, 2020

KPMG Audit, a division of KPMG S.A.

Marie Guillemot Partner Ernst & Young Audit

Yvon Salaün Partner

3.5.2.2 Statutory auditors' report on the annual financial statements

Financial year ended December 31, 2019

To the Annual General Meeting,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of Orange SA (hereinafter referred to as "the Company") for the financial year ended December 31, 2019. These financial statements were approved by the Board of Directors on February 12, 2020 based on the information available at that date and in the evolving context of the COVID-19 pandemic.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and financial position of the Company as at December 31, 2019 and of the results of its operations for the year then ended, in accordance with French accounting principles.

The opinion expressed above is consistent with the contents of our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2019 to the date of our report, and we did not provide any prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No 537/2014 or in the French Code of Ethics (Code de déontologie) for statutory auditors.

Justification of Assessments: Key Audit Matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code (Code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the annual financial statements as a whole, approved in the context described above and were used to form the opinion we expressed above. We do not provide a separate opinion on specific items of the annual financial statements.

Revenue recognition for telecommunications activities and for certain contracts with third-party operators

The Company recognized in the annual financial statements €. 22,790 million of revenue for the year ended December 31, 2019.

The Company's telecommunications business involves a wide range of frequently changing services and large volumes of data processing. This requires various revenue recognition methods according to the type of product or service sold, and complex IT systems.

In addition, certain contracts may be entered into with third-party operators. Procedures for applying accounting standards to these agreements may be complex and require judgments and estimates, especially with regard to the estimation of certain variable considerations for revenue recognition.

Revenue recognition principles are presented in Note 9.1.2 of the notes to the annual financial statements.

Revenue recognition of telecommunications business and for certain contracts with third-party operators is a key audit matter due to the complexity of the associated IT systems, and the judgments and estimates required for the determination of revenue.

Audit Response

For telecommunications business, we gained insight into the accounting processes used to recognize various revenue streams, from contract signature and initial communication to invoicing and receiving payment.

We took into account the high level of integration of the various IT systems involved in revenue recognition by including IT specialists in our audit team and testing the design, implementation and effectiveness of key automated system controls affecting revenue recognition.

As part of our work, we:

- identified the main controls set up by the Company that were relevant for our audit;
- tested the functions of business and commercial applications used to prepare accounting and financial information, the configuration and interfaces of accounting systems;
- performed analytical procedures and tested a selection of manual entries at year end, by comparing our revenue estimates, based on a combination of internal data and publicly available external data, with revenue recorded;
- evaluated the relevance and reliability of the internal and external data used to develop our expectations.

We examined the accounting treatment applied for certain contracts with third-party operators. We also assessed key judgments and estimates made by the Company after obtaining and inspected the related contractual documentation and analyses performed by Company Management.

We have also assessed the appropriateness of the information presented in Notes 2.1, 4.7 and 9.1.2 of the notes to the annual financial statements.

Valuation of equity investments and goodwill

The carrying amount of equity investments and goodwill recognized on the balance sheet at December 31, 2019 was \in .42,386 million and \in .22,082 million respectively.

Equity investments are recognized at historic cost on their acquisition date, plus any business combination accounting loss *(mali de fusion)*. Impairment is recorded when their carrying amount is higher than fair value, which is value in use for strategic investments.

As stated in Notes 9.1.5 and 9.1.6.of the notes to the annual financial statements, value in use of equity investments comprises estimated enterprise value less net debt (or plus net liquid assets), which is calculated in its currency of origin and converted into euros at the exchange rate effective at the reporting date.

Goodwill is recognized at acquisition cost. Impairment is recorded when the carrying amount is higher than fair value, generally based on value in use.

Due to the short-term volatility of market value and the strategic nature of its investments, Orange SA uses the discounted cash flow method to assess enterprise value (excluding for banking activity). Discounted cash flow is calculated based on economic and regulatory assumptions, assumptions relating to license renewals and operating forecasts by Company management.

Other criteria, such as market value (assessed based on average share price over the last 20 trading days), growth and profitability prospects, parent company equity, proportionate share in the investment (historic basis) can be taken into account, separately or in addition to value in use, when calculating fair value according to the type of each investment.

Audit Response

Given the significance of equity investments and goodwill on the balance sheet, the complexity of models used and their sensitivity to changes in data and assumptions on which estimates are based, we believe that measuring value in use of goodwill is a key audit matter.

We have gained insight into the procedure implemented by Company Management to identify indications of impairment in equity investments and goodwill, and where appropriate, to determine impairment and impairment reversals.

We have assessed the method used by Orange SA to identify impairment of equity investments and goodwill.

To assess the estimate of the values in use of equity investments and the value in use of goodwill, we:

- analyzed the procedure for devising and approving business plans on which cash flow forecasts are based;
- compared 2019 cash flow forecasts with business plans from previous financial years;
- compared business plans from previous financial years with actual earnings over the financial periods in question;
- interviewed operational and finance managers at Orange SA to gain insight into the key assumptions used in business plans and assess assumptions based on the explanations obtained;
- examined the sensitivity analyses performed by Orange SA and performed our own sensitivity analyses on key assumptions to assess the potential effect of a change in these assumptions on the conclusions of impairment tests (including operating cash flows, discount and perpetual growth rates);
- reconciled the data included in the valuation models used by the Company in the determination of recoverable values to the plans submitted to the Board of Directors.

To simulate the models used to calculate enterprise value, we called on our valuation specialists to:

- test the mathematical reliability of the models and recalculate value in use determined by Orange;
- assess the method used to determine the discount rate and perpetual growth rate, compare those rates with market data and external sources and recalculate the rates based on our own data sources;
- test that enterprise value resulting from forecast cash flows had been adjusted for net debt for each entity concerned.

We have also assessed the appropriateness of the information presented in Notes 3.1.1, 3.2, 9.1.5 and 9.1.6. of the notes to the annual financial statements.

Evaluation of provisions for competition and regulatory disputes

Orange SA is involved in a number of legal disputes in France and abroad relating to competition issues, and national and European Commission regulations.

As stated in Note 9.1.14, expenses arising from these proceedings are recorded when the Company has a present obligation towards a third party arising from a past event, and it is probable that an outflow of resources embodying economic benefits without compensation will be required to settle the obligation and the amount of that liability, which can be quantified or estimated on a reasonable basis.

As stated in Note 6, a provision of €. 569 million was recognized to account for ongoing disputes involving the Company at December 31, 2019 (not counting provisions for employee benefits, tax disputes or tax audits).

Given the Company's exposure to competition issues in the telecommunications sector and the high level of judgment required by Management to estimate risks relating to legal disputes, we have identified the subject as a key audit matter.

Audit Response

To assess the extent of risk and the estimates used to record provisions for competition and regulatory disputes, our work included:

- gaining insight into procedures implemented by Management to identify and map risk, and where appropriate, record provisions;
- testing key controls set up by Management, which we believe to be the most relevant to our audit. That includes controls related to the assessment of data provided by the Legal Department and external counsels:
- interviewing the Legal Department and the Secretary General of your Group and analyzing the documentation available (specifically the minutes of court hearings) to assess the basis of assumptions used to determine the provisions for litigation;
- understanding the risk analyses performed by Management;
- examining the responses to third party confirmations requests: legal opinions of external counsels and underlying information including ongoing proceedings and the probable financial consequences;
- assessing whether any events subsequent to the reporting date and information provided in the financial statements for the year ended December 31, 2019 have been taken into account to estimate provisions.

We have also assessed the appropriateness of the information presented in Notes 6 and 9.1.14 of the notes to the annual financial statements.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations.

Information given in the Management Report and in the other documents with respect to the financial position and the financial statements provided to the Shareholders

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Management Report of the Board of Directors as approved on February 12, 2020 and in the other documents with respect to the financial position and the financial statements provided to the Shareholders. Regarding the events that occurred and the elements known after the date of approval of the financial statements relating to the effects of the COVID-19 crisis, Management has informed us that such events and elements will be communicated to the General Meeting of shareholders called to decide on these financial statements.

We hereby attest that the information on payment deadlines as stipulated in Article D. 441-4 of the French Commercial Code is fairly presented and consistent with the annual financial statements.

Information relating to Corporate Governance

We hereby attest that the information required by Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code (Code de commerce) has been disclosed in the Management Report section of the Board of Directors' report on Corporate Governance.

Concerning the information given in accordance with the requirements of Article L. 225-37-3 of the French Commercial Code (code de commerce) relating to remunerations and benefits awarded or allocated

to the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from controlled companies comprised in the consolidation scope. Based on these procedures, we attest the accuracy and fair presentation of this information.

Information on matters likely to have an effect on a public tender or exchange offer is provided in accordance with Article L. 225-37-5 of the French Commercial Code. We have verified the consistency of the information with the documents from which it is derived, which were provided to us. Based on our work, we have no matters to report on the information.

Other information

In accordance with French law, we have verified that the required information concerning the identity of shareholders or holders of voting rights has been properly disclosed in the Management Report.

Report on Other Legal and Regulatory Requirements

Appointment of the statutory auditors

We were appointed statutory auditors of Orange SA by the Shareholders' Meeting held on May 27, 2015 for KPMG and by Ministerial order for Ernst & Young Audit.

As at December 31, 2019, KPMG was in the fifth year of its total uninterrupted engagement and Ernst & Young Audit was in its twenty-ninth year (which is the twenty-third year since the Company's securities were admitted to trading on a regulated market).

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it expects to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and where applicable, internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Financial Statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code (Code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his Audit Report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the Audit Report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the financial statements and assesses whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee, which includes a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report any significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore key audit matters which we must describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set out by Articles L. 822-10 to L. 822-14 of the French Commercial Code (Code de commerce) and in the French Code of Ethics (Code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris-La Défense, April 16, 2020

The statutory auditors French original signed by:

KPMG SA A Division of KPMG S.A. Marie Guillemot *Partner* Ernst & Young Audit

Yvon Salaün
Partner

3 — Financial Report

Statutory Auditors' Reports

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The Statement of Non-Financial Performance of Orange can be found in the following sections: the business model is shown in Section 1.2.3, the non-financial risk factors are described in Section 2.1.4 and the framework detailed in Section 2.2.4. This last section lays out Orange's

policy for managing its non-financial risks, as well as the governance and processes established in the Group. The non-financial performance presented below is a report card on the implementation of Orange's policies in 2019.

Dialogue with stakeholders

Orange bases its CSR efforts on repeated, structured dialogue with all of its stakeholders, aimed at:

- ensuring the coherence of the Group's CSR projects and producing a materiality assessment;
- identifying and defining the risks related to the societal and environmental issues in the countries where Orange operates, with a particular effort to detect "weak signals";
- identifying opportunities for innovation opening up new prospects of growth for Orange, while supporting the social and economic development of the countries concerned.

These dialogues are held at the country level: although nearly all countries have already successfully completed their dialogues, some countries, particularly those where Orange has recently invested, still need to conduct their first sessions. Elsewhere, the resumption of sessions at regular intervals makes it possible to adjust the policies to the new risks or opportunities identified. In 2019, therefore, two "country" dialogues were launched in Guinea and Côte d'Ivoire with a view to upgrading the general analysis of Orange's CSR issues in these territories

Moreover, themed dialogues on Orange's major challenges are regularly identified: between October 2018 and March 2019, Orange Bank held a Dialogue with its stakeholders to work on its CSR policy within its Corporate Plan.

OBS also launched a dialogue in 2019 to align its Corporate Social Responsibility policy with the priority CSR issues of its stakeholders and to identify ways forward for joint innovation with major companies in relation to digital potential.

As part of the Group "Diversity" dialogue, Belgium launched its own dialogue in 2019, which led to a review of the six conventional pillars of diversity and identification of Orange's challenges in Belgium. As part of the dialogue, an action plan on wellbeing at work was launched by Orange Belgium's HR teams and the subsidiary received its GEEIS certification in December 2019 (backed up by the dialogue report).

Lastly, some issues of a cross-company nature that the Group is particularly involved in are treated in both a corporate and a devolved manner, using Group dialogues. Thus, a new Group dialogue was started between October 2017 and March 2018 on the topic of "Social Vulnerability and Digitization" in France. It led to the identification of five scenarios for combating digital exclusion in France. The first scenario resulted in a product called "A Little Boost", launched in July 2019 by the French marketing team, a digital package offered to young people enrolled in a local jobs program. This dialogue helped to identify the directions taken by the Group in the area of digital inclusion, expressed during 2019 by the joint construction of its purpose, set out in its new strategic plan, Engage 2025.

Orange also wants to open a debate on the changes brought by the new technologies in daily life, and offer the greatest number of people a greater ability to cope with digital issues: such are the objectives of the Digital Society Forum (DSF), launched in 2013 under the leadership of Orange. Through various types of events (round tables, collaborative workshops) this collaborative open space brings together and helps develop pluralistic viewpoints among academia, institutions, practitioners, economic agents and citizens.

In 2019, the *Digital Society Forum* addressed the topic of digital inclusion. It identified how social inequalities are changing in this period of digital transition, as well as the opportunities that new technologies may provide to reduce those inequalities. It made a great point of the need for continuous learning required by the continuous evolution of information technology. It also organized its fifth annual round table in France to discuss digital transition and the environment.

A new Group dialogue "Youth and the Company" concerning generational renewal at Orange, with a broader discussion on the hopes, fears and preferences of young people in regard to the Company, was introduced in late 2018 and will be held in 2019-2020. This dialogue currently covers two regions of France (Hauts de France and Île-de-France), and will later be extended to Egypt (by Orange Egypt and OBS Egypt) and Senegal.

Salience analysis

In 2019, Orange did not fully repeat the exercise of updating its materiality grid through consultation with the stakeholders, instead initiating discussions on impact analysis and carrying out a salience

analysis (see Section 2.2.4), the results of which are consistent with the Risk factors presented in Section 2.1.4 *Non-financial Risks*.

Orange's purpose

Orange's purpose was constructed jointly during 2019, by consultation with its staff (over 15,000 interactions and proposals, 130,000 votes) and with its internal (social partners, directors) and external stakeholders (NGOs, think tanks, customers, authorities, suppliers, investors, etc.). It was revealed in December 2019 and will be included in Orange's By-laws, subject to approval at the General Meeting of May 19, 2020:

"As a trusted partner, Orange gives everyone the keys to a responsible digital world."

It comes with a mission and commitments:

"Our mission is to ensure that digital services are well thought-out, made available and used in a more caring, inclusive and sustainable way in all areas of our business. Orange does everything in its power to ensure people and organisations enjoy a more autonomous, secure

digital life. Through the engagement and expertise of the Group's teams, Orange employs innovative technologies and services everywhere, and for everyone."

Orange's purpose is part of the new Strategic Plan, Engage 2025, which is guided by exemplary social and environmental conduct.

To expand digital inclusion, for example, Orange will roll out its digitally inclusive tools across all territories by 2025. The initiatives taken in this regard include (1) the opening of Orange Digital Centers in each country where the Group is present, bringing together the Open Code

schools, the *Orange Fab* and the structures dedicated to community inclusion, such as the FabLab or Women Digital Centers; (2) a business proposal to promote the inclusion of people who are digitally excluded; (3) support to help customers use digital tools responsibly.

With regard to the environment, Orange is taking measures to be Net Zero carbon by 2040, with the midway 2025 aim of reducing its own CO₂ emissions by 30% compared to 2015, thanks to a renewed energy efficiency plan, use of renewable energies and carbon sequestration for its residual emissions.

Note on methodology

2019 Non-financial reporting

Since 2002 the Group has published an annual report on sustainable development and Corporate Social Responsibility (CSR), and since FY 2018, a Statement of Non-Financial Performance (SNFP).

More detailed information about commitments, impacts and corporate social and environmental performance are available on the web at orange.com/Group/non-financial Reporting. All the indicators related to the statement can also be found there.

Reporting period

The 2019 CNFS covers the period from January 1 through December 31, 2019.

Reporting scope

The information presented covers all the Group's activities and countries of operation, except where specifically stated, corresponding to the scope of the consolidated subsidiaries. The list of the Group's main consolidated subsidiaries is given in Note 19 to the consolidated accounts (see Section 3.3).

Note that the activities of Orange Bank were included from the 2017 fiscal year.

For fiscal year 2019, the scope of non-financial reporting covers on average 97% of the Group's revenue. The coverage rate, estimated in percentage of revenue of the entities included in the scope, is specified for each indicator in the environmental and social data tables.

Reporting methodology

The content of the report was prepared based on the indicators selected to take into account the main economic, social, societal and environmental impacts of the Group's activities. The selection of these indicators is based on the recommendations of international standardization bodies such as standard AA1000 APS (2008), the Global Reporting Initiative (GRI), the United Nations Global Compact, the guiding principles of the OECD and the ISO 26000 standard on Corporate Social Responsibility. Indicators were collected, calculated, and consolidated with the support of dedicated IT tools.

Application of the principles of the AA1000 standard

The process of developing the 2019 SNFP observed, in its main aspects, the three principles (inclusion, materiality and responsiveness) of the AA1000 Accountability Principles Standard (APS) (2008), a standard in the area of Corporate Social Responsibility based on taking stakeholders' requirements into account:

- inclusion: identifying the expectations of Orange's stakeholders is a determining factor in identifying sustainable development issues;
- materiality: selecting the most significant sustainable development issues in view of the Group's activities, taking into account stakeholders' expectations and an internal ranking of risks, which is re-evaluated regularly;
- responsiveness: identifying the significant sustainable development issues for the Orange Group's activities, resulting in action plans that are re-evaluated annually.

More information on the application of this process is available on the website *orange.com/Group/non-financial Reporting*.

Verification of the Report

As in prior years, Orange engaged one of its statutory auditors, which is a designated independent third party organization, to verify the compliance of the Statement of Non-Financial Performance and the accuracy of the information contained in the Statement that must appear in the consolidated Management Report prepared by the Board of Directors and presented to the Shareholders' Meeting. Orange has also requested a more in-depth verification of certain indicators in order to obtain a Reasonable Assurance Report (see Section 4.7 Report by one of the Statutory Auditors).

The verification of the most important non-financial information was conducted within a select group of contributing entities, combining on-site and remote verifications. This work was supplemented by an in-depth review of the consolidation of non-financial information. The methodology was adapted to the fact that the Orange organization has multiple locations.

The conclusions of the verification work are given in the report on Orange's non-financial performance (see Section 4.7 Report by one of the Statutory Auditors).

4.1 Effects of our activities in terms of respect of human rights and fundamental freedoms

4.1.1 Protecting Personal Data

4.1.1.1 Monitoring the management of the GDPR governance program

Governance

Monitoring the management of the GDPR governance program is undertaken by both the Group Security Department and the Personal Data and Security Department of the Group's Legal Department.

Operational organization

The approach taken by the Group Security Department is audited by a yearly assessment to check compliance with the Group's Security Standard. The annual entity reviews involve exchanges of information between the Security Department and the entities' management, involving relevant members of the Executive Committee. They assess the entities in terms of data security and suggest areas for improvement. 30 reviews were carried out in 2019 on entities in Europe and Africa (operator subsidiaries and Group support functions, representing 93% of Group revenues).

As an example, they helped correct vulnerabilities or helped in structuring the security units of certain subsidiaries.

With regard to personal data protection, all the "Operator" subsidiaries in Europe and Orange Business Services have a DPO in 2019. The DPO Network is managed under the framework of the Data Protection Committees by the Group DPO; it met once a month in 2019 to ensure correct deployment of the compliance approach in line with developments in legislation, share good practice, analyze typical complaints and review the entities' internal procedures. Several hundred people in the Group spend all or part of their time maintaining this continuous improvement approach and supporting the business

Furthermore, associated with this network are numerous multidisciplinary committees in the entities and in the support functions that deal with the deployment and the compliance issues that may arise. The Legal Department and the DPOs are members. This structure has made it possible to ensure that the program has been well understood down to the business unit level. They are additional to the monitoring process of the Group's security policy.

For entities in the Middle East and Africa region, regional staff, like their European counterparts, are made aware of personal data protection through meetings. Legal requirements in the Middle East and Africa region are monitored.

Awareness and Training

Like the security area, raising the awareness of all employees about the risks and the acquisition of best practices by everyone were carried out with support from the Security Department and by data protection training. An employee data protection charter was disseminated in the countries and remains accessible via the Company's intranet. The entities have promoted follow-up e-learning programs or training sessions. In some entities, the participation rate is estimated at over 80% of personnel.

Controls

In 2019, five Group entities were assessed on-site in Europe and the Middle East and Africa region to check correct implementation of the Group Security Standard, share good practices from other subsidiaries and collect their own good practices. The results were shared with the entities' CEOs and used to adjust the action plans according to the areas of improvement identified.

Similarly, the Security Oversight Centers (SOCs), a major tool in detecting and preventing cyber threats, were assessed against four principles: governance, process, technology and human resources. The objective is to help the SOCs to mature and thereby become more effective at detection.

Indicators	2019	2018
% of entities in Europe with a DPO	100%	100%
% of entities with a security organization	90%	87%
% of entities with a security		
management system	86%	85%

4.1.1.2 Business opportunity: Orange Cyberdefense

In May 2018, Orange combined its cyber activities within the Group's Strategy and Cyber-Security Department (DSCS) in order to strengthen the security of the Group's systems and networks. This was both to ensure a high level of internal cyber defense and to develop Orange's commercial activities in this strategic area. With 26 detection centers located in 13 countries, Orange Cyberdefense analyzes over 50 billion events per day and discovers and closes down over 200 malicious sites per day. Its know-how was officially recognized by the French information systems security agency (the Agence Nationale de Sécurité des Systèmes d'Information or ANSSI), which in late 2018 awarded Orange Cyberdefense the French security-incident detection service certification.

Orange Cyberdefense combines the historical security expertise and infrastructure of Orange Business Services (OBS) with that of Atheos, acquired in 2014, Lexsi, acquired in 2016, SecureData in January 2019 and SecureLink, the leading independent cybersecurity player in Europe, in July 2019, considerably strengthening the size and presence of Orange in Europe. Orange Cyberdefense's capacity to supports its customers locally in every region, while developing an essential critical size in this consolidating market, has significantly improved.

Orange Cyberdefense has at its disposal multiple OBS locations around the world and puts to good use the 30 years of Orange's experience in making at-risk infrastructures secure, whether for SMEs or multinational corporations. The Company draws on the security expertise of 2,300 employees working in France and abroad. Orange is now a major player in the European cybersecurity sector with over 700 million euros revenue in 2019 from the whole of the new scope, including new companies acquired in 2019.

- Orange Cyberdefense is assessed as a "Strong Performer" in the Forrester Wave™ Managed Security Services Providers (MSSPs) report of November 2018;
- is still the top-ranked IT security service provider in 2019 in France, for the ninth consecutive year, according to the assessments of the Teknowlogy Group (study of November 2019).

4.1.2 Breach of ethical rules

The "Tone from the top"

On November 27, 2019, the seventh Ethics & Compliance Day was a new opportunity to confirm the Executive Committee's commitment, with speeches from the Delegate Chief Executive Officer Finance, Performance and Europe and the Senior Executive Vice-President of CSR, Diversity, Partnerships and Philanthropy, plus many messages to employees from the Executive Directors and Managing Directors of the subsidiaries

Governance

- monitoring of rollout of the Group's compliance program was presented to the Group Risk Committee in January 2019. This committee also held a meeting in the first quarter of 2019 to discuss cases of fraud and corruption, in the presence of the Lead Director;
- the progress of the Group's compliance program was presented to the Company's Governance and Corporate Social Responsibility committee (CGRSE) in the fourth quarter;
- the Group's Ethics Committee met twice during the year: the annual assessment of alerts received in 2018 via the Group's different whistleblowing mechanisms plus the action plans implemented were presented at this committee.

Operational organization

- the Compliance Network (CCO Chief Compliance Officers) met formally 11 times in 2019 to share information and recommendations by the Group CCO and to share the experiences of the entities' CCOs;
- two Compliance seminars (Orange Business Services and Africa/Middle East), bringing together the CCO and CO (Compliance Officers) in these two regions were held in 2019, in addition to an ACR Forum (Audit, Control and Risk) in November and an "Internal Control and Risk Management" seminar;
- the Ethics Network (which brings together the Ethical Advisers) met four times in 2019 to share information and experience.

The Group's Anti-Corruption Policy, which is its code of conduct in the meaning of the "Sapin 2" Act, was rolled out and/or adapted across the Group and its subsidiaries.

The Group methodology for carrying out "Fraud and Compliance" Due Diligence, which was significantly updated in 2019, was rolled out in nearly all the Group's divisions and countries at the end of 2019.

Prevention of conflicts of interest was reinforced by introducing an annual declaration of management's interest links in certain subsidiaries (Orange Slovensko, Orange Côte d'Ivoire for example).

The tools used to declare gifts, meals and invitations continue to be rolled out in the entities and subsidiaries covering over 90% of the Group's revenue.

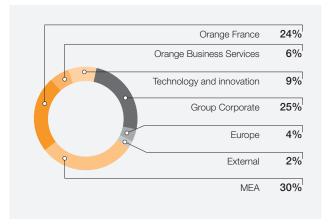
Awareness and Training:

 the seventh Ethics & Compliance Day on November 27, organized in most countries and entities on the themes of "Prevention and Management of Conflicts of Interest" and "Whistleblowing Mechanism" led to many actions organized locally by the CCO/CO and Ethical Advisers: video or email messages from the Managing Directors and/or CCOs, training sessions, posters, demonstrations of tools or e-learning, games, competitions, conferences and debates with internal or external experts;

- the training tools and materials on corruption prevention, renewed since 2018, added momentum to training actions in 2019, with around 35,000 "UN Orange Anticorruption Visas" issued in 2019;
- following a French and English version, the UN Orange Anticorruption Visa training was delivered in Spanish in 2019;
- the Ethical and Compliance Networks were given communication tools to support them in direct communication to employees on Gifts and Invitations; these tools remind employees of the rules and the requirement to declare these benefits above a certain threshold, following a code of ethics.

Whistleblowing Mechanism processing

Communication on whistleblowing mechanisms (Group mechanisms and local mechanisms in Europe and Africa/Middle East) was reinforced in 2019: the number of alerts received at Group level has significantly increased on the previous year (+80%) with a distribution between geographical regions and operational or corporate entities as shown below:



Controls

every year, the topic of ethics is reviewed as part of the Sarbanes-Oxley Act (see Section 2.2.3.2 Summary of works on Internal Control implemented under Section 404 of the Sarbanes-Oxley Act) with verification of the following points: existence of the Code of Ethics and employees' access to it, information given to employees about conflicts of interest and the existence of an internal whistleblowing system, plus access to and information provided about that system. This control concerns Orange SA and its main subsidiaries, representing 95% of the Group's revenue. Both the work conducted by Orange and the independent assessment by the Statutory Auditors have reached a satisfactory conclusion for the 2019 fiscal year:

- the statutory auditors also ensured the progress of the Anticorruption Compliance program through biannual meetings with the Group Compliance Director;
- lastly, the Internal Audit Department carried out several audits in 2019 on the Sapin 2 Act compliance programs (Group and country program) as well as several "Standard Entity reviews", during which the Sapin 2 compliance program was also audited.

Indicators	2019	2018
Governance: entities with a Compliance and/or ethical representative Training: UN Orange Anticorruption	100%	100%
Visas issued:	~ 35,000	~ 5,000

4.1.3 Breaches of human rights and fundamental freedoms

Impact study on human rights

Based on its 2019 impact study on human rights, which was nourished by the multi-criteria analysis of Verisk Maplecroft on all entities where Orange acts as an operator and by major political events (tensions during the electoral process), Orange paid special attention to the following geographical regions: the Democratic Republic of the Congo, the Central African Republic, Guinea, Cameroon, Mali, Madagascar, Egypt. Orange operates in observance of the GNI principles (see Section 2.2.4.1.3).

Like other member companies of the GNI, Orange is independently assessed every two years on its progress in implementing the GNI principles. The aim of the assessment is to enable the GNI's Board of Directors to determine whether each member company is striving in good faith to implement its principles as part of a continuous improvement approach. The independent assessment, which includes both an examination of the company's processes (systems, policies and procedures) and an examination of specific case studies, concluded that implementing the GNI principles is definitely a priority for the Group, that the principles are integrated in Orange's policies and that Orange makes an effort to implement the GNI principles in good faith as part of a continuous improvement approach.

As an example, Orange has specifically commented on how it dealt with a request from the authorities in Guinea, which was made several times and repeated in 2019: Orange, along with other operators in Guinea, received a request from the national telecommunications regulator to access a roaming call processing platform, containing a significant amount of customer data.

Orange sought to obtain a common response from operators in order to assert the lack of a legal basis for such a request, a breach of privacy as stipulated in Article 116 of the Guinean law on ITC # 18 of August 13, 2015, and a breach of Article 12 of the Universal Declaration of Human Rights.

In response, the authorities increased the operators' tax burden, adding penalties for failing to comply with the request. The Orange Group then chose to make the facts known to the public and launched an international alert through NGOs, whose actions meant that the request was withdrawn. The government then issued a public reaffirmation in favor of the principles of personal data protection,

respect for fundamental freedoms and international conventions. With this case, Orange demonstrated how it assessed the situation by defending GNI's principles of respect for the privacy and security of employees.

Promotion of human rights and fundamental freedoms

Orange renewed its signature of the United Nations Global Compact in 2019 in compliance with the fundamental principles stated in the Universal Declaration of Human Rights and the International Labour Organization, and publicly defends its values, in particular as concerns its responsibility towards its supply chain:

- on invitation from the German Federal Government on February 21, 2019, at a workshop on the responsibility of principals towards their suppliers and sub-contractors with regard to respect for human rights and fundamental freedoms, the health and safety of people and the environment, as part of implementing the Vigilance Plan;
- at the Innovation Forum in London on April 2 and 3, 2019, by explaining its responsibilities and policy against forced labor and modern slavery in its supply chain;
- at the OECD Peace Forum in November 2019, against child labor and forced labor of its suppliers and sub-contractors.

Orange also took part in round table discussions to present the risks of potential intrusion with 5G and possible actions by operators in view of government requests for network interruptions in Tunis at RightsCon, which brought together over 2,000 participants from 130 countries and over 700 companies, members of government and organization, on the theme of Technology and Human Rights, from June 11 to 14, 2019.

In addition, as a member of the EDH association (Entreprises pour les Droits de l'Homme) Orange continued dialogue with NGOs and social partners on the duty of vigilance, in particular on human rights, in February 2020.

Indicators	2019	2018
number of serious incidents dealt with (requests for network interruptions		
by national authorities)	10	10

4.2 Employment-related consequences of our activities

Employee information is essentially taken from the Orange Group's HR reporting system which sorts information by gender and social-professional category. These data are complemented by those taken from the Group's financial reporting tool.

For the fifth year in a row, Orange received the *Top Employer Global* certification in February 2020, being recognized as deploying the best policies and practices in terms of human resources.

4.2.1 Employment

General changes in the number of Group employees

At the end of 2019, the Group had 146,768 active employees, of whom 143,526 were on permanent contracts and 3,242 on temporary contracts. Permanent contracts were down 3.0% (i.e. -4,406) on a comparable basis, and temporary contracts were down by 8.3% (i.e. -293). These trends vary depending on the geographic and business area.

In France, the Group's scope did not change in 2019. At the end of December, the Group had 87,242 employees, 85,867 on permanent contracts and 1,375 on temporary contracts, a fall of 4,637 active employees (i.e. down 5.0%), -4,347 permanent contracts and -290 temporary contracts. This decrease was led by Orange SA (-4,775 permanent contracts, i.e. -6.0%), with permanent contracts in French subsidiaries increasing by 4.2% (+428). The fall in temporary contracts was recorded by the parent company (-181, i.e. -15.9%) and the subsidiaries (-109, i.e. -20.8%).

Internationally, 19 new subsidiaries joined the Orange Group in 2019, with in particular the integration of:

- the Secure Data groups (three companies and 217 permanent contracts in the United Kingdom and South Africa) and Secure Link (729 permanent employees working in 10 companies, mainly located in Western Europe and Scandinavia) adding to the cybersecurity services within the Orange Business Services division;
- the two companies in the Upsize SA Group (204 permanent contracts), a connectivity supplier in Belgium within the Europe division;
- two companies (24 permanent contracts) offering mobile transfer and payment in the Middle East & Africa division in Jordan and Morocco.

During the year, three companies also left the Group, notably Orange Niger (-382 permanent contracts and -54 temporary contracts) in the Middle East & Africa division.

At the end of 2019, 57,659 permanent employees were working internationally, an increase of 1.3% (i.e. +750 permanent contracts) on an actual basis and a globally stable evolution on a comparable basis (-59 permanent contracts, i.e. -0.1%). This stability masks some real differences:

- the Middle East & Africa division shows some stability in the number of permanent employees between 2018 and 2019 (up 10, i.e. +0.1% on a comparable basis);
- Spain also showed a stability in permanent contracts (up 23, i.e. +0.3% on a comparable basis);
 - by contrast, the Europe division showed a decrease (-1,085 permanent contracts, i.e. -5.2% on a comparable basis) due to the reduction in staff at Orange Polska (-1,170 permanent contracts, i.e. -8.9% on a comparable basis) and more moderately at Orange Belgium (-21 permanent contracts, i.e. -1.0% on a comparable basis), partially offset by growth in the Eastern Europe sector (led by Moldova and Romania);
- finally, the increase in permanent OBS International staff continues (+952 permanent contracts, i.e. +7.0%), mainly in emerging countries (Egypt, India, Mauritius and Morocco) in the company Equant.

In terms of average full-time equivalent employees (the monthly average over the year), or "FTE", the Group's internal workforce was 135,619 FTE at December 31, 2019. It therefore showed a decrease of about 2,300 FTE (-1.7%) on a comparable basis, a trend led 75% by France.

Number of employees – active employees at end of period	2019	2018	2018 (pro forma)	2017
Orange SA French subsidiaries (2) Total France (1) International subsidiaries (1) (2)	76,301 10,941 87,242 59,526	81,257 10,622 91,879 58,832	81,257 10,622 91,879 59,588	84,246 8,513 92,759 58,797
Group total	√√ 146,768	150,711	151,467	151,556

⁽¹⁾ Scope of financial consolidation: a company is assigned to the scope over which its revenues are consolidated.

^{✓✓} Item reviewed by KPMG: reasonable assurance

Employees by contract type	2019	2018	2018 (pro forma)	2017
Permanent contracts Temporary contracts	143,526 3,242	147,123 3,588	147,932 3,535	148,122 3,434
Group total	√√ 146,768	150,711	151,467	151,556

✓✓ Item reviewed by KPMG: reasonable assurance

A new business line standard was implemented in France in 2019 and will be introduced internationally in 2020. The figures presented below therefore reflect the equivalence between the old and the new standard for the years 2018 and, for the international scope, 2019, in order to present the information in a consistent manner. This new standard has

a business line category named "Support". This includes the management, project management and process management business lines. The "Innovation and Technology" category includes, among others, business lines relating to the rollout and operation of the networks.

⁽²⁾ The distribution of the France subsidiaries/International subsidiaries has been corrected: a company with six permanent contracts has therefore been counted internationally rather than for France.

Employees by business line	2019	2018	2017
Support	19.6%	19.5%	-
Customer	33.0%	32.8%	-
Support functions	12.1%	12.6%	-
Innovation and Technology	32.3%	32.3%	-
Other	3.0%	2.8%	-
Group total ⁽¹⁾	100%	100%	-

(1) The Group reporting scope comprises all entities consolidated in the Group's financial statements.

Employees by gender	2019	2018	2017
Women Men	36.0% 64.0%	36.1% 63.9%	36.1% 63.9%
Group total (1)	√√ 100%	100%	100%

✓✓ Item reviewed by KPMG: reasonable assurance.
(1) The Group reporting scope comprises all entities consolidated in the Group's financial statements.

Employees by age	2019	2018	2017
Under 30 Between 30 and 50 Over 50	13.3% 55.0% 31.7%	13.2% 53.7% 33.1%	12.4% 52.5% 35.1%
Group total (1)	√√ 100%	100%	100%

✓✓ Item reviewed by KPMG: reasonable assurance.

The average age of a permanent employee is 44.2 for all Group permanent contracts (-0.2 year compared to 2018), with a difference between France (47.6 years, down 0.3 year compared to 2018) and internationally (39.1 compared to 38.8 in 2018).

Employees by geographical area ⁽¹⁾	2019	2018	2017
France	59.4%	61.0%	62.1%
Spain	4.0%	3.8%	3.6%
Poland	8.5%	9.0%	9.9%
other European countries	15.5%	8.3%	7.3%
Africa	9.7%	11.6%	11.2%
Asia-Pacific	1.3%	3.9%	3.7%
North and South America	1.6%	2.4%	2.2%
Group total (2)	√√ 100%	100%	100%

✓✓ Item reviewed by KPMG: reasonable assurance.

The presentation was revised so as to be exclusively geographical (previously it included organizational units in certain combinations).
 The Group reporting scope comprises all entities consolidated in the Group's financial statements.

At December 31, 2019 the Group had 3,242 employees on temporary contracts, nearly 60% international. Between 2018 and 2019, this population decreased by 8.3% on a comparable basis (-293), a trend led exclusively by France, both in the parent company (-181, i.e. -15.9%) and the subsidiaries (-109, i.e. -20.8%).

This extra workforce, which represents 2.2% of personnel at the end of 2019 (compared to 2.3% in 2018 on a comparable basis), is still marginal. It is mainly used (over 50%) in Customer activities (essentially sales and residential customer services), with innovation and technology (information systems and networks) as its second sector of activity (around 17%).

Recruitments and departures

Number of permanent external hires	2019	2018	2017
Orange SA French subsidiaries	1,419 1.554	1,701 1.503	1,542 1.197
Total France ⁽¹⁾ International subsidiaries ⁽¹⁾	2,973 8,081	3,204 7,948	2,739 7,176
Group total	√√ 11,054	11,152	9,915

(1) Scope of financial consolidation: a company is assigned to the scope over which its revenues are consolidated.

✓ Item reviewed by KPMG: reasonable assurance.

The number of outside hires by the Group on permanent contracts in 2019 was 11,054, down by 0.9% from 2018.

⁽¹⁾ The Group reporting scope comprises all entities consolidated in the Group's financial statements.

Nearly 3,000 people were hired in France (down by 7.8% from 2018). Anticipating the impact of retirements, they were hired to meet the future skills needs of the business and will help further its transformation. 80% of these were in the Innovation and Technology and Customer business lines. The profile of these new recruitments is developing towards increased expertise, particularly in software production design activities, data analysis, consultancy and integration of information systems or cybersecurity.

Internationally, there were 8,081 hires in 2019 versus 7,948 in 2018 (up by 134 or +1.7%), 75% were in the Innovation and Technology and Customer business lines, a measured increase that reflects the different situations of the divisions:

- the Europe division shows a moderate decrease in the volume of its recruitments (-67, i.e. -3.6%), with over 20% of new recruitments being international (particularly in Romania with around 700 recruitments);
- the fall is more marked in the Spain division (-475, i.e. -23.2%) which nevertheless still accounted for nearly one recruitment in five in
- by contrast, the MEA divisions (+252, i.e. +25%) and particularly OBS (+503, i.e. +21.3%), with recruitments mostly in India, Egypt, Mauritius and Morocco, in the company Equant, show an increase in their recruitments compared to 2018. They accounted for 15% and 35% respectively of 2019 recruitments internationally.

Number of permanent employee resignations	2019	2018	2017
Orange SA	189	178	137
French subsidiaries	722	571	375
Total France ⁽¹⁾	911	749	512
International subsidiaries (1)	5,204	4,847	4,107
Group total	√√ 6,115	5,596	4,619

(1) Scope of financial consolidation: a company is assigned to the scope over which its revenues are consolidated. ✓ Item reviewed by KPMG: reasonable assurance.

Number of permanent employee dismissals	2019	2018	2017
Orange SA	49	43	39
French subsidiaries	66	39	51
Total France(1)	115	82	90
International subsidiaries (1)	1,916	2,005	1,908
Group total	√√ 2,031	2,087	1,998

There were 15,416 final departures of permanent employees of the Group in 2019 (compared with 15,065 in 2018), a 2.3% increase. This development was more marked in France than internationally.

In France, the 7,401 departures in 2019 represent 277 more than in 2018 (7,124 in 2018, i.e. +3.9%): the increase was notably led by a rise in resignations with 160 additional departures (909 compared to 749 in 2018, i.e. +21.4%), mostly led by the OBS division in business lines with a marked technological aspect (software design, data experts, etc.), the subject of significant competition between companies in the sector. In addition, many retirements (77% of departures in 2019), due to the demographic structure of eligible populations, also led to an increase in the number of departures in France in 2019 (5,705 retirements in 2019 compared to 5,602 in 2018, an increase of 1.8%).

For its part, the international scope was relatively stable (74 more departures, up 0.9%) compared to 2018 (8,015 departures in 2019 compared to 7,941 in 2018), which reflects an increase in resignations (+7.4%), mainly in the international scope of OBS, partially offset by a reduction in other types of departure.

Professional integration of young people

Professional integration – Group in France (1)	2019 (4)	2018	2017
Number of new intern students received during the year (2)	2,614	2,617	2,691
Number of work-based learning contracts signed during the year (3)	3,510	3,535	3,516

Orange SA and its subsidiaries with workforces in France.

Applies to students who have signed their internship agreement during the year. Apprenticeship and professional-track contracts.

(4) Numbers given for 2019 are provisional.

2019 was the first year of a new intergenerational agreement lasting until 2021, signed on December 12, 2018 with the social partners. As in previous years, the number of interns and work placement students welcomed to the Group in France was higher than the minimum commitments, respectively 2,150 and 2,400. In addition, there were 4,796 students on work/study contracts in France as of December 31, representing 5.6% of permanent contracts on the same date. The vocational integration rate in France is therefore above the commitments made by Orange to trade union organizations and its legal obligations (5%).

Keen to capitalize on their initial vocational experience and the skills acquired, the Group also gives preference to these young interns or work placement students when it comes to external permanent recruitment for the business lines necessary to the Group's future in France. 825 of them therefore (28% of permanent hires in France over the year) benefited from this in 2019, corresponding to over 40% of Orange's commitment to recruit a minimum of 2,000 people over three

External workforce

Interim employees – Group France ⁽¹⁾	2019 (3)	2018	2017
Amount of payments made to external companies for employee placement (in millions of euros) Monthly average number of temporary workers (2)	36.7	40.7	35.6
	775	855	756

- Scope of financial consolidation: excludes companies with employees in France but whose revenues are consolidated under the "international" business consolidation scope.
- (2) Calculation of interim employee expenses recorded in France Group's results.
 (3) Numbers given for 2019 are provisional.

Temporary work is used during temporary increases in activity, particularly the launch of new products and services, as well as sales campaigns and promotional offers.

Presented in full-time equivalents (FTE) and as a monthly average over the year. In 2019, it is used mainly in commercial areas, particularly for retail customers and, to a lesser extent, for sales and services to business customers. Less important on network activities, it accounted for only a small volume on information systems. It shows a decrease of 9.3% compared to 2018, led by residential customer relations activities.

The Group recommends using interim employees rather than workers on temporary contracts for assignments shorter than two months. This external labor represented 0.7% of the Group's total workforce in France in 2019.

Outsourcing

Outsourcing – Group France ⁽¹⁾	2019 (3)	2018	2017
Amount for subcontractors (in millions of euros)	2,745.3	2,529.9	2,227.5
Full-time equivalent workforce (monthly average) (2)	34,049	31,100	29,196

- Scope of financial consolidation: excludes companies with employees in France whose revenues are consolidated under the "international" business consolidation scope.
- Calculation of outsourcing expenses posted in the statutory financial statements of companies in the Group France consolidation scope.
- (3) Numbers given for 2019 are provisional

The use of employees belonging to external companies takes the form of service contracts

In France, it is used mainly in the networks in relation to technical work (on networks and on customers' premises), studies, engineering, architecture as well as in customer relations and customer services (Residential and Enterprise). It is also present in the information systems area, regarding design, development and integration.

The use of outsourcing represented 34,049 full-time equivalent employees (as a monthly average over the year) at the end of December 2019, compared with 31,100 FTE in 2018, an increase of 9.5%. This external labor accounted for 30.4% of the total Group France workforce (Orange SA and Group subsidiaries active in France). This upward trend is largely due to the efforts deployed by the Group to continue the development of fiber (very high-speed network production and, to a lesser extent, customer connections).

4.2.2 Compensation

Compensation and recognition, particularly in terms of corporate benefits, are based primarily on:

- the basic salary:
- the variable portion, which rewards individual and group performance, through the achievement of both quantitative and qualitative targets in the service of sustainable customer satisfaction;
- collective compensation, such as incentive or profit-sharing schemes in France;
- benefits programs, covering health, death and disability insurance, savings and retirement, in addition to non-monetary items, which are socially responsible solutions that also develop a sense of belonging to the Company. Employee shareholding programs also contribute to this aim while increasing employees' share in the Group capital (see Section 6.2.1 Distribution of capital and voting rights).

The compensation policy of the Group's various business units is measured and monitored closely with the Finance Department, and must take account of local conditions, notably legal obligations, the macroeconomic environment, employee turnover, and compensation policies observed elsewhere in the market.

In France, studies carried out by the Internal Compensation Survey showed consistency in the compensation practices across all of the Group's companies, and compensation practices in line with the rest of the market:

- managers and supervisory staff benefit from half-yearly individual variable compensation based on achieving the targets of the Group's major programs and their own personal targets;
- all employees receive additional compensation related to performance criteria or results through corporate incentive agreements and the Group's profit-sharing agreement in France.

Compensation - Orange SA	2019 (1)	2018	2017
Gross average monthly compensation (in euros)	4,334	4,213	4,083
Men	4,449	4,329	4,196
Women	4,138	4,012	3,885

⁽¹⁾ Numbers given for 2019 are provisional

Collective and individual raises are complemented by measures that recognize skills, qualifications and professional pathways, as well as specific schemes that focus on professional equality, basic salary levels and employees at the start of their careers.

Average compensation increased by 2.9% in 2019, 2.8% for men and 3.1% for women.

Incentives and profit-sharing agreements

Incentives

In France, incentive agreements are signed in each company (19 companies in the Group in France have a profit-sharing agreement in 2019), involving all employees in the company's performance. These agreements are based mostly on a financial indicator and operating priorities, including the quality of service provided to customers. When targets are achieved, the percentage of payroll paid out as the incentive bonus is usually around 4%.

Under the new agreement at Orange SA for 2018 to 2020, the incentive bonus is based primarily on achieving an operating performance indicator (growth in revenue, control of operating expenses and optimization of investments in all markets), and this is weighted 60%. This indicator is supplemented with an indicator of the service quality offered to customers (a measure of customer satisfaction in all areas and all markets), weighted 30%, plus a CSR indicator related to the limitation of electrical energy consumption, weighted 10%.

Incentive bonuses representing 4.37% of wages were paid in respect of 2018 in May 2019. With regard to the 2018 results, on February 20, 2019 the Board of Directors voted for an additional bonus, paid in June 2019, bringing employees' total incentive rate up to 4.78%. For an average yearly salary of 50,000 euros, the individual incentive bonus came to 2,440 euros.

For 2019, a provision for exceeding the operating performance, service quality and energy management targets was recognized at December 31, 2019.

(in millions of euros)	2019	2018	2017
Orange SA incentives	191 (1)	180(2)	200
Additional Orange SA incentives		17	

⁽¹⁾ Amount funded at December 31, 2019.

Employee profit sharing

An employee profit-sharing agreement was signed with the trade unions in June 2013 in France, replacing the previous agreement. This agreement applies to the employees of Orange SA and its majority-owned French subsidiaries, members of the agreement.

Using a dispensatory calculation formula, the special profit-sharing reserve of each company is equal to 4% of its operating income (French standard), and the Group's profit-sharing reserve amounts to the sum of the positive special profit-sharing reserves of the companies that are party to the agreement.

The Group's special profit-sharing reserve is distributed to eligible employees, 20% based on hours worked and 80% in proportion to their annual gross salary. Employees may choose whether their individual amounts are paid to them directly or deposited in the Group Savings Plans.

The following table shows the amount of profit-sharing distributed over the last three years under the Group profit-sharing agreement.

(in millions of euros)	2019	2018	2017
Special profit-sharing reserve of the Group	146(1)	148(2)	150

Amount funded at December 31, 2019; including 145 million euros funded in the Orange SA accounts.

The Orange Vision 2020 free share award plan

The Orange Board of Directors decided on October 25, 2017 to launch a free share award plan with performance conditions: Orange Vision 2020. This plan is intended to recognize the contribution of employees to the success of the Essentials 2020 strategic plan. It also aims to increase the Group's employee shareholding.

A total of 9.1 million shares were awarded to 141,000 employees in 49 countries as well as the monetary equivalent of 1.7 million shares to 3,000 employees in 38 countries. Final vesting of the shares, or monetary equivalent depending on the case, is subject to the employee being present in the workforce from September 1, 2017 to December 31, 2019 and on the fulfillment of two financial indicators:

- 50% linked to organic cash flow;
- 50% to adjusted EBITDA.

With regard to meeting the performance conditions, measured in relation to the budgets for fiscal years 2017, 2018, 2019, the shares of the Orange Vision 2020 plan were vested on March 31, 2020, subject to the beneficiary employees meeting the other conditions, for 5/6th of the amount of shares or the monetary equivalent initially awarded.

For more information, see note 6.3 Share-based payment to the consolidated financial statements.

Long Term Incentive Plan (LTIP) 2017 - 2019

On July 26, 217, the Board of Directors approved a Long Term Incentive Plan (LTIP) for approximately 1,200 senior employees involving 1.6 million free shares. See note 6.3 Share-based payment to the consolidated financial statements.

⁽²⁾ Updated 2018 amount.

⁽²⁾ Updated 2018 amount.

4.2.3 Work organization

Working hours organization

Number of part-time employees by proportion of working time	2019	2018	2017
Less than 30%	8,190	10,053	10,132
From 30% to 49%	138	105	106
From 50-59%	2,039	2,207	3,219
From 60-69%	329	1,438	3,023
From 70-79%	2,217	2,266	2,188
From 80-89%	5,352	5,864	5,058
From 90-99%	2,117	1,496	2,164
Group total	20,382	23,428	25,890

At the end of 2019, the number of part-time employees in the Orange group was 20,382, or 16.0% of the Group's active workforce, a decrease of -3,046 employees or -13.0%, compared to end 2018.

These employees work largely in France (16,581 at December 31, 2019, or 81.4% of total part-time employees in the Group). Nearly 70% of them have one of the plans deriving from the agreements benefiting seniors and adjusting their preparation for retirement. The great majority opt for the "French Part-Time for Seniors plans" (TPS). The plan has been extended as part of the "senior employment" element of the inter-generational agreement signed with the trade unions on December 12, 2018. It is now available to those employees who can take retirement up to 2024 inclusive, depending on the formula chosen.

These plans aim to adapt the working hours of seniors by freeing up a period of "free time" before their retirement. This period can last up to two years depending on the plan chosen. The employee remains part of the workforce during this period. The large number of employees recorded in the below 30% category corresponds to this phase of the program.

Absenteeism

Number of employee days absence due to illness ⁽¹⁾	2019 (2)	2018(3)	2017
Group total	1,083,272	1,088,973	1,114,112
o/w Orange SA	647,309	679,895	727,882

- (1) The definition relates to employees on permanent contracts and employees on temporary contracts. It excludes work-based learning participants.
 (2) The number given for Orange SA is for the year 2019, recorded at January 15, 2020. This number does not take into account any adjustments that occurred after that date. The value will be updated to the final value in next year's annual report.

 (3) The results for 2018 have been updated based on final value for the Orange SA consolidation scope.

Number of employee days absence due to occupational accidents ⁽¹⁾	2019 (2)	2018(3)	2017
Group total	32,565	37,865	39,704 32.392
o/w Orange SA	25,906	29,160	;

- This indicator covers employees on permanent contracts and employees on temporary contracts. It excludes work-based learning participants.
- The number given for Orange SA is for the year 2019, recorded at January 15, 2020. This does not take account of any adjustments made subsequently. The value will be updated to the final value in next year's annual report.
- (3) The results for 2018 have been updated based on final value for the Orange SA consolidation scope.

In 2019, the scorecard for health, safety and absenteeism covers over 95% of personnel in the consolidated Group.

Group-wide (as well as within the Orange SA scope), the number of days of employee absence due to illness decreased significantly, including in terms of the reduced number of employees. The decline was even more pronounced for work-related accidents.

Absenteeism following a work accident continues to fall. These improvements may be largely due to continued efforts at better information and training in workplace health and safety for employees, managers, and CHSCT/CSS members.

4.2.4 Social dialogue

Organization of social dialogue

Worldwide

In accordance with the incorporation agreement of 2010, the Global Works Council, created to share a common basis for social dialogue at Group level, was renewed in 2019. It comprises 33 members representing 25 countries across the world, each with more than 400 employees. It met once in 2019. It examines economic, financial

and employee-related matters globally and transnationally, such as the Group's general business and its probable developments, its financial situation, its industrial and commercial strategy, and innovation.

The employee representatives are either trade union representatives appointed by their trade union to sit on the committee, or representatives appointed by elected forums of employees, or employee representatives appointed by a democratic process according to locally defined rules.

In Europe

The European Works Council comprises 28 employee representatives from 19 countries and met three times in 2019, to discuss structural topics such as the economic and financial situation per sector of activity, the probable development of business and the Group structure, the industrial strategy and innovation, plus the major directions in terms of investment, job evolution and forecasts.

In France

In 2019, the Central Committee of the Orange Works Council (CCUES) met 10 times over 20 days (compared to 13 times in 2018 over 23 days). During the year, this employee representative body addressed 51 subjects (including 16 for information-consultation), in addition to examining the resolutions adopted in respect of the management of Social and Cultural Activities (SCA). Of these 16 items, 13 related to annual reports and assessments provided by agreement or under the French Labor Code and 3 related to proposed organizational or process changes.

The French Works Council, a contractual body covering all the Group subsidiaries in France, was renewed in February 2019. It met three times during fiscal year 2019, dealing with 13 topics relating to the business, the financial situation, job development and Group structure.

Collective agreements in France

During 2019, 11 agreements or amendments were negotiated and signed: ten agreements or amendments at national level and one agreement at global level:

- two agreements or amendments dealing with compensation agreements:
 - amendment No. 1 to the 2018-2020 incentive agreement of June 28, 2019,
 - the pay agreement 2019 of April, 24 2019,
 - an agreement relating to the management of social and cultural catering activity in UES Orange of May 31, 2019,
 - an agreement relating to employer contribution and management of Social and Cultural Activities at UES Orange of November 12, 2019,
 - an agreement relating to social dialogue within UES Orange of May 13, 2019,
 - an amendment revising the agreement of June 28, 2017 on the employment and integration of disabled people and the fight against discrimination 2017-2019 of June 17, 2019,
 - amendment No. 1 to the agreement on social dialogue within UES Orange of October 21, 2019,
 - an agreement relating to the mandatory negotiations within the Orange Group of November 18, 2019,
 - a pre-electoral memorandum of agreement (PAP) relating to the 2019 professional elections of June 6, 2019,
 - an amendment No. 1 to the pre-electoral memorandum of agreement of September 17, 2019,
 - a global agreement on professional gender equality within the Orange Group of July 17, 2019.

4.2.5 Health and Safety

The Orange group is committed to making its occupational health, safety and quality of life policy a cornerstone of its CSR policy. This policy is based on the global health and safety agreement and the laws and regulations in force in each country. The Group's commitments are detailed in Section 2.2.4.2.2.

In the context of the so-called France Telecom social crisis trial, in July 2019 Orange decided to set up a compensation commission to review individual situations. Its implementation was discussed with the trade union organizations. A Monitoring and Repair Committee, set up on October 1, 2019, is reviewing the individual requests that will be submitted until the end of June 2020 by persons who worked with the company between 2007 and 2010 and their beneficiaries. It is responsible for reaching amicable solutions and settlements in order to avoid long, costly and socially painful litigation procedures for those concerned. As of April 10, 2020, the Committee has already considered

around 400 individual requests, including around 220 which were either closed following settlement, or declared inadmissible.

See also section 3.2.1 Recent events for the management of the health crisis linked to COVID-19.

Occupational accidents and illnesses

The health, safety and quality of life at work indicators presented in the Group scorecard, which also includes absenteeism, covered over 95% of personnel in 2019 (98% in 2018). Indicators are expressed on a calendar basis. The number of theoretical working hours over the year fluctuates by country. It is calculated based on the number of employees on duty (full-time equivalent), the number of annual theoretical working days, and the number of theoretical working hours per day in each country where the Group operates (source: ILO for the last two items).

Number of occupational accidents with lost time ⁽¹⁾	2019 (2) (3)	2018(4)	2017
Group total	615	732	683
o/w Orange SA	411	541	514

(1) Occupational accidents with lost time and the associated number of days lost are recognized in accordance with applicable local regulations.

(2) The indicator was collected on more than 95% of the Group consolidation scope.
 (3) The number given for Orange SA is for the year 2019, recorded at January 15, 2020. This number does not take into account any adjustments that occurred after that date. The value will be updated to the final value in next year's annual report.

(4) The results for 2018 have been updated based on final value for the Orange SA consolidation scope.

Number of fatal occupational accidents	2019	2018	2017
Group total	2	2	1
o/w Orange SA	0	0	0

The Group experienced two fatal accidents in 2019 (road accidents).

Frequency rate of occupational accidents (1)	2019 (2)	2018 ⁽³⁾	2017
Group total o/w Orange SA	3.01	3.33	3.06
	3.87	4.94	4.48

⁽¹⁾ The frequency rate of occupational accidents corresponds to the number of occupational accidents with lost time per million theoretical working hours. These theoretical working hours are calculated based on the number of annual theoretical working days in each country where the Group operates (source: ILO). Occupational accidents with lost time and the associated number of days lost are recognized in accordance with applicable local regulations.

(2) The number given for Orange SA is for the year 2019, recorded at January 15, 2020. This number does not take into account any adjustments that occurred after that date. The value

Severity rate of occupational accidents ⁽¹⁾	2019 (2)	2018 ⁽³⁾	2017
Group total	0.16	0.18	0.18
o/w Orange SA	0.24	0.27	0.28

The severity rate of occupational accidents corresponds to the number of days of sick leave for occupational accidents per thousand theoretical working hours. These theoretical working hours are calculated based on the number of annual theoretical working days in each country where the Group operates (source: ILO). Occupational accidents with lost time and the associated number of days lost are recognized in accordance with applicable local regulations

In application of the Worldwide Health and Safety agreement of 2014, and in line with the rollout of the Group vigilance plan:

- all the Group's employees have sickness insurance cover.

- all the Group's companies have social dialogue bodies dedicated to health and safety and employee working conditions;

Number of cases that were classed as occupational illness	2019 (1)	2018	2017
Total Orange SA	32	33	58

⁽¹⁾ The number given for Orange SA is for the year 2019, recorded at January 15, 2020. This number does not take into account any adjustments that occurred after that date. The value will be updated to the final value in next year's annual report. It only takes into account recognized occupational illnesses declared by active employees

The indicator "number of cases that classed as occupational illness" concerns Orange SA exclusively. Over 80% of the occupational illnesses recognized are musculoskeletal disorders. The figures are too weak, in absolute terms, to make a relevant interpretation. It is to be noted that they only relate to files opened by active employees.

4.2.6 **Training**

Number of training hours (in millions)	2019	2018	2017
Group Total (1)	2.49		
o/w Orange SA	2.15	2.46	2.79

⁽¹⁾ Due to the rollout of the Orange Group Learning tool in the international subsidiaries, the data displayed for the Group for fiscal year 2019 concerns the reporting scope of Orange SA, Spain, Egypt, Romania, Senegal, Jordan and Belgium, in total 65% of the Group consolidated workforce.

Number of training hours per employee	2019	2018	2017
over the Group (1)	26.0		
over Orange SA	27.8	30.4	33.0

⁽¹⁾ Due to the rollout of the Orange Group Learning tool in the international subsidiaries, the data displayed for the Group for fiscal year 2019 concerns the reporting scope of Orange SA, Spain, Egypt, Romania, Senegal, Jordan and Belgium, in total 65% of the Group consolidated workforce.

With regard to skills development, 2019 was notable for the opening up of the Orange Campus, until now solely reserved for manager training, to all Group employees to support them in their transversal and technological skills development, through digital content and face-to-face learning.

In 2019, Orange Campus therefore:

- rolled out a new key skills development offer (communicating with impact, working together, etc.) for all Group employees using enriched and scaleable digital content and group workshops for practice and experimentation;

- initiated and delivered the first cybersecurity technician and engineer training courses in France and in the Middle East and Africa region;
- launched the first awareness and acculturation training modules on artificial intelligence;

will be updated to the final value in next year's annual report.

(3) The results for 2018 have been updated based on final value for the Orange SA consolidation scope.

⁽²⁾ The number given for Orange SA is for the year 2019, recorded at January 15, 2020. This number does not take into account any adjustments that occurred after that date. The value will be updated to the final value in next year's annual report.

(3) The results for 2018 have been updated based on final value for the Orange SA consolidation scope.

- and lastly, continued to support the Group's managers with corporate changes and taking on board a common managerial culture based on an individual and collective dynamic.

For Orange France, training actions supporting the Group's strategic challenges continued, using increasingly digital, modular methods of provision. The training efforts focused specifically on reinforcing customer service soft skills, supporting the store transformation through the Smartstores concept and upskilling in the areas of cybersecurity, future networks (5G, etc.) and IT.

For Orange Business Services, the training covered four strategic skills areas: customer empathy, digital confidence, technological leadership and business openness and agility. Skills development focuses mainly on cyberdefense, digital services (API - Application Programming Interface, IoT - Internet of Things, M2M - Machine to Machine) software development, the Cloud and the virtualization of networks and BigData. The company also continued to support its employees in the areas of anti-corruption, compliance and data protection, in line with its ambition to be a trusted business operator.

In Europe, the emphasis was on the development of key skills, acculturation to agility and the development of new leadership models. In addition to customer empathy and convergence, the training mainly focused on cybersecurity, IoT and AI, with a growing proportion of digital content.

In the Middle East Africa zone, skills development continued in the seven strategic areas identified as playing a major role in digital transformation in Africa and the Middle East: cybersecurity, BigData, AI, new financial services, Cloud, IoT/M2M and B2B/ICT.

4.2.7 Promoting diversity and inclusion

Orange is convinced of the benefits of diversity, both for its economic performance and for the well-being of its teams. The Group's Diversity & Inclusion policy aims to welcome and develop a wide variety of talent, put in place the conditions for a quality employee experience and encourage social engagement from staff. This policy is based on a vision in which management operates in a benevolent atmosphere, promoting inclusion and wellbeing at work.

On July 17, 2019, Orange signed a worldwide agreement with UNI global union on gender equality in the workplace, combating discrimination and violence, and the work-life balance. Usable and adaptable in countries where the Orange Group operates, this agreement is based on a participative approach by all the stakeholders, with structured social dialogue and the setting up of special local committees in the main subsidiaries. A shared inventory and action plans appropriate to the context of the country will be monitored over time, in relation with the social partners, thus confirming the Orange Group's commitment to long-term action.

Gender equality in the workplace

Percentage of women – Group	2019	2018	2017
% of women in the active workforce	✓ ✓ 36.0%	36.1%	36.1%
% of women in supervisory staff ⁽¹⁾	✓ ✓ 30.9%	30.6%	29.9%
% of women in management networks (2)	✓ ✓ 31.1%	29.8%	28.5%

⁽¹⁾ The "supervisory staff" indicator counts employees in the "senior management" category, which corresponds to the consolidation of Levels E, F and G of the French collective agreement on telecommunications (CCNT). Entities outside France rely on a document describing each level of the CCNT to match each of their employees to the relevant CCNT level.

(2) These are the executive and leadership networks, which counted 1,274 executives between them at the end of 2019. These managers hold highly responsible positions in the Group.

With regards to female-male representation on the Group's Board of Directors, see also Section 5.2.1.3 Applying the principle of diversity and balanced representation between women and men.

Gender equality in the workplace is a common priority shared by all Group entities. Orange's policy in this field is led by the Professional Equality Strategy Committee, which comprises members of the Executive Committee as well as individuals representing Group entities. This committee, which is one of the Group's principal governance bodies, sets out the broad outlines of the gender parity policy and tracks progress made on a regular basis.

The policy is deployed in the Group across four areas:

- equal pay:

The Group conducts regular assessments country by country, which result in customized action plans. The common statistical standard used by the Group last year is now used for all subsidiaries of over 400 employees to ensure standard measurement of pay gaps. In France, maintaining special budget accounts in the annual pay increase exercises has continued to reduce the pay gaps between men and women. In accordance with the law of September 5, 2018 on the freedom to choose a future career, Orange publishes indicators every year relating to gender pay gaps and the actions taken to remove them. In 2020, Orange's Social and Economic Unit obtained an overall grade of 99 out of 100 for the indicators measured over 2019:

equal access by women to positions of responsibility:

The Group has set a target of 35% for the entire managerial population and for management networks. The increased presence of women on Orange's executive management bodies was demonstrated in 2019. The Group's Executive Committee is still 33.3% female. In application of the provisions of Article L. 225-37-4 6° of the Code de commerce, the results in terms of gender diversity in the 10% of positions with greater responsibility within the Group are in steady progression: the rate of feminization in the networks of management, which includes 1,274 executives and leaders, has passed from 28.5% in 2017 to 31.1% in 2019. Career development or mentoring programs (including by the Group's senior management) are offered to high-potential female employees in several countries;

^{✓ ✓} Item reviewed by KPMG: reasonable assurance.

- gender balance in all of the Group's occupations, particularly the technical ones:

In France, in May 2019, Orange, a member of the Femmes@numerique Foundation since 2018, signed a Manifesto for the redeployment of women into the digital sector, initiated by Syntec Numerique and Social Builder, in the presence of the Secretary of State for Digital Affairs. In addition, through the "Classes for Female Technicians" program, 500 women seeking work were trained in technical occupations between 2012 and 2019, nearly three-quarters of whom were hired as permanent Orange employees. Since 2017, this program has been supplemented by "Classes for Female Engineers" and "Classes for Female Sales Managers" programs. The Women Start and #Femmes Entrepreneuses programs, dedicated to female entrepreneurship and launched successfully in 2018, were renewed in 2019. 2019 saw continued efforts to overturn the educational stereotyping of girls and to awaken their interest in scientific and technical studies, with Shadowing days and a Girls' day in several countries, the Capital Filles program in France and Romania and the Elles Bougent initiative in France;

- the balance between private life and work life:

Convinced that the work-life balance is a factor in improved quality of life at work, the Group intends to promote this balance across all geographical regions. The work-life balance was discussed in a chapter of the global agreement on gender quality signed on July 17, 2019 by Orange and UNI global union. In this agreement, Orange undertakes to facilitate the balance between work and personal or family life by promoting homeworking, flexible hours, the right to log off and adaptable work schedules for employees who are parents or carers.

In France, the 5th agreement on gender equality and work-life balance signed last year expanded the paid leave donation system and put in place a digital platform to assist with the administrative formalities that have to be completed when an employee becomes a carer.

Communications and awareness-raising

Orange communicates with its employees to raise their awareness of the issue of gender equality in the workplace, whether by using the intranet, the diversity communities of the company's social network and through motivational or communications campaigns and events organized throughout the world, for example, on International Women's Day (March 8). In France, the "equal opportunities visa", an online awareness module launched in June 2018, was followed by 11,000 employees in 2019.

Evaluation of the gender equality policy

Since 2011, the Group's Professional Equality Policy has undergone a continuous improvement process and is evaluated as part of the Gender Equality European and International Standard (GEEIS), which was extended to cover all diversity issues and renamed as the Gender Equality & Diversity for European & International Standard. The Group's diversity and workplace gender equality policy and its implementation are audited every two years by an independent outside organization and are certified in 17 countries. In 2019, certification was confirmed for 10 entities in nine countries: the Group, France, Brazil, Tunisia and all the countries in the Europe zone: Belgium, Luxembourg, Moldavia, Poland, Romania and Slovakia. In September 2019, in New York, the new GEEIS-SDG award was given to the Orange Foundation's Women's Digital Centers.

At the same time, the global Stakeholder Dialogue mechanism for diversity and gender equality in the workplace, introduced by the Group in 2015, is still being rolled out in the subsidiaries. Conducted in nine countries (Spain, France, India, Jordan, Poland, Romania, Russia, Senegal and Tunisia) between 2015 and 2018, it was extended to Belgium in 2019 (see beginning of Section 4).

Orange's performance has been confirmed by several rankings:

- Equileap international ranking: between 2018 and 2019, Orange went from 73rd to 54th place out of 3,000 companies worldwide;
- Gender Equality Index Bloomberg 2019: Orange is a member of this stock exchange of the 230 global companies most committed to gender equality.

Employment and integration of people with disabilities

Disabled employees – Orange SA	2019	2018	2017
Number of disabled employees ⁽¹⁾ Amount invoiced by the sheltered employment sector (in millions of euros) Integration rate ⁽²⁾	5,250	5,432	5,547
	20.1	19.6	17.8
	7.0%	7.1%	7.1%

Disabled employees declared in the French mandatory declaration for disabled employees (DOETH).
 Rate of integration calculated in accordance with DOETH methods. The value given for 2019 is provisional.

In France:

In 2019, the Group continued to implement the actions set out in the sixth agreement on the employment and integration of people with disabilities, signed in June 2017 and covering the period from 2017-2019. This specifically involved reinforcing the leadership of the network of disability specialists in the divisions and operational entities, the digitization of requests for adapting disabled employees' workstations, the "live my life" DuoDay event between Orange employees and disabled people outside the company, or the provision of external expertise to drive forward new practices in recruiting people with disabilities.

For five years, the amount of Orange's procurement from the sheltered employment sector (STPA) has steadily increased (+34%), reaching 20.1 million euros in 2019. Procurement from this sector is also increasingly diversified. A commitment letter was signed at the Responsible Purchasing trade fair in Paris in May 2019 for local services intended for Orange Data centers.

Lastly, Orange reaffirmed its commitments in October 2019 when Stéphane Richard signed the Manifesto for the inclusion of disabled people in economic life in France, an initiative led by the Secretary of State responsible for people with disabilities.

Outside France:

- the Group, as a signatory of the International Labor Organization "Business and Disability" charter in 2015, continues to be an active member of the Global Business and Disability Network and in 2019 took part in this network's annual conference in Geneva;

- the global agreement on gender equality at work signed by Orange on July 17, 2019 also covers anti-discrimination, specifically setting out Orange's commitments to people with disabilities and offering flexible working to employees who are carers;
- in December 2019, the Group joined the global movement The Valuable 500, bringing together the 500 largest companies that work to promote the inclusion of people with disabilities. This international commitment was signed by Stéphane Richard.

Finally, on December 3 this year, to mark the International Day of Disabled Persons, Orange launched a call for testimonials from its employees, at global level. The purpose of this internal campaign is to change people's views of disability, give employees the chance to speak, and highlight the commitment of the Group and its employees to the inclusion of people with disabilities.

Combating discrimination and equal opportunities policy

For many years, Orange has been engaged in combating all forms of discrimination, one of the major focus areas of its Diversity policy. Internationally, combating discrimination was included in the global agreement on gender equality at work signed in July 2019 by Orange and UNI global union. In this agreement, Orange reaffirms its equal treatment of recruitment candidates, based on the skills and experience required for the post. Similarly, in this agreement Orange commits to ensuring that access to training, career development and work organization is subject to objective criteria.

In France:

Orange renewed its intergenerational agreement for 2019-2021, covering the Group's companies in France and taking into account three major areas of focus: the sustainable employment of young people (work-study contracts, internships, recruitment and career development, etc.), the employment of seniors (recruitment, training, validation of learning, skills sponsorship) and the transfer of knowledge and skills (mentoring and tutoring).

Orange is committed to a long-term policy to help young people from modest backgrounds, individually or collectively, to enter the world of business. This support is provided through partnerships with associations in which more than 800 Orange employees give their time: Capital Filles in France and Romania, Article Un, Énergie Jeunes, Nos Quartiers ont des Talents, and Proxité. Combating discrimination is also included in the company collective agreement for the employment and integration of people with disabilities, signed in June 2017. Within the scope of that agreement, a great many actions were taken to make combating discrimination a high priority, such as:

- monitoring the actions set out in the collective agreement for the employment and integration of people with disabilities and combating discrimination: the monitoring committee met with the trade union organizations twice in 2019;
- providing the whistleblowing service Allodiscrim (external to Orange) to employees and external recruitment candidates to report and deal with any situation of discrimination, and processing of any Allodiscrim and Defender of Rights referrals by the Group Diversity

To mark the International Day against Homophobia, Orange continued its internal awareness campaign in France, in partnership with Mobilisnoo, the Group's LGBT+ employee network. Orange also published its first LGBT+ guide for employees: "Sexual orientation and gender identity: understanding and acting at Orange in France".

Note on methodology – employment data

The employee-related data in this section comes primarily from the HR information system and is complemented by data from the Group's Financial information system. The methodological precisions or limitations of some indicators are specified below and include, among others, compilations of the precisions given under the employment indicator tables.

Breakdown of men-women among supervisory staff (permanent employees at the end of the period)

The rule for calculating the "supervisory staff" indicator is based on the active workforce with permanent contracts.

The "supervisory staff" indicator counts employees in the "senior management" category, which corresponds to the consolidation of Levels E, F and G of the French collective agreement on telecommunications (CCNT) or the equivalent level for entities outside France.

Percentage of women in the Leaders network.

The Leaders network is a management network comprising 1,274 managers at the end of 2019. These managers hold highly responsible positions in the Orange Group.

Disabled employees - Orange SA

The "Number of disabled employees" corresponds to the numbers of employees declared in the DOETH (Obligatory Declaration of Employment of Disabled Workers).

Their "Rate of integration" is calculated according to DOETH methods. The value shown for 2019 is provisional due to the processing time of the declarations.

Number of departures

The "number of resignations" and "number of dismissals" indicators only take into account the departure of employees in active work on a permanent contract. Thus, the departure of employees that are temporarily not working (inactive employees: long-term medical leave, extended leave, unpaid leave, etc.) are not included in these indicators.

The "number of final departures of permanent employees" indicator referred to in the employment section of the Management Report, includes by convention the balance of the provisional recruitment and departures from the Group, with departures being higher than recruitment.

Training hours

The number of training hours per employee is calculated on the basis of the number of training hours divided by the average monthly number of active employees over the year.

The data on Group training comes from two types of feedback: one via the Orange Group Learning tool rolled out to all the subsidiaries worldwide, the other from the monthly reporting of subsidiaries from their own information systems.

To calculate the indicators related to training, the reporting scope covers 65% (1) of the consolidated Group workforce, as a result of actions taken to make the information being deployed more reliable.

Health and safety indicators

The coverage rate for these indicators is more than 95% of employees at the end of 2019. Accidents reported by the countries comply with local regulations.

The values given for Orange SA are for the year 2019, recorded on January 15, 2020. The values for year "n" are updated by the final values when fiscal year "n+1" is reported, taking account of any adjustments made subsequently.

The definition of the "Number of employee days absence due to illness" and "Number of days of employee absence due to occupational accident" indicators relates to employees on a permanent contract and employees on a temporary contract. It excludes work-based learning participants.

The indicator "Number of employees recognized as having an occupational illness" only takes into account recognized occupational illnesses declared by employees in active work.

The frequency rate of occupational accidents corresponds to the number of occupational accidents with lost time per million theoretical working hours per year.

The severity rate of occupational accidents corresponds to the number of days of sick leave for occupational accidents per thousand theoretical working hours per year.

The number of theoretical working hours over the year fluctuates by country. It is calculated based on the number of employees on duty (full-time equivalent), the number of annual theoretical working days, and the number of theoretical working hours per day in each country where the Group operates (source: ILO for the last two items).

4.3 Social consequences of our activities

Digital technologies are changing the world and contributing to the development of societies. This is occurring to such an extent that they can be considered a fundamental need. The three drivers supporting Orange's actions to develop territories are: (1) providing access to the

greatest number of people; (2) deploying responsible and inclusive digital services; (3) supporting entrepreneurship and open innovation, particularly as a driver of social innovation.

4.3.1 Business opportunities associated with digital inclusion

Mobile network coverage continues to increase on all continents. In Europe the population not covered is estimated at 1%, with 11% in the North African and Middle East region (MENA) and 30% in Sub-Saharan Africa (2). In addition to coverage, the population excluded from digitization for reasons of purchasing power, technological skill or personal situation, particularly in terms of education or training, is estimated at an average of 24% in Europe, 49% and 46% respectively in MENA and Sub-Saharan Africa (2). The essential services of ordinary life (employment, education, access to culture, access to social rights, etc.) are rapidly becoming digitized, which presents a risk of social exclusion among populations who do not have access to or are not familiar with these tools. In this regard, Orange has made digital inclusion one of the pillars of its commitment to its Engage 2025 strategic plan, covering the period 2020-2025 (see Section 1.2.2 The Orange Group's strategy).

Digital inclusion covers a number of areas, as described below.

Providing access to the greatest number of people

To bring the benefits of the digital world to everybody everywhere, improving speeds across all areas, Orange is engaged in an ambitious action plan, based chiefly on:

- developing access infrastructures to extend fixed-line and mobile network coverage and to roll out latest-generation technologies (fiber, 4G, 5G);
- expanding the network of submarine broadband fiber optic cables as well as IP points of presence and IPX to improve Internet connectivity for Africa, the Middle East and the Indian subcontinent.

For more information, see Section 1.5.1 Orange's networks.

Offering accessible services and supporting appropriate use

Driven by its Engage 2025 strategic plan, Orange launched a "digitally inclusive" program aimed firstly at removing the barrier to purchasing power via "social offers" (e.g. "Coup de Pouce" in France, "Gigas Solidarios" in Spain) and secondly offering free training sessions for everyone in its stores on how to manage appropriate everyday use of digital services.

Offering accessible services

As part of its Engage 2025 strategic plan, Orange made the commitment to launch a social offer in the European countries where it operates, like its *Coup de Pouce Livebox* offer in France. This offer is designed for low income households who do not have home Internet access and includes (1) Internet-TV-Telephone access at €19.99/month in ADSL or Fiber; (2) a reconditioned laptop priced at €175 including an Office tools suite and (3) priority access to free digital support in certain Orange stores. This offer was put together jointly by Orange and stakeholders in the local charity sector to support the general public; after being tested in the Hauts-de-France region (3,600 beneficiaries in this region at 12/31/2019), it will now be expanded.

Other areas also present opportunities for Orange to develop its business model: to counter digital exclusion related to disability or age, Orange has been delivering a "designed for everyone" strategy for some years now. Its objective is to adapt products and services for the needs of these people, and design specific products that combine innovation, simplicity and ergonomics, either directly or in partnership with start-ups in an *Open Innovation* approach. Orange has thus

⁽¹⁾ Orange S.A. (France), Orange Spain, Orange Egypt, Orange Romania, Orange Belgium, Orange Senegal, Orange Jordan.

⁽²⁾ Source GSMA 2019 Mobile Industry Impact Report, https://www.gsma.com/betterfuture/resources/2019-mobile-industry-report

Social consequences of our activities

developed a range of offers and products that meet the needs of disabled and senior persons, such as the *multi-profile disability* mobile app to help the Deaf and Hearing-Impaired (Roger Voice) or home assistance solutions to watch over dependent persons remotely.

Supporting appropriate use

Implementing Orange's policy on the safe and responsible use of digital technology involves several measures which continued in 2019:

Internally, the marketing and communication departments are given guidelines that are enriched through forums, webinars, discussions and co-construction workshops on issues of responsibility such as "transparency" or "support for appropriate use". In 2019, a total of 900 participants attended 46 webinars, on a dozen topics. Since it was set up in 2017, 100 workshops have been held with nearly 1,500 participations;

For the general public in France, digital workshops in small groups are offered free of charge to seniors, parents and children, for one hour on different topics (choice of: How to use a smartphone, Protecting your data and restricting its distribution, Discovering social media, and three new modules introduced in 2019: Balancing screen time in families, First steps on the Internet, Supporting your teen with their first smartphone). In 2019, over 1,800 people took part in Orange digital workshops, either in stores or at other locations.

Supporting entrepreneurship

In a hyper-connected world, Orange promotes synergies between players by creating ecosystems for support and exchange and by disseminating knowledge in an *Open Innovation* approach. Orange works hard to set up business support systems at every stage in the life of start-ups to train, identify, assist and promote digital talent.

Through its numerous calls for bids, Orange picks the start-ups most likely to lead the coming changes in digital habits and integrates them into the digital ecosystem.

Orange provides various kinds of technical and expert support covering the spectrum from incubation to acceleration, as well as access to financing that is appropriate to the different levels of start-up maturity. As such the Group supports various incubators and incubator networks in France and Africa through its subsidiaries, especially in Senegal, Guinea and Mali. To open up the field of impact entrepreneurship, Orange also supports the Ruches network (Social Business incubator) in France. Ronalpia in the Auvergne-Rhône-Alpes region and the

AFIDBA (AFD For Inclusive and Digital Business in Africa) program in Africa. Orange is a partner of Bond'Innov, a start-up incubator related to the African diaspora, and the Afric'Innov incubator network that has set itself the objective of increasing the professionalism of incubators in this region. Lastly, the Group is building commercial partnerships between start-ups and its business lines, through *Orange Fab* and its presence on four continents.

Orange provides financial support via:

- investment funds: Orange Digital Ventures (a 150 million euros tech fund which invests globally), Teranga Capital (in Senegal) or Comoe (in Côte d'Ivoire);
- multi-stakeholder programs like Afric'Innov, a network of over 50 African incubators, in which Orange participates in the choice of zero-interest loans provided to start-ups by AFD (the French development agency).

Orange offers its expertise via:

- the Orange start-up platform, dedicated to promoting and supporting innovative companies in all the Group's geographical regions;
- digital tools such as Cloud Starter, a Cloud Computing platform for start-ups, and Orange Developer, which brings together all of Orange's API & SDK toolset and development kits;
- organizing communities: Imagine with Orange, which is active in 56 countries, Villa Bonne Nouvelle, a showcasing of the Group's HR innovation, Les Ambitieuses TechForGood, an incubator for women social entrepreneurs established in partnership with *La Ruche*, and the Orange Social Entrepreneur awards POESAM, which every year identify and assist 10 innovative start-ups in Africa and the Middle East;
- improving their international profile: during tradeshows like Vivatech Challenges, or through media, as Start-up Stories (broadcast on M6) and Orange's start-up website.

In 2019, to strengthen its support for the innovative, digital ecosystem, the Group created the first Orange Digital Centers (ODC). Following Tunis in April and Dakar in October 2019, other ODC will be gradually set up in all the countries where Orange operates. The principle of the Orange Digital Centers is to bring together in one space several strategic programs dedicated to entrepreneurial and digital skills: the Code school, *Fablab Solidaire*, *Orange Fab* and Orange Digital Ventures, the Group's investment fund, where applicable.

4.3.2 Business opportunities associated with basic services

As part of its overall development strategy, Orange offers communities a new range of services to meet basic needs, based on its connectivity products. Alongside financial services and electricity, Orange has identified several lines of action in Africa and the Middle East such as agriculture (*mAgri*, a range of decision-making services for farmers enabling virtual marketplaces to be created), health (*eHealth*, a range of information services used by public authorities for preventive actions as well as health insurance), education and e-learning.

Access to online financial services

Orange Money was launched 12 years ago (first launched in Côte d'Ivoire in 2008), to facilitate access to prepaid communication top-ups.

It now aids economic development in the countries where Orange operates, by enabling people without bank accounts to access financial services.

With Orange Money, people can make deposits and withdraw cash, transfer money, pay bills, access micro-loan services (up to 100 euros) and savings and insurance products (health, life insurance, etc.). Orange Money is now considered an essential part of Orange's business, with 45 million customers in 14 countries at the end of 2019 (excluding entities under the equity method and excluding Niger, following its disposal in November 2019), carrying out over 2.6 billion euros in transactions per month with a network of 220,000 Orange Money retailers (see Section 3.1.3.4.1 Revenue – Africa & Middle East).

Following Orange Côte d'Ivoire in 2018, Orange Guinea and Orange RDC obtained "GSMA Mobile Money Certification" in 2019. A global initiative that provides greater security, greater transparency and safer, more reliable mobile financial services to millions of mobile money users worldwide.

Access to electricity

Access to electricity is a major issue for the African continent, where Orange can play a leading role by capitalizing on its brand, its commercial presence, and its technical assets. While ensuring the continuity of its own services, Orange is committed to a diversification approach in this field; it has significant business stakes and will strengthen its positive, participatory presence in the region.

Orange is developing three separate offerings:

- individual electricity generation in rural and remote areas that do not have access to the national grid, in the form of individual solar kits; this offer was distributed at the end of 2019 in eight countries (Burkina Faso, Cameroon, Côte d'Ivoire, Guinea, Madagascar, Mali, Senegal, DRC); the objective was to provide access to solar energy in rural areas or towns where the quality of electricity service providers is inadequate. The service comprises a kit with a solar panel, a central unit containing a battery and a SIM card, lights with LED bulbs, a multi-connection cable charger, a radio, a portable torch light and, as an option, a television or ventilator. The kits are produced with partners selected by Orange for their quality and ability to offer

- integrated solutions and to meet large-scale demand. Payment via Orange Money means the service can be granted or re-established automatically and remotely for the required period of time;
- solutions using solar farms: solar power systems such as the three solar parks set up in Jordan with the aim of supplying all the electricity needs of the Orange subsidiary's sites that are connected to the country's power plants. The off-grid self-consumption initiative is under review for its applicability to other countries in the region, pending regulatory approval. Orange has also committed to meeting all of its own electricity needs at its small-scale facilities not connected to the grid and consuming less than 1,800 W in the Middle East and Africa region from renewable sources by 2030. To achieve this aim, Orange develops solar farms through partnerships with electricity companies (ESCO projects): at the end of 2019, eight countries in the region had solar farms (see Section 4.4.2.1 Network energy consumption). Orange also develops an internal sourcing approach (Oryx: solution rolled out in around 10% of sites in the MEA zone, i.e. over 2,800 solar panel sites (some 100% solar, others hybrid) at the end of 2019, saving 38 million liters of fuel every
- a B2B Smart metering offer for operators of transport and electricity distribution networks (PowerCo), opening up the possibility of automatic meter reading and improving customer relations in various areas: supervision, management, billing and payment. For the electricity operators, it is now possible to avoid offloading entire zones and to restrict the energy usage of each household.

4.3.3 Philanthropy and the Orange Foundation

The Orange Foundation works to promote the social and vocational integration of young people and women in difficulty: young people without qualifications or jobs, women in precarious situations and people with autism. For the past 30 years, the Foundation has provided them with access to education, health and culture, helping them integrate better into society. Orange also contributes to the democratization of culture among all sections of the population, by promoting access to vocal music, books and museums. The Foundation is currently active in all these areas, ensuring that digital tools are an essential factor in equal opportunities. Therefore, with the support of thousands of committed employees and 23 million euros invested in 2019 with 460 partner associations, the Orange Foundation enables around 2 million people, every year in 30 countries, to make a new start.

As part of its new strategic plan covering the next five years, Orange has made the commitment to:

- extend opportunities for Group employees to deliver skills sponsorship (in a general interest association, one of the areas supported by the Foundation or by leading digital support workshops for employees who choose the Orange Solidarity association for example), until now only available on the French Part-Time for Seniors program (TPS), to employees transferring within the Group. Since 2010, 2,850 employees have chosen this commitment as part of their French Part-Time for Seniors (TPS) plans, through partner associations (396 active employees at the end of 2019);

 ensure the Foundation has a presence in each of the countries where it operates, grouping together the philanthropic programs within a common structure to promote synergy between the different actions it performs, in particular giving young people and women access to digital tools.

Therefore, in 2019:

- 820 Digital Schools in 16 countries enabled 200,000 students in remote schools without books and the Internet to access educational content:
- over 350,000 people benefited from the infrastructure of 75 Orange Villages in 11 countries: water points, health centers and schools for young people in Africa;
- 8,200 Digital Workshops organized in France provided digital training to 44,000 people from deprived backgrounds.

Since 2014, 109 FabLabs Solidaires in 17 countries have remotivated and trained young people who are unemployed or not in school in the digital industry, to prepare them for the jobs of the future, and 250 Digital Centers in 20 countries have helped give independence back to several thousand women by offering them digital training.

4.3.4 Protecting customers' health and safety

So everyone can safely enjoy the benefits of digital technology, Orange has introduced a responsible marketing policy and promotes healthy digital habits. In 2019, this policy was driven by the Orange brand, for example, by the marketing campaign in all the countries where the

Group operates, on the theme of "we all have great power and we all have great responsibility", calling on its customers to use digital devices appropriately, in particular in terms of road safety, screen time and parents' vigilance on the use of digital devices by their children.

4.3.4.1 Responsible marketing

To complement its support for appropriate use, Orange delivers a specific program aimed at children, a section of the population considered to be particularly at risk and vulnerable, through the "Better Internet for Kids" program, which involves the following initiatives:

- internal guidelines for responsible marketing to children (with updates that take new applications into account, such as virtual reality, artificial intelligence and personal assistants);
- filters and parental controls (e.g. the Xooloo app in France);
- marketing of offers appropriate for children (e.g. "Kid starters" in Poland);
- awareness campaigns featuring experts and targeting both children and parents (courses for parents, parents' forums, talks, school events, screen time workshops, etc);
- #SuperCoders, a coding workshop program in 20 countries in Europe and Africa that promotes digital creativity, teamwork, entrepreneurship and civic engagement. This program has reached over 46,000 children since it was launched in 2014, including 16,000 children in 2019.

In Morocco, the program is delivered as part of an agreement with the Ministry of National Education, aimed at children in 120 public schools, with the support of Orange volunteer employees.

4.3.4.2 Overuse and inappropriate use of services

Wireless technology brings society many benefits, but its accelerated development, especially for young people and their early adoption, does raise questions about practices and health, because, as with anything new, we do not yet have the perspective we need to evaluate them over the long term. In particular, in mid-2018 the World Health Organization (WHO) added the addiction to digital or video gaming to the 11th Revision of the International Classification of Diseases (ICD-11). A gaming disorder is considered to be a pattern of gaming behavior characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. For this reason, Orange tracks the latest media and scientific developments and passes on that information to its users in the spirit of transparency:

- Orange has had a screen time guide compiled by psychologists which is available in five languages and distributed in five countries;
- screen time workshops are now offered in stores in France; together with the AFIE, Orange has also published psychological quizzes on screen use and a family guide aimed at positive screen use in collaboration with the UNAF and e-Enfance associations. Since September 2019, 5,000 guides have been distributed at digital workshops and other internal and external Orange events;
- Orange organized talks, workshops and school events featuring experts for parents, children and families in general in order to raise families' awareness of the risky uses of digital media. In France for example, a TV and social media campaign "Passe en mode ballon" (1) relies on the influence of high-level athletes from the French football or rugby team to promote reasonable use of digital devices (6 million views, award-winning advertising);

in France, for example, Orange develops educational programs for 9-14 year olds to make them aware of positive, secure ways to use digital devices, such as the "Playdagogie" digital education method (six sports-based training sessions, through the NGO Play International and the French Football and Rugby Federations) or "Les magiciens du numérique" (Digital magicians), an immersive escape game produced with the support of e-Enfance and the Ligue de l'Enseignement. These two pilot schemes were tested until the end of 2019, with a view to generalized rollout in 2020.

4.3.4.3 Electromagnetic waves

The orange.com website ⁽²⁾ has a section in seven languages on radio waves and health where the Group provides transparent and updated information, including precaution of use, for all its stakeholders. In 2019, the radio waves website was reorganized and a 5G part was added, as well as a section on radio waves at work. Public awareness initiatives on radio wave issues are tailored to the cultural and political contexts in question and conducted in conjunction with health authorities, local governments or civil society meetings in some countries.

- Health recommendations and a hands-free kit are provided to customers along with all handsets sold by Orange.
- Orange actively supports scientific research by backing the Fondation-Mines Telecom, a sponsor of the C2M (characterization, modeling and management) chair on exposure to electromagnetic waves with the ANFr, the French Government Agency that manages the country's radio spectrum. Orange also works closely with global standards bodies like the International Electrotechnical Commission (IEC).
- Orange carries out standards assessments on new technologies in cooperation with the agencies concerned.
- Some authorities, to improve public information and take account of developments in the use and appearance of new devices that might expose consumers to radio waves, extend the requirement to display the SAR (specific absorption rate) to all electrical radio equipment intended for use near the body, and no more limited to cellphones. The Group revised its procurement of radio equipment sold by Orange or marketed under its brand by (1) strengthening its requirements during product testing, (2) working with inspection agencies, and (3) launching education and safety cessions in France and abroad.
- Base station (mast) exposure limits are subject to international recommendations and national regulations. Orange provides its subsidiaries with the same type of mobile phone masts approved for European standards of use and carries out checks during installation using simulation tools. The Group regularly trains employees working near or at base stations on safety recommendations and how to use a dosimeter, in particular at the request of countries in the Middle East and Africa. Security perimeters are assessed around the masts. The Group has also provided its subsidiaries with the tools to facilitate calculation of these perimeters.

⁽¹⁾ https://www.youtube.com/watch?v=sLK9bvtWDaE

⁽²⁾ https://radio-waves.orange.com/en/your-questions-about-radio-waves-and-health/

4.4 Environmental impacts of our activities

Environmental Management System

At the end of 2019 all of the Group's ISO 14001 certified organizations successfully passed their renewal or monitoring audits. The ISO 14001 scope increased in 2019 as a result of the gradual extension of the certified scopes decided by Orange Business Services, three new large sites having obtained their certification this year (the offices at La Défense in France, the skills center in Malaysia and the joint Data center and offices in Singapore).

This successful extension of the Orange Business Service ISO 14001 certified scope means that the OBS SME now covers 1/3 of employees, 1/3 of energy consumption and 1/3 of office space.

	2019	2018	2017
Proportion of scope certified	✓ ✓ 60.8%	59.8%	66.6%

^{✓✓} Item reviewed by KPMG: reasonable assurance.

ISO 14001 certified entities at end-2019

Subsidiary	Scope
Orange Espagne	All activities
Orange Slovensko	All activities
Orange Egypt	All activities
Orange Marine	All activities
Orange France	All activities
Orange Moldova	All non-network activities (20% of scope)
Orange Mali	All activities
Orange Business Services	1/3 of employees, 1/3 of energy use and 1/3 of office space
Orange Romania	All activities
Orange Senegal	50% of scope

4.4.1 Toward the circular economy

Orange is working to reduce the environmental impact of the products and services marketed to its customers throughout their life cycles. Among other things this entails incorporating the circular economy into all its processes and business lines.

4.4.1.1 Waste prevention and management

Environmental performance (waste)	Units	2019			2018	2017
		France ⁽¹⁾	Rest of the World	Group Values	Group Values	Group Values
Internal consumption Paper and cardboard used: internal (office) and external use (marketing, invoicing, packaging, etc.)	metric tons	4.429	556	4,985	7,154	9,126
Consumed water	m³	668,412	38,896	707,308	1,106,883	1,280,102
		000,112		101,000	1,100,000	
Internal evacuated waste Internal WEEE (network and services) Recovery rate Wooden poles Recovery rate Batteries Recovery rate	metric tons % metric tons % metric tons %	1,097 92.9% 18,859 100.0% 827 69.0%	416 97.2% 289 100.0% 767 96.2%	1,512 94.1% 19,148 100.0% 1,594 82.1%	1,393 91.0% 19,805 100.3% 1,387 83.0%	2,210 85.4% 17,687 100.0% 1,781 84.1%
Other hazardous waste (PCB – printer cartridges – fluorescent tubes included)	metric tons	161	9	170	189	254
Recovery rate	%	88.2%	78.0%	87.7%	93.8%	89.5%
Total hazardous waste	metric tons	20,944	1,481	22,424	22,774	21,932
Recovery rate	%	98.3%	97.1%	98.2%	98.6%	96.2%
Cables ⁽²⁾ Recovery rate Paper and cardboard Recovery rate Metal poles Recovery rate Other non-hazardous waste Recovery rate	metric tons % metric tons % metric tons % metric tons %	11,528 75.4% 2,220 100.0% 1,227 100.0% 7,172 46.8%	355 94.8% 458 93.4% 322 100.0% 1,739 84.1%	11,883 76.0% 2,678 98.9% 1,549 100.0% 8,911 54.1%	12,563 78.9% 3,254 86.1% 1,508 100.0% 9,434 48.7%	24,519 86.3% 3,157 98.8% 1,251 100.0% 10,664 59.7%
Total non-hazardous waste	metric tons	22,147	2,875	25,022	26,759	39,591
Recovery rate	%	70.0%	83.8%	71.6%	70.3%	72.3%
Total internal evacuated waste	metric tons	43,091	4,355	47,446	49,533	61,523
Recovery rate	%	83.8%	91.6%	84.5%	83.3%	86.5%
Customer WEEE waste collected (including batteries and rechargeable units) Recovery rate	metric tons	3,380 86.3%	365 44.3%	3,745 82.2%	2,754 82.7%	1,371 82.9%

Since the values are rounded up, the Group values may not be the sum of the "France" and "Rest of World" values.

Orange's waste prevention and management policy, both for itself and its customers, is based on extending the life of products and equipment, notably through their re-use and optimizing their end-of-life treatment. The Group's commitments to the circular economy in the Engage 2025 strategic plan are presented in Section 2.2.4.4.1 Orange's environmental commitment.

In 2019, the Group generated 47,446 metric tons of internal waste, 4.2% less than in 2018, and recovered 84.5% of it, once again up 1.2 points from the previous year.

This indicator principally concerns waste generated in France (which accounts for 90.8% of the Group's waste) where there are clear procedures for identifying and treating waste. This information is harder to obtain in other countries.

The recovery rate in France is improving, reaching 83.8% of internal waste in 2019 compared to 83.1% in 2018.

Optimizing the life cycle and end-of-life equipment

The Group acts in several complementary ways:

- optimizing the management of waste and end-of-life equipment generated internally, by implementing processing suited to each category of waste and ensuring that they are traceable;

⁽¹⁾ The France scope covers Orange France, the Group's headquarters, Orange Marine and the entities of Orange Business Services operating in the country.

(2) Due to a lack of detailed data, in this table all Orange cables are listed under non-hazardous waste; However, some of the oldest cables contain hazardous substances, and are therefore processed ad hoc at the end of their life.

 collecting and processing used electronic equipment from customers through approved external partners or collective sectors (where they exist).

Although in the European countries, the implementation of suitable systems is already well under way, the emergence of new circular economy models will, in particular, involve the development of recycling, using appropriate systems in countries where there is currently no structured waste management industry.

Since 2010, Orange has teamed up with Emmaüs International and *Ateliers du Bocage*, a company in the social and solidarity employment sector, to open mobile waste collection workshops in Africa. In the absence of efficient local recycling structures, the collected waste is amassed and then recycled in France per European environmental standards. These workshops have opened in five countries (Burkina Faso, Benin, Cameroon, Côte d'Ivoire and Niger), have created 30 local jobs, and collect on average 12 metric tons of mobile phones annually, with more than 2.4 million mobiles collected.

Giving equipment a second life

To reduce the impact of electronic waste on the environment, Orange strives to ensure obsolete devices are re-used or are dismantled for recycling, in accordance with environmental standards in force.

Internally, Orange has a "marketplace", a platform where network equipment can be reconditioned and re-used, with the support of the manufacturers who guarantee its correct functioning. The re-use might be due to a change in technology between countries, or technological redeployment between different geographical areas.

Tons of Waste Electrical and Electronic Equipment (WEEE) collected from customers has significantly increased at Group level, reaching 3,745 metric tons in 2019 (+37.0% in 2018). As with internal waste, this indicator mainly represents waste collected in France (France represents 90% of WEEE waste collected by the Group).

The recovery rate of customers' WEEE at Group level was more or less unchanged at 82.2% in 2019, (compared with 82.7% in 2018). In France, the recovery rate of customers' WEEE decreased slightly (83.8% in 2019 compared with 86.2% in 2018), but the actual amount of WEEE recovered rose from 2,463 metric tons in 2018 to over 3,380 metric tons in 2019.

In 2019, the handset collection rate was 16.3% over all the European countries in the Group, an increase of +0.9 points compared to 2018, with 1.6 million handsets collected, over 14.7 million since 2010. This increase is mainly due to France.

Two handset collection systems exist side by side:

- some countries have made collection schemes part of their business models, incorporating handset recovery or promoting environmental responsibility. Collection rates in France and Romania, for example, are above 20%. In France, the "Orange Reprise" program allows users to return with benefit their old phone after an assessment since 2013. The collection rate therefore reached 30% in France over the last quarter of 2019, with over 1.1 million handsets collected during the year; in other countries, independent resellers or collectors play this role, leaving Orange subsidiaries with much lower collection rates.

To facilitate recycling, Orange has been distributing the *Fairphone* mobile terminal on the French market since 2017. Fairphone 3, which is adaptable and repairable and can extend the average life of a phone by two years compared to other smartphones, was designed using recycled materials such as copper or plastic and minerals from non-conflict zones; since its launch in September 2019, it has been distributed by Orange.

The circular economy in action: Livebox and decoders

As an exemple, Orange has applied the principle of the circular economy by setting up a process for the eco-design, collection and reconditioning of *Livebox* and Decoders, with the aim of reducing their environmental footprint, reusing the resources and making significant savings.

The reconditioning requirement is included from the design stage and continued throughout the life cycle of the products. Orange and its suppliers joined forces to eco-design these products so that they can be disassembled and upgraded simply and easily. As part of the strategy undertaken with *Livebox 4* and the TV UHD decoder, Orange has worked with its ecosystem of partners to improve production and reduce by 29% the carbon footprint of the new *Livebox 5*, launched in 2019, with a 100% recycled plastic shell, lighter, more compact manufacture, fewer electronic components and a new design that enables passive ventilation without a ventilator.

A meticulously run and monitored collection scheme ensures that as many used products as possible are recovered, sorted, tested, rebooted and reconditioned as new so that they can be reused several times in their life cycles.

In 2019, the collection rate of multimedia equipment in Europe (Liveboxes, Set-top Boxes, Airboxes) reached around 90%, thanks to the above programs, with the collection of 2.7 million units in France, 0.5 million in Spain, 0.3 million in Poland and 0.05 million in Belgium. Those equipments are tested, repaired and reconditioned in line with the principles of the circular economy, so that it can be re-used up to five times. In 2019, the reconditioning specifications were reviewed, delivering a gain in efficiency of around 15%.

4.4.1.2 Use of rare and critical resources

Since 2011, Orange has applied a process aimed at taking into account issues associated with the rare and critical resources used in the Group's products:

- a database, updated regularly and containing data sheets on each material, serves as the basis for carrying out risk analyses and seeking alternative resources. Discussions are held with suppliers to encourage them to limit the use of these resources and favor alternative and recycled resources;
- the Group has opened discussions with industrial operators in various sectors and public authorities to support the development of efficient channels to exploit the vast reserves of scarce resources contained within WEEE – veritable "urban mines" that may contain up to 40 times more recoverable minerals than there are underground.

4.4.1.3 Other impacts on the environment

Impact on fauna and flora

In 2013, Orange undertook a risk assessment in relation to its core businesses (networks, service activities, transport) and opportunities associated with the use of information and communication technologies (ICT), in order to assess its impacts on biodiversity. This study was conducted in accordance with methodology of the WBCSD (World Business Council for Sustainable Development), and showed that the Group's impacts are generally low. The main impact is related to CO_2 emissions, which are responsible for climate change, a major cause of loss of biodiversity.

Orange thus participates in biodiversity studies, particularly:

- within its partnership with CREA (Alpine ecosystems research center), in which Orange offers CREA access to its antennas located in mountain areas and equips them with sensors to gather information on temperatures in the Mont Blanc region. Orange contributes to the processing and presentation of data to the scientific community and the general public, and volunteer employees ensure the maintenance of the dedicated equipment and participate in observations of the fauna and flora of the Alps. This initiative was recognized by the United Nations during the COP23, CREA Mont-Blanc and Orange were the 2017 recipients of the Momentum for Change prize;
- in another area, in partnership with ARGO (an international consortium launched in 2000 by the Intergovernmental Oceanographic Commission of UNESCO and the World Meteorological Organization), Orange Marine helped develop and maintain a global network of profiling floats, measuring the temperature and salinity of the oceans in real time.

Soil use

The Group does not extend its control to the soil, except for the buildings in which it operates (offices and Data centers).

Incorporation of nuisance specific to the activities of a telecommunications operator

Radio mobile antennas can sometimes be visually challenging. In some countries (France and Egypt, among others), the Group has undertaken to blend a number of antennae into the environment and landscape by adapting them to the local style and context (painting, incorporation in buildings, etc.).

The Group's activity does not generate noise pollution.

Paper consumption

For several years Orange has implemented programs to reduce paper consumption and to use FSC and/or recycled paper.

Water consumption

The main sources of water consumption in the Orange group are water fountains, toilets, canteens and the humidification systems of Data centers.

Releases into the air, soil and water

The only other substances released into the environment, with the exception of CO_2 emissions, are HCFCs used in cooling systems. Whenever possible, HCFCs are replaced with HFCs and systems such as optimized ventilation and free cooling are used to reduce consumption of air conditioners.

Food waste

In the context of the Group's activities, this issue is to do with catering at the company which is mainly outsourced.

4.4.2 Toward a lower impact on the environment and the climate

Environmental performance	Units		2019		2018	2017
(energy)		France ⁽¹⁾	Rest of the World	Group Values	Group Values	Group Values
Facilities presenting a risk						
Fuel tank units	units	1,369	2,668	4,037	4,255	4,228
Energy consumption – Scope 1						
Fuel oil (all buildings and all uses) Gas Coal Fuel - Gasoline-LPG for company cars - Diesel for company vehicles Total Energy Scope 1	m³ m³ metric tons liters liters GWh	12,825 11,763,009 na 21,180,725 4,181,827 16,998,898 480	47,684 3,169,515 51 12,244,899 4,038,301 8,206,598 705	60,509 14,932,524 51 33,425,624 8,220,128 25,205,496 ✓✓ 1,184	66,931 19,995,141 56 36,040,004 5,997,432 30,042,572 1,340	72,163 17,884,871 71 35,253,976 3,408,576 31,845,400 1,373
Scope 1 CO ₂ emissions (energy only) – CO ₂ emissions from fuel oil, gas and coal – CO ₂ emissions from vehicles CO ₂ emissions from greenhouse gases (refrigerants)	metric tons CO ₂ metric tons CO ₂ metric tons CO ₂ metric tons CO ₂	121,615 66,276 55,339	167,823 136,490 31,333 6,198	289,437 202,766 86,671 6,198	316,212 219,321 96,891 17,478	325,036 229,349 95,687 6,723
Scope 1 CO ₂ emissions	metric tons CO ₂	121,615	174,021	√√ 295,636	333,690	331,759
Emissions avoided with external projects (2)	metric tons eq CO ₂	<u> </u>	(2,405)	(2,405)	(2,229)	(2,154)
Energy consumption – Scope 2	_					
Electricity of which renewable - Electricity supply from renewable sources	GWh GWh	2,246	2,138 <i>542</i>	✓ 4,384 542	4,357 <i>52</i> 6	4,299 <i>4</i> 93
with certificate of guarantee of origin – Electricity supply from renewable sources from ESCo contracts or solar farms, or internal solar production	GWh	-	482	482		
 Electricity supply from renewable sources from PPAs 	GWh	-	_	-		
Scope 2 CO ₂ emissions	metric tons CO,	117,473	889,572	√√ 1,007,045	1,043,144	1,001,900
Total energy consumption (Scope 1 and 2)	GWh	2,726	2,843	5,569	5,698	5,889
Total CO ₂ emissions (Scope 1 + Scope 2)	metric tons CO ₂	239,088	1,063,593	1,302,681	1,376,834	1,333,659
Energy consumption – Scope 3						
Flight distance for business trips Train distance for business trips	km km	174,437,635 95,204,758	77,551,265 10,285,343	251,988,900 105,490,101	246,564,097 91,033,830	250,765,793 94,097,363
Scope 3 CO ₂ emissions	metric tons CO ₂	41,693	18,418	√√ 60,111	46,170	47,041
Total CO ₂ emissions (Scope 1 + Scope 2 + Scope 3)	metric tons CO ₂	280,781	1,082,010	√√ 1,362,791	1,423,004	1,380,700
NA: not applicable						

Since the values are rounded up, the Group values may not be the sum of the "France" and "Rest of World" values.

For the third year in a row, in 2019 Orange reached its 2020 goal of halving its CO₂ emissions per customer use compared to 2006 (they fell by \checkmark 64.2%). Furthermore, Scope 1 & 2 $\mathrm{CO_2}$ emissions were down from 2018.

This objective was defined on the basis of a sample of ten countries plus Orange Business Services, representing 84.5% of the Group's CO₂ emissions.

The "customer usages" identified are fixed voice or mobile, TV, Internet access or data transfer. Thus, an Open pack includes four or five usages depending on the range: fixed Internet access, fixed-line telephony, Orange TV, mobile voice and possibly mobile data. Internet

datacards account for one usage, and mobile phones account for one usage or two for a smartphone. To ensure maximum transparency, this methodology was prepared by an independent external provider and audited by an external auditor.

The purchase of green energy with certificate of guarantee of origin in Spain and Belgium as well as the production of electricity from renewable sources by Orange on its solar farms are taken into account in the calculation of the indicator. As a result, the 2019 performance for this indicator should not be compared with the 56.6% reduction in CO₂ emissions compared with 2006, published in 2018, but rather with the 2018 comparable basis figure of -61.2%.

The France scope covers Orange France, the Group's headquarters, Orange Marine and the entities of Orange Business Services operating in the country.

 ⁽²⁾ Orange is part of the Net Zero Initiative. According to the latter's 2019 recommendations, the emissions avoided by projects external to the Group are not excluded from Scope 1 of the Group's emissions; the values of CO₂ Scope 1 emissions in 2017 and 2018 have been revised accordingly.
 Item reviewed by KPMG: reasonable assurance.

Indeed, the Group's Scope 1 $\&\,2\,\mathrm{CO}_2$ emissions for these ten countries plus Orange Business Services fell by 4.6% in 2019 compared with 2018 (5.4% decline in Scope 1 $\&\,2\,\mathrm{CO}_2$ emissions within the Group) as a result of sharply contrasting trends: it is mainly because higher emissions in France, Spain, Morocco and Senegal were more than offset the lower emissions in Poland and Jordan.

Increased emissions of 3.3% in France between 2018 and 2019 is due to higher emissions factors set by the International Energy Agency (IEA), but energy consumption actually fell by 0.7% over the same period.

In Spain, the consumption of fuel oil used on the back-up network and for rural off-grid sites increased in 2019, due to a change in the calculation methodology (revised estimates thanks to new data from suppliers) and due to an increase in the number of sites in rural areas not served by the national network (increased coverage of the Orange Spain mobile network), which impacts Scope 1 emissions upwards.

In 2019, Orange Spain used electricity from renewable sources for all of its electricity consumption (Scope 2) through consumption contracts with Guarantee of Origin (GoO) from its suppliers; considering the CO, emission factor from Spain's energy mix, it corresponds to 92,959 tons of CO₂ avoided in 2019, i.e. 7.1% of the Group's emissions (Scopes 1 & 2). It may be noted that Orange Spain's electricity consumption declared until 2018 covered an estimate of the electricity consumed by Orange equipment located in third-party operator sites (OT), as well as the entire electricity consumption of the Orange Spain sites, although they host third-party equipments, thus inducing an overestimation of the network's electricity consumption. In 2019, only the electricity purchased by Orange Spain for its own sites is accounted for, since the network agreement concluded between various operators is substantially balanced. This new calculation method thus makes it possible to cover electricity costs under the scope covered by the ISO 14001 standard.

Meanwhile, the reduction in ${\rm CO_2}$ emissions (down 5.5% between 2018 and 2019) in Poland, thanks to the reduction in energy consumption (down 2.7% between 2018 and 2019) has been magnified by lower factors set by the IEA for Poland.

In Jordan, Orange has profoundly modified its sources of electricity supply, by using its own solar energy resources up to 52.3 GWh, corresponding to 62% of Orange Jordan's total electricity consumption in 2019. The commissioning of three solar farms in 2019 allows releasing a full year capacity corresponding to 70% of the electricity needs estimated for Orange Jordan in 2020.

Considering the $\rm CO_2$ emission factor from Jordan's energy mix, it corresponds to 25,996 tons of $\rm CO_2$ avoided in 2019, i.e. 2.0% of the Group's emissions (Scopes 1&2).

It should be noted that in 2019, Orange Belgium used electricity from renewable sources for all of its electricity consumption (Scope 2) through consumption contracts with Guarantee of Origin (GoO) from its suppliers; considering the $\rm CO_2$ emission factor from Belgium's energy mix, it corresponds to 17,750 tons of $\rm CO_2$ avoided in 2019, i.e. 1.4% of the Group's emissions (Scopes 1&2).

As part of its strategic plan "Engage 2025", Orange has undertaken the following commitments:

- reduce its CO₂ emissions by 30% at the end of the plan, compared to 2015:
- meet more than 50% of its electricity needs from renewable sources at the end of the plan. At the end of 2019 and taking into account both its own actions and the energy mix of the countries in which it operates, Orange meets 26% of its electricity needs from renewable sources.

4.4.2.1 Network energy consumption

A massive energy action plan, *Green ITN 2020*, was undertaken in 2008 to reduce energy consumption related to the operation of networks and information systems, which account for 84.0% of the Group's total consumption and 81.6% of $\rm CO_2$ emissions (including network equipment in buildings). Implemented in most countries where the Group is active, this action plan enabled Scope 1 & 2 energy consumption to be restricted to a +0.1% between 2019 and 2018, despite uses continuing to increase (up 3.9% in the most representative countries selected for the Group's $\rm CO_2$ per customer use indicator). For the 2 largest energy consumers of the Group:

- the change in energy consumption related to information networks and systems between 2019 and 2018 amounted to +3.8% for France, attributable to the increase in the number of mobile sites with the coverage of white areas and the continued deployment of 4G. From 2014 to 2018, the volume of data transported for mobiles had multiplied 7 times, and the energy performance during the same period had improved by 80% (i.e. quantity of electricity to transport 1 Giga bytes);
- the change in energy consumption linked to networks and IT between 2019 and 2018 amounted to -1.4% for Poland.

Thanks to this action plan, between 2010 and 2019, at least 5 TWh of electricity and 260 million liters of fuel oil were saved within the network and IT scope. These savings prevented the release of at least 2,7 million metric tons of CO_2 over the period.

These results were made possible by a series of measures introduced, particularly increased cooperation with equipment suppliers with a view to developing and obtaining highly energy-efficient telecommunication equipment by 2020.

In 2019, Orange continued its efforts to reduce the energy consumed by its cooling systems significantly. To this end, effort has gone into liquid cooling systems, a technology which allows heat dissipated by telecoms equipment and servers to be collected as close as possible to the components, without needing to cool the liquid beforehand using a cooling system, and also allows some of that energy to be reused for office heating.

At Orange's initiative, a European standard has been developed to speed up the development of this technology. In addition, water-cooled network equipment has already been deployed at an equipment bay level with very promising results. Next it will be applied to servers.

The Group is rationalizing its Data centers, virtualizing servers and renewing the most energy-consuming equipment in order to benefit from new, less energy-consuming technologies. In France, following the example of the first eco-efficient Data center commissioned in 2012, Orange has undertaken large-scale work to build two new Data centers, which will replace ten sites across the country. At equivalent capacity, the eco-efficient data center consumes 30% less than the old ones.

In light of the need to prioritize the procurement of the most energy-efficient equipment, research has gone into measuring the amount of energy consumed by servers in relation to the service they provide. Several scientific papers have been published on the topic. The goal is to develop an energy consumption model for Data centers.

Following the 400 V DC energy supply pilot project launched in 2017, Orange France has implemented this model when building new facilities or upgrading existing ones.

In Africa and the Middle East, Orange continued rolling out solar power at the radio sites in the region, with more than 2,800 sites operational in 2019

Orange is also working with energy service companies (ESCOs) throughout the Middle East and Africa. The aim is to outsource investment, installation, modernization and operational management of the electrical generation infrastructures with a view to optimizing electricity consumption, supply reliability, its environmental impact and energy expenses. These projects have been implemented in the Democratic Republic of the Congo, Niger, Guinea Conakry, Côte d'Ivoire and Burkina Faso and in 2019 in Sierra Leone, Central African Republic and Liberia. This reduces fuel consumption by up to 80% (depending on the site). The implementation of this program should continue in other countries in the area in 2020.

4.4.2.2 Other energy consumption

Reducing emissions from buildings

Tertiary buildings account for 10.1% of the Group's energy consumption and 11.7% of CO₂ emissions, down by 15.9% compared with 2018.

In France, the energy action plan covers all aspects of buildings: heating, ventilation, air conditioning, lighting, etc. The installation of meters that measures multi-fluid use continued to expand, and now covers 140 of the largest service and mixed sites. Audits and inspections of service providers continued, in order to identify opportunities to optimize the energy management of a building. In 2019, Orange cemented its real estate energy and environmental policy with the renewal of its ISO 50001 certification and a newly operational HQE Global Management System. Orange was awarded once again in 2019 by winning first place at the IFPEB's CUBE 2020 Contest (French Institute for Building Efficiency).

In all European countries, tools for measuring the energy consumption of computer and office equipment have been set up so as to optimize energy consumption. Since optimization policies were established in 2015, several countries have reduced this equipment's energy use by 30%-50% due to better control of the equipment, in particular outside working hours.

Reducing transport emissions

Business travel accounts for 5.9% of the Group's energy consumption, down by 8% compared with 2018, and 6.7% of CO_2 emissions. Using electrified vehicles, limiting business travel, and promoting cooperative and responsible modes of transport: Orange is exploring innovative technological and people-oriented solutions to reduce its emissions.

The Group has a large fleet of company vehicles in Africa and especially in Europe, with France representing three-fourth of the Group's fleet.

The size of the fleet in France has been constantly decreasing by an average 3.5% per year since 2015, down to 17,500 vehicles at the end of 2019, with the aim of continuing this decrease by around a thousand vehicles by 2025. In France, Orange is now making the renewal of its fleet mandatory by eliminating Diesel technology, which emits fine particles (NO $_{\chi}$), and boosting the deployment of electrified vehicles to control its CO $_{2}$ emissions.

At the end of 2019, Orange was using more than 900 electrified vehicles. More than 600 recharging points had been networked this year on nearly 200 Orange sites, enabling the supervision and

administration of the charging stations in question. Each user of Orange's rechargeable electric vehicle has a web tool and a mobile application including the mapping of these charging stations and the possibility of booking them. Finally, these very vehicles are equipped with cards giving them access to a network of 15,000 public charging stations. The Group's aim is to be equipped with 7,000 electrified vehicles by 2025.

Launched in 2013 with around 100 vehicles, the car-sharing fleet had 2,600 dedicated vehicles at the end of 2019. Orange thus has the first car-sharing fleet in France and in Europe and wishes to continue optimizing this fleet with 6,000 shared vehicles in 2025.

Furthermore, several Group entities have introduced plans to limit the use of private cars (company travel plans, carpooling, car-sharing, road risk management and eco-driving training courses, etc.).

Employees moreover have solutions allowing them to reduce business travel (videoconferencing and other tools for remote collaborative work). Orange has around 270 video conference rooms in France and close to an additional 100 in the rest of the world. The usage rate for these rooms is globally around 15% and promise excellent prospects of change.

4.4.2.3 Alignment with TCFD recommendations

In the context of the committee monitoring the TCFD, Orange has prepared a cross-reference table enabling Orange's response to each of the TCFD recommendations to be identified. Orange will add to the table as it continues to align its operations with the TCFD's recommendations.

For the purposes of the table, Orange defines short-term as the completion of its 2020 Strategic plan, medium-term as its Engage 2025 strategic plan covering 2020-2025 and long-term as 2050.

The Group has already aligned significantly to the nine recommendations identified by Orange. Furthermore, recommendation no. 5 was also the subject of additional work in 2019:

- as a member of the International Telecommunication Union (ITU), since 2018 Orange has helped to draw up a sector methodology for measuring the contribution of ICTs in a 1.5°C scenario. This work is carried out in cooperation with the GSMA, GeSI, the International Energy Agency and SBTi. The associated ITU-T L. 1470 recommendation is available at the end of March 2020⁽¹⁾;
- Orange also carried out a climate-risk assessment project, which aims at determining the physical resilience of its businesses to be determined in relation to a more than 3°C warming scenario compared with the pre-industrial age (equivalent to IPCC scenario RCP4.5). This project, initially carried out on the scope of France, consisted of reviewing past effects according to climatic hazards and network components (data center, access node, cables, poles, antennas, etc.). Climatic sensitivity thresholds have thus been identified, focusing on the most risky hazards (heat waves, strong winds, intense precipitation, lightning strikes, wild fires). These climate indicators were then projected according to two time horizons (2030 and 2050), based on data from Météo France. The project was subsequently extended to the other countries where the Group is present, to project climate indicators by 2030 and based on data from 4 climate models used in the work of the IPCC⁽²⁾.

⁽¹⁾ https://www.itu.int/rec/T-REC-L.1470

⁽²⁾ HadGEM2-ES, GFDL-CM3, CNRM-CM5, CSIRO-Mk3-6-0.

	TCFD recommendations	Section in 2019 Universal Registration Document
Governance	(1) Describe the Board's oversight of climate-related risks and opportunities	5.2.1.8 Board and committee activities during the fiscal year 5.2.2.1 Form of exercise of General Management 2.2.4.4.2 Environmental monitoring framework
	(2) Describe management's role in assessing and managing climate-related risks and opportunities	2.2.2 Group Corporate Social Responsibility 5.2.1.6 Board of Directors 5.2.1.8 Board and committee activities during the fiscal year
Strategy	(3) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	2.1.4 Non-financial risks 4.3.2 Business opportunities associated with basic services 4.4.3 Business opportunities associated with reducing environmental effects
	(4) Describe the effect of climate-related risks and opportunities on strategy, markets and financial planning	4.4.2.3 Alignment with TCFD recommendations
	(5) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	4.4.2.3 Alignment with TCFD recommendations
Risk management	(6) Describe the processes for identifying and assessing climate-related risks	2.2.1 Group Audit, Control and Risk Management
	(7) Describe the organization's processes for managing climate-related risks	2.2.1 Group Audit, Control and Risk Management 4.4.2.1 Network energy consumption 4.4.2.2 Other energy consumption
	(8) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	2.2.1 Group Audit, Control and Risk Management 2.1.4 Non-financial risks
Metrics and Targets	(9) Highlight the metrics used by the organization to assess climate-related risks and opportunities	4.4.2 Toward a lower effect on the environment and the climate
	(10) Highlight Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks	4.4.2 Toward a lower effect on the environment and the climate
	(11) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	1.2.2 Group strategy 1.2.3 Business model 2.2.4.4.1 Orange's environmental commitment 4.4.1.1 Waste prevention and management

4.4.3 Business opportunities associated with reducing environmental impact

Orange is developing innovative tools for agriculture, cities and shared mobility to implement the circular economy and improve energy consumption (see Section 4.3.1 *Business opportunities associated with digital inclusion* and Section 4.3.2 *Business opportunities associated with basic services*). Orange Business Services offers remote work, videoconferencing and virtual IT infrastructure services

that under certain conditions reduce greenhouse gas emissions (see Section 1.4.5 *Enterprise*).

Orange also offers and implements tools that significantly improve climate change monitoring and raise public awareness (see Section 4.4.1.3 Other impacts on the environment).

Note on methodology - Environment

Reporting scope

The data shown cover the entire consolidated financial scope, unless otherwise clearly specified.

Orange Business Services International

The reporting by Orange Business Services internationally was limited to 11 countries (or 103 sites) out of the $74^{(1)}$ where it operates. These countries represent 82% of the OBS International workforce and 67% of the occupied floor space of its buildings (in square meters), namely, Australia, Brazil, Switzerland, Egypt, Germany, India, Mauritius, Russia, Singapore, United States and the United Kingdom.

As regards the consumption of electrical energy, the OBS International reporting is based on 296 sites in 39 $^{(2)}$ countries where OBS is located. These countries represent 88% of the occupied floor space of its buildings (in square meters) outside of France.

Elettra

Elettra, a subsidiary of the Orange group with a cable ships business, is excluded from the reporting scope as of date.

Reporting methodology

The environmental reporting of this chapter is based on a non-financial information system. The key indicators are subject to quarterly reporting at the country level and indicators of lesser materiality for the Group are reported on every six months or even annually.

Values relating to the fourth quarter may have been estimated in the event of non-availability of data within the time frame required for publication. This is particularly the case for Orange France data.

The changes in methodology that had a Group-level effect greater than or equal to 5% of the indicator or a country-level effect greater than or equal to 20% of the indicator, and data updates following receipt of actual figures that had a major effect on the Group are calculated on a comparable basis (pro forma). This adjusted data in the report is marked with an asterisk.

Characteristics of the indicators

Environmental Management System

The KPI "Group ISO 14001 certification rate" is the ratio of electrical energy consumed by all areas of the Group that are ISO 14001 certified over the total electrical energy consumed by the Group.

It is calculated across the entities or divisions consolidated by the Group. France has "site" and "process" certifications for several entities or divisions (Orange France, OBS, Orange Marine).

Energy

The energy used by Data centers, buildings, and shops is calculated using the online control tool that measures and controls in real time all of the buildings' systems, including IT, air conditioning, UPS, etc.

The consumption of energy of the Orange France network is partly based on an estimate. Energy use by the Orange Spain network is extrapolated based on invoices supplied by the electricity supply

companies. The electricity consumption of Poland is calculated using a statistical sampling of invoices received during the year.

The "fuel oil consumption (all buildings and all uses)" indicator comprises consumption (excluding vehicles) of domestic fuel oil, diesel and gasoline, as well as marine heavy fuel oil and diesel for Orange Marine's fleet.

Energy consumption of office space, in particular the shops, that is not invoiced directly to the Orange group is not recognized. The consumption of energy from urban heating plants is not recognized due to the difficulty of estimating the associated CO₂ emissions.

Orange Spain's situation with regard to electricity consumption is subject to a special feature due to the network sharing agreements in this country. Orange Spain's electricity consumption declared until 2018 covers an estimate of the electricity consumed by Orange equipment located in third-party operator sites (OT), as well as the entire electricity consumption of the Orange Spain sites, although they host third-party equipment, thus inducing an overestimation of the network's electricity consumption. In 2019, only the electricity purchased by Orange Spain for its own sites is accounted for, since the network agreement concluded between various operators is substantially balanced. This new calculation method thus makes it possible to cover electricity costs under the scope covered by the ISO 14001 standard.

Greenhouse gas emissions

For emissions linked to electricity consumption, the emission factors of the IEA (International Energy Agency), in its updated version of January 2018, have been used for all countries, with no restatement of previous data. The coefficients used for the other fuels (natural gas, fuel oil, coal, gasoline, diesel fuel and LPG) come from the GHG Protocol.

Orange Belgium and Orange Spain have used green energy for all of their electricity consumption (Scope 2) through consumption contracts with Guarantee of Origin (GoO) from their suppliers. Their GHG emissions linked to their electricity consumption are therefore recorded at zero.

Refrigerant emissions are not exhaustive; even though this emissions item is negligible (Carbon 4 study on the Group's Bilan Carbone), the Group is working to improve monitoring of these emissions.

As far as transport is concerned, the $\rm CO_2$ emissions from "short haul" air travel of the GHG Protocol (180 g $\rm CO_2$ /km passenger) were used for all flights (short-, medium- and long-haul). Besides, the $\rm CO_2$ emission factor for train travel was determined using the "Bilan CarboneTM" method when it is available for the country in question. In the other countries, a standard factor of 100 g $\rm CO_2$ /km passenger is used.

Mobile phones collected

Calculation of mobile phones collected takes into consideration five collection streams: responsible citizen collection, collection of mobile phone waste in Africa, Retail redemption offers, Enterprise redemption offers, and commercial returns. The percentage is calculated by dividing the number of mobile handsets collected by the number of mobile handsets sold by Orange through controlled channels, over the same period.

⁽¹⁾ Excluding France

^{(2) 37} countries with Accenture, as well as Egypt and Russia.

Suppliers and subcontractors

Evacuated waste and recovered waste

Evacuated waste is waste that is no longer stored on Group premises or that is no longer under its direct control, as it is entrusted to a service provider or an external organization, with or without a financial transaction. Recovered waste is waste that has been recovered in the form of reuse, recycling, material or energy recovery. These concepts apply for the European countries.

For the non-European countries, and taking into consideration the gradual set-up of structures, the amounts of recycled waste concern, more broadly, all amounts of waste evacuated and that have been

Despite the continuation of the process of identifying and collecting information on some local waste management providers, waste indicators are not exhaustive on the one hand, due to the continuous work of identifying and retaining the waste collection and treatment procedures in the MEA region; on the other hand, due to difficulties in accessing data within the framework of contracts for the outsourcing of network operation in certain countries of the Europe zone.

- Fluorescent bulbs, PCB (polychlorinated biphenyls), and printer cartridge waste has been accounted for under "Other hazardous
- Different specific service providers are involved according to the type of waste concerned (copper cables, paper, network equipment, batteries, wooden poles, etc.). Special attention is given to wooden poles in order to prohibit their reuse, taking into consideration regulatory restrictions, and to ensure their adequate elimination.
- For leased sites, household or similar waste is not recoded as it is managed by the lessors.
- The WEEE (Waste Electrical and Electronic Equipment) collected from retail customers are WEEE (mobile handsets, fixed handsets and multimedia) returned to sales points, sent by mail or collected by service providers on behalf of Orange.

This indicator includes the mobile telephones of the Group's employees. This includes batteries and rechargeable cells that are part of equipment when it is returned by customers, and the other types of batteries and rechargeable cells collected separately at the various collection points.

France

Likewise, for tertiary and network waste not including customer WEEE, only waste handled by a service provider that has signed a framework agreement with the Orange group is added to the reporting, except for a limited number of Orange Marine wastes. These service providers represent majority of the waste handled.

For the 2019 fiscal year, Network WEEE data for the third and fourth quarters is not yet available and has been estimated.

The waste from the dismantling of telephone booths is included in the "Other non-toxic waste" indicators for aluminum, stainless steel, steel, glass and "WEEE network" for WEEE.

For OBS, reused WEEE waste is recognized as recovered, and action plans are being implemented to increase reporting coverage.

WEEE from Business customers (OBS France) are not recognized in this WEEE customer indicator but in the internal WEEE indicator (network).

Water

The main sources of water consumption in the Orange group are water fountains, toilets, canteens and the humidification systems of Data centers. The company restaurants are the sole responsibility of the Works Councils and are not included in the Orange group's consolidation scope.

Following an evaluation, the Group believes that the volumes involved are not significant enough to warrant setting up a restrictive and verifiable process of collecting and consolidating data on water

4.5 Suppliers and subcontractors

At Group level, a responsible purchasing policy continues. The progress of the approach led Orange to rethink its monitoring KPIs in 2019: indeed, the focus on the introduction of the CSR clause in the new contracts signed (or renewed) during the year became widespread (see Section 2.2.4.5 Management framework for suppliers and subcontractors), and the buyers' training program on CSR issues in the supply chain is now an integral part of the Group's processes. Monitoring the implementation of CSR in purchasing within the Group currently covers a scope of 27 entities.

	2019	2018
entities that declared having introduced the CSR clause in more than 80% of the contracts signed % of contracts signed including the CSR clause	100% 96%	70%
entities that trained more than 80% of their buyers % of buyers having followed dedicated CSR training during the last two years	93% 96%	62%

4.5.1 New supplier assessment program for the subsidiaries of Orange

In January 2019, Orange defined a new supplier assessment program oriented towards local suppliers, which is gradually being integrated by the subsidiaries. Its main objective is to increase the visibility of suppliers' CSR performance in order to mitigate risks better and support those who must strengthen their efforts on the path of sustainability.

This new initiative involves the assessment of local suppliers belonging to the high-risk category, with a significant annual order value. In order to guarantee the independence and quality of the CSR analysis, supplier assessments were entrusted to a partner recognized in this field, whose methodology is based on international CSR standards and guidelines such as UNGC, ISO26000, ILO or CDI

In 2019, nine entities participated in this program, including Orange France, Orange Spain, Orange Slovakia, Orange Moldova, Orange Jordan, Orange Egypt, Orange Cameroon, Orange Madagascar and Orange Bank. All these entities started assessments of local,

high CSR risk suppliers. In that year, 84 assessments were carried out among existing suppliers of Orange, apart from the 39 assessments that are underway. Among the suppliers already assessed, 31 (i.e. 37%) were identified as requiring an improvement in CSR performance. For these suppliers, the subsidiaries of Orange systematically request corrective action plans, and monitor them until these are completed.

In France, the approach was tested in the first half-year of 2019, after training buyers in collaboration with our partner, and then generalized in the second half-year of 2019. This first assessment (or reassessment) campaign focused on suppliers in the category of high CSR risk purchases under local contracts. The first few corrective action plans are requested and monitored over the year 2020.

During the assessments carried out at the time of calls for tenders, specific additional questionnaires can be sent to verify certain points of compliance, in particular.

4.5.2 On-site JAC audits

In addition to its coordinated on-site CSR audits (see Section 2.2.4.5 *Management framework for suppliers and subcontractors*) using its own resources, Orange works alongside other operators via the Joint Audit Cooperation (JAC) The JAC took a new scope since 2018 with the JAC Academy, a body whose objective is to train suppliers in the JAC's auditing methodology and incorporate it into their supply chains.

In 2019, JAC conducted 124 audits, including 71 on-site audits directly by the JAC, 20 by suppliers under the JAC Academy, 13 according to the VAP & FLA standard (Validated Assessment Program, Fair Labor Association) and 20 studies with workers, specifically on their working conditions. Audits of Tier-4 suppliers were conducted.

The JAC's on-site audits resulted in 567 corrective action plans, of which 43% addressed occupational health and safety requirements, 31% other working conditions, 10% business ethics and 16% the environment – affecting about 304,700 employees. 2019 closed 825 action plans relating to the current year or previous years.

Since 2010, the JAC has conducted a total of 639 audits in 37 countries (86% of the audited production facilities are located in Asia), improving the working conditions of around 1.3 million employees.

4.5.3 On-site audits in the MEA region

In 2019, 12 on-site audits were carried out by Orange and its subsidiaries in the MEA region, concerning local suppliers identified as potentially at high CSR risk. Many of them have resulted in the

establishment of a corrective action plan to be carried out by the supplier, monitored by Orange. This on-site audit program is intended to be renewed in 2020.

4.6 Duty of vigilance

In accordance with Law no. 2017-399 of March 27, 2017 on the duty of vigilance of parent companies and contracting companies, Orange's first vigilance plan was approved by the Shareholders' Meeting of May 4, 2018. It included a risk map, procedures for evaluating the position of subsidiaries, subcontractors and suppliers, appropriate actions for mitigating risks or preventing serious abuses, a whistleblowing mechanism and a mechanism for the collection of reports and a system for monitoring the measures taken.

Orange has since updated its information and prepared a new plan including the measures taken and an assessment of their effectiveness. The new plan is available on orange.com/Group/non-financial reporting. Its main implementation features are described in Section 2 (risk factors and management) and Section 4 (implementation of measures taken). See the Correspondence Table of the Management Report of the Board of Directors to the Shareholders' Meeting (Section 7.1.3).

2020 vigilance plan

It is part of the 2019 vigilance plan, while taking into account the Group's new orientations expressed through its strategic plan and covering the period 2020-2025, as well as Orange's purpose. Orange has specifically identified the exposure to physical and transient risks linked to climate change, and has committed to being Net Zero carbon by 2040. Orange has also committed to digital inclusion, to strengthen everyday digital freedom and security for people and organizations.

Strengthening governance

The vigilance plan and its report are presented to the GCSER Committee of the Group, before approval by the Board of Directors.

The new duties assumed by the Ethics Committee, made up in particular of the Group's executive directors, include in particular the definition of the Group's vigilance plan, the operational monitoring of its deployment and the associated reporting.

The Group CSR Department, in charge of effectively defining and implementing the plan, acts in coordination with the other Group functions and has created a vigilance plan monitoring group made up

of CSR, Internal Control, Risk Management, Compliance, Purchasing, Human Resources and Legal Management to use the tools and networks and communicate with Group entities and enable the appropriation and effective implementation of the action plans of the vigilance plan.

A cross-functional steering group was formed for the implementation of the plan (mainly CSR, Audit, Risk Control and Management and Legal Department), which met very regularly to define new operational directions and to better associate the subsidiaries and entities of the Group with actions linked to the implementation of the vigilance plan.

Each subsidiary or entity concerned by the plan has appointed a person in charge of implementing the vigilance plan within the subsidiary or entity considered.

The 2020 vigilance plan includes a risk map and repositions the risk of non-compliance with the law ("vigilance plan lacking or incomplete") taking account of the action plans implemented under the 2019 vigilance plan. A summary appears below:



In addition, the measure regarding the system for monitoring actions implemented and the assessment of their effectiveness was added to the 2020 plan and appears below:

2019 vigilance plan implementation report

The law on the duty of vigilance stipulates that a report on the implementation of the previous year's plan be published.

Orange's report is available at orange.com/Group/non-Financial Reporting. The main points can be found in Chapter 4 *Non-financial performance*.

Scope of implementation of the Plan

The plan will gradually be extended to all of the Group's consolidated entities

Based on a substantial but limited number of entities in 2018, it was extended in 2019 to cover the entities selected under the Sarbanes-Oxley program, the main divisions and/or departments of Orange SA and has been extended to subsidiaries with revenues of more than

100 million euros. The scope chosen for the implementation of the plan in 2019 thus covers 95% of the Group's consolidated revenue for 2019 (88.4% of Orange's revenue in 2018) and is based on the Group's risk management methodology.

Implementation

The vigilance plan steering committee has in particular developed an implementation kit for Group Entities to enable them to take ownership of their plan in a coordinated manner, using the tools implemented according to the Group's risk management methodology and thus deploy their action plan linked to the Group's vigilance plan. Internal audit was strongly involved, in particular, in the form of a questionnaire on CSR governance sent to all Group entities and subsidiaries and 56% answered it.

Monitoring the Plan by type of risk is summarized in the table below:

Risks	Governance	Indicators	2019	2018
Lack of or faulty vigilance plan				
Lack of risk identification in its operations and in those of its suppliers (risk mapping)	GCSER Ethics Committee Cross-functional steering group CSR & Procurement Steering Committee	oup CSR in the entity (in % of entities)		4%
Failure in the design of preventive measures	GCSER Ethics Committee Cross-functional steering group	Approval of the Plan in the entity's governance bodies (monitoring on the European scope)	71.4%	
Failures in the implementation of preventive measures: execution of operations and processes (control systems)	GCSER Ethics Committee BoD or Management Committee of the Entities Cross-functional steering group	Approval of the Plan in the entity's governance bodies (monitoring on the European scope)	71.4%	
Failure to provide evidence to authorities on time	Ethics Committee BoD or Management Committee of the Entities Cross-functional steering group	Appointment or designation of the person responsible for the vigilance plan in the entity (broadened SOX scope)	96%	
Human health, safety and security	1			
Physical or mental disability (death, occupational accident, occupational illness, disability, etc.)	GCSER ExecComm DPQVT CGM CSE	Frequency rate of occupational accidents (number of occupational accidents with lost time per million theoretical hours worked)	3.0%	3.3%
Deterioration of working conditions jeopardizing human health, safety and security	GCSER ExecComm DPQVT CGM CSE	Employee barometer: % of employees for whom "Orange provides a working environment guaranteeing health and safety"	84.3%	83.4%
Abuses of Human rights and fund	amental freedom			
Modern slavery or human trafficking within the framework of a known established contractual relationship	GCSER Ethics Committee CSR & Procurement Steering Committee	Number of action plans in the areas handled by the Joint Audit Cooperation	11	8
Non-decent working conditions at suppliers' and subcontractors': remuneration that does not allow an adequate standard of living, right to rest, etc.	GCSER Ethics Committee CSR & Procurement Steering Committee	Number of action plans in the areas handled by the Joint Audit Cooperation	149	119
3. Infringement of the child's right to harmonious education and development: prohibition of child labor, protection against content unsuitable for a young audience	GCSER Ethics Committee CSR & Procurement Steering Committee	Number of action plans in the areas handled by the Joint Audit Cooperation	9	12
Infringement of the freedom of association and right to collective bargaining on working conditions	GCSER Ethics Committee CSR & Procurement Steering Committee	Number of action plans in the areas handled by the Joint Audit Cooperation	7	7
Any act of discrimination: recruitment, work, salary, diversity, unfair procedures	GCSER Ethics Committee CSR & Procurement Steering Committee	Number of action plans in the areas handled by the Joint Audit Cooperation	140	22
Breach of the freedom of expression (in civil society)	GCSER Ethics Committee CSR division	Number of disconnection requests received from authorities	10	10
7. Violation of privacy	GCSER Ethics Committee CSR division	Number of customer data and interception requests received from authorities		337,921

Risks	Governance	Indicators	2019	2018
Environment				
Inadequate treatment of toxic waste (poles, batteries, etc.)	GCSER Ethics Committee Circular economy committee	% of hazardous waste recovery	98.2%	98.6%
Ineffective collection of used equipment (WEEE)	GCSER Ethics Committee Circular economy committee	% of mobiles collected in Europe	16.3%	15.5%
	GCSER Ethics Committee Circular economy committee	Box collection rate	Approx. 90%	
Circular economy (4R) not implemented in businesses (Marketing and Networks)	GCSER ExecComm Ethics Committee Circular economy committee	% progress on the roadmap of the Strategic circular economy committee	91%	
Failure to adapt to a 2°C world (related financial risks)	GCSER ExecComm Ethics Committee	CO ₂ emitted in tonnes	1,302,681	1,376,834
	GCSER ExecComm Ethics Committee Circular economy committee	Percentage of renewable electricity used	26%	-

GCSER: Governance and Corporate Social and Environmental Responsibility Committee.
DPQVT: Risk Prevention and Occupational Quality of Life Department.
WWC: Worldwide Works Council.
OHSWCC: Occupational Health & Safety and Working Conditions Committee.
CPGEC: Group Circular Economy Steering Committee.
ExecComm: Group Executive Committee.

4.7 Report by one of the Statutory Auditors

Report by one of the Statutory Auditors, appointed as an independent third party, on the Statement of Non-Financial Performance in the Management Report.

This is a free English translation of the Statutory Auditor's report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

For the year ended December 31, 2019

To the shareholders,

In our capacity as Statutory Auditor of your company (hereinafter the "entity") appointed as independent third party, and accredited by the French Accreditation Committee (*Comité Français d'Accréditation* or COFRAC) under number 3-1049 (1), we hereby report to you on the consolidated Statement of Non Financial Performance for the year ended December 31, 2019 (hereinafter the "Statement"), included in the Group Management Report pursuant to the requirements of articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code (*Code de commerce*).

Responsibility of the entity

The Management Board's is responsible for preparing the Statement, including a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are presented in the Statement and available upon request at the Company's headquarters.

Independence and quality control

Our independence is defined by the requirements of article L. 822-11-3 of the French Commercial Code and the French Code of Ethics (Code de déontologie) of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with applicable legal and regulatory requirements, the ethical requirements and French professional guidance.

Responsibility of the Statutory Auditor

On the basis of our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the Statement with the requirements of article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with article R. 225-105 I, 3° and II of the French Commercial Code, i.e., the outcomes, including key performance indicators, and the measures implemented considering the principal risks (hereinafter the "Information").

Our responsibility is also to provide a report expressing, at the request of the entity and outside of the scope of accreditation, a reasonable assurance conclusion that information selected by the entity, presented in Appendix 1 and identified with the symbol ✓ in chapter "Statement of Non-Financial Performance" has been prepared, in all material respects, in accordance with the Guidelines.

However, it is not our responsibility to comment on the entity's compliance with other applicable legal and regulatory requirements, in particular the French duty of care law and anti-corruption and tax avoidance legislation nor on the compliance of products and services with the applicable regulations.

Nature and scope of our work

The work described below was performed in accordance with the provisions of Article A.225-1 et seq. of the French Commercial Code, as well as with the professional guidance of the French Institute of Statutory Auditors (Compagnie nationale des commissaires aux comptes or CNCC) applicable to such engagements and with ISAE 3000 (2):

- we obtained an understanding of all consolidated entities' activities, and the description of the principal risks associated;
- we assessed the suitability of the criteria of the Guidelines with respect to their relevance, completeness, reliability, neutrality and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of social and environmental information set out in article L. 225-102-1 III as well as information regarding compliance with human rights and anti-corruption and tax avoidance legislation;
- we verified that the Statement provides the information required under article R. 225-105 II of the French Commercial Code, where relevant with respect to the principal risks and includes, where applicable, an explanation for the absence of the information required under article L. 225-102-1 III, paragraph 2 of the French Commercial Code;
- we verified that the Statement presents the business model and a
 description of principal risks associated with all the consolidated
 entities' activities, including where relevant and proportionate, the
 risks associated with their business relationships, their products or
 services, as well as their policies, measures and the outcomes
 thereof, including key performance indicators associated to the
 principal risks;
- we referred to documentary sources and conducted interviews to:
 - assess the process used to identify and confirm the principal risks as well as the consistency of the outcomes, including the key performance indicators used, with respect to the principal risks and the policies presented,
 - corroborate the qualitative information (measures and outcomes) that we considered to be the most important presented in Appendix 1. For all risks, our work was carried out at the level of the consolidating entity;
- we verified that the Statement covers the scope of consolidation, i.e. all the consolidated entities in accordance with article L. 233-16 of the French Commercial Code within the limitations set out in the Statement:
- we obtained an understanding of internal control and risk management procedures the entity has put in place and assessed the data collection process to ensure the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes that we considered to be the most important presented in Appendix 1, we implemented:

⁽¹⁾ Accreditation scope available at www.cofrac.fr

⁽²⁾ ISAE 3000: international standard on assurance engagements other than audits or reviews of historical financial information.

- analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
- tests of details, using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities⁽¹⁾ and covers between 65% and 98% of the consolidated data selected for these tests;
- we assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

We believe that the work carried out, based on our professional judgment, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures.

Means and resources

Our work was carried out by a team of twelve people between October 2019 and February 2020 and took a total of thirty weeks.

We were assisted in our work by our specialists in sustainable development and Corporate Social Responsibility. We conducted around fifty interviews with the individuals responsible for preparing the Statement from Risk Management, Compliance, Human Resources, Health and Safety, Environment and Purchasing departments.

Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the non-financial statement is not presented in accordance with the applicable regulatory requirements and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines, in all material respects.

Comments

Without modifying our conclusion and in accordance with article A. 225-3 of the French Commercial Code, we draw your attention to the following matters:

- improvements still need to be made in the organization of the reporting of social and health and safety related information, specifically with regard to the reporting of data by the overseas entities:
- for the calculation of indicators relating to training, the Group has extended the scope of reporting, which now covers 65% of the Group's consolidated workforce (compared to 54% in 2018), thanks to actions taken to improve the reliability of the information;
- for waste indicators, despite the continuation of the process of identifying and collecting information on some local waste management providers that are still immature, the data completeness from OMEA and Belgium subsidiaries can still be improved. It should be noted that Orange France contributes to approximately 91% of the waste tonnage reported.

Reasonable assurance report on a selection of non-financial information

Nature and scope of our work

With regard to the information selected by the entity presented in Appendix 1 and identified with the symbol ✓ in chapter "Statement of Non-Financial Performance", we conducted the same procedures as those described in the paragraph "Nature and scope of our work" (for the most important non-financial information). However, these procedures were more in-depth, particularly regarding the number of tests.

Consequently, the selected sample represents between 65% and 74% of the information identified with the symbol \checkmark .

We believe that these procedures enable us to express reasonable assurance regarding the information selected by the entity and identified with the symbol \checkmark .

Conclusion

In our opinion, the information selected by the entity and identified with the symbol \checkmark in chapter "Statement of Non-Financial Performance" has been prepared, in all material respects, in accordance with the Guidelines.

Paris-La Défense, on February 21st 2020

KPMG SA

Anne Garans Partner Sustainability Services Marie Guillemot

⁽¹⁾ Orange France, Orange Marine (France), Orange Polska (Poland), Orange Sénégal (Senegal), Orange Jordan, Orange Slovensko (Slovakia), Orange Romania, Orange Belgique (Belgium), Orange Spain, Orange Business Services (OBS), Orange Egypt, OBS Egypt.

Appendix 1

Qualitative information (actions and results) considered most important

Social policies in favour of talent retention

Quality of life at work and prevention of employees health and safety risks

Measures taken to promote diversity and equal opportunities

Measures taken to reduce greenhouse gas (GHG) emissions

Environmental footprint reduction policies

Internal systems to fight corruption and tax evasion

Measures taken in favor of human rights

Personal data management policies

Key performance indicators and other quantitative results considered most important

Number of employees – Active employees at the end of the period, by contract type, gender, age and geographical region % of women in the active workforce % of women in supervisory staff	Reasonable Reasonable Reasonable
% of women in the leaders' network	Reasonable
Number of permanent external recruitments	Reasonable
Number of definitive departures of permanent contracts	Reasonable
Number of permanent employee resignations	Reasonable
Number of permanent employee dismissals	Reasonable
Number of employee days of absence due to illness	Limited
Number of employee days of absence due to occupational accidents	Limited
Number of occupational accidents with lost time	Limited
Number of fatal occupational accidents	Limited
Frequency rate of occupational accidents	Limited
Severity rate of occupational accidents	Limited
Number of employees whose cases were classed as occupational illness	Limited
Number of training hours per employee	Limited
Proportion of the ISO 14001 certified scope	Reasonable
Total Scope 1 energy	Reasonable
Total electricity consumption	Reasonable
Total CO ₂ emissions (Scopes 1, 2 and 3) by customer usage	Reasonable
Mobile phones collection rate	Reasonable
Total internal evacuated waste	Limited
Rate of recovered internal waste	Limited

5 Corporate Governance

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5.1 Composition of management and supervisory bodies

5.1.1 Board of Directors

As of April 16, 2020, the date on which the Board of Directors approved the Chairman's Report on Corporate Governance and Internal Control, the Board comprised 15 members: the Chairman,

seven independent directors, three directors representing the public sector, three directors elected by the employees and one director representing employee shareholders.

Corporate Officer, Director

	Date first appointed	Term ending
Stéphane Richard	June 9, 2010 ⁽¹⁾	Following the 2022 Shareholders' Meeting

(1) Term of office renewed at the Shareholders' Meeting of May 27, 2014, and May 4, 2018.

Stéphane Richard, born in 1961, has been Chairman and Chief Executive Officer of Orange SA since March 1, 2011. He joined the Orange group in September 2009 and has successively occupied the positions of Deputy Managing Director in charge of French Operations, Delegate CEO and, starting on March 1, 2010, CEO. Between 1992 and 2003, Stéphane Richard was successively deputy to the CFO of Compagnie générale des eaux, CEO of Compagnie Immobilière Phénix and Chairman of CGIS (Compagnie générale d'immobilière et de services), now Nexity. From 2003 to 2007, he was Deputy Managing

Director of Veolia Environnement and CEO of Veolia Transport, as well as being a Director of Orange SA. From 2007 to 2009, Stéphane Richard was Chief of Staff to the French Minister for the Economy, Industry and Employment. He is also Director and Chairman of the Board of Directors of GSMA. Stéphane Richard is a graduate of École des hautes études commerciales (HEC) and École nationale d'administration (ENA). He is a Knight of the French Legion of Honor. He is a French national.

Independent directors

		Date first appointed	Term ending
Alexandre Bompard	Member of the Innovation and Technology Committee	December 7, 2016 ⁽¹⁾	Following the 2023 Shareholders' Meeting
Charles-Henri Filippi	Chairman of the GCSER Committee	February 5, 2008 ⁽²⁾	Following the 2020 Shareholders' Meeting
Anne-Gabrielle Heilbronner	Member of the GCSER Committee	May 21, 2019	Following the 2023 Shareholders' Meeting
Christel Heydemann	Member of the Audit Committee	July 26, 2017 ⁽³⁾	Following the 2020 Shareholders' Meeting
Helle Kristoffersen	Chairman of the Innovation and Technology Committee	June 7, 2011 ⁽⁴⁾	Following the 2023 Shareholders' Meeting
Bernard Ramanantsoa	Chairman of the Audit Committee	June 7, 2016	Following the 2020 Shareholders' Meeting
Jean-Michel Severino	Member of the Audit Committee	June 7, 2011 ⁽⁴⁾	Following the 2023 Shareholders' Meeting

⁽¹⁾ Co-opted by the Board of Directors on December 7, 2016, to replace Bernard Dufau. Term of office renewed at the Shareholders' Meeting of May 21, 2019.

(2) Term of office renewed at the Shareholders' Meeting of June 5, 2012, and June 7, 2016.
(3) Co-opted by the Board of Directors on July 26, 2017, to replace José-Luis Durán. Term of office renewed at the Shareholders' Meeting of May 4, 2018.

(4) Term of office renewed at the Shareholders' Meeting of May 27, 2015, and May 21, 2019.

Alexandre Bompard, born in 1972, has been the Chairman and Chief Executive Officer of Carrefour since July 18, 2017. After graduating from the École nationale d'administration (ENA), Alexandre Bompard was posted at the Inspectorate General of Finance (1999-2002). Thereafter he became Technical Advisor to François Fillon, then Minister of Social Affairs, Labor and Solidarity (April to December 2003). From 2004 to 2008, Alexandre Bompard worked in several capacities within the Canal+ Group. He was Chief of Staff to Chairman Bertrand Méheut (2004-2005), then Director for Sports and Public affairs for the Canal+ Group (June 2005 - June 2008). In June 2008, he was appointed Chairman and Chief Executive Officer of Europe 1 and Europe 1 Sport. In January 2011, he joined the Fnac Group as Chairman and Chief Executive Officer. He then undertook an ambitious transformation plan of the Group, called "Fnac 2015," to meet the challenge of the digital revolution and changes in customer expectations. On June 20, 2013, Alexandre Bompard also led Fnac's initial public offering. In Autumn 2015, Fnac launched a takeover bid on the Darty Group. He became, on July 20, 2016, Chairman and Chief Executive Officer of the new entity made up of Fnac and Darty. Alexandre Bompard is a graduate of the Institut d'études politiques of Paris and holds a master's degree in Public Law, a Master of Advanced Studies (DEA) in Economics and is also a graduate of the École nationale d'administration (ENA). Alexandre Bompard is a Knight of the French Order of Arts and Letters. He is a French national.

Charles-Henri Filippi, born in 1952, is managing partner of Lazard and was appointed co-chairman for France in October 2019. He was Chairman of Citigroup France from 2011 to 2017. He joined Crédit Commercial de France (CCF) in 1987 after several years in French administration and in ministerial offices. He was appointed Chief Executive Officer of CCF France in 1998, and was then appointed to the Senior Management of HSBC in 2001, in charge of the Group's Global Customers activities. He became Chairman and Chief Executive Officer of HSBC France in March 2004, then Non-Executive Chairman from August 2007 to December 31, 2008. He was also Senior Advisor

at CVC Capital Partners France until December 31, 2010, and a Partner at Weinberg Capital Partners until December 31, 2011. He is also founder of the Octagones and Alfina asset management companies, and was their Chairman from 2008 to 2012. Charles-Henri Filippi is a French national.

Anne-Gabrielle Heilbronner born in 1969, is a member of the Management Board (Directoire) of Publicis Group, the world's third largest company in the field of communication and advertising. As group General Secretary, she is in charge of human resources, procurement, legal affairs, compliance and governance, CSR as well as internal audit and control and risk management. As member of the Management Board, she participates in the all strategic decisions regarding the transformation of the Group. She also worked on the merger of Publicis with Omnicom in 2013, and the acquisition of Sapient in the United States in 2015 and of Epsilon in 2019. She began her career as a Financial Inspector before joining the Treasury Department as deputy manager of Social Housing Financing. She joined Euris from 2000 to 2004 as Head of the Corporate Finance in charge of all financial operations for Euris and Casino. After having contributed to EDF's initial public offering strategy, she then held the positions of Chief of Staff (2004-2005) and Special Adviser (2005-2007) respectively with the French Secretary of State for the Reform of State and then with the Ministry for Foreign Affairs. Director of Internal Audit and Risk Management within SNCF (2007-2010) where she developed and strengthened the role of audit and compliance functions (ethics, fraud prevention, etc.), she then became Senior Banker and Managing Director at the Société Générale Corporate and Investment Banking. in charge of a portfolio of listed companies. She joined Publicis group in 2012. Anne-Gabrielle Heilbronner is a Financial Inspector, an alumna of the École Nationale d'Administration (ENA), and a graduate of ESCP-Europe and of Institut d'Etudes Politiques de Paris and also holds a postgraduate degree in tax law and public finances and a master's degree in public law. She is a French national.

Christel Heydemann, born in 1974, is Chairman of Schneider Electric France and has been a member of the Schneider Electric Executive Committee since April 2017. Christel Heydemann began her career in 1997 with the Boston Consulting Group. In 1999, she joined Alcatel, where she held various senior positions, notably within the context of the Alcatel-Lucent merger. In 2004, she joined the Alcatel-Lucent sales department, taking charge of the strategic SFR and Orange accounts. In 2008, she was appointed Sales Director France and Member of the Executive Committee of Alcatel-Lucent France. In 2009, she negotiated a strategic alliance with HP in the United States before being promoted in 2011 as VP Human Resources and Transformation and member of the Executive Committee. Christel Heydemann joined Schneider Electric in 2014 as Senior VP Strategic Alliances with the task of accelerating the launch of IoT solutions by developing an ecosystem of partners, before being appointed as Senior Vice President Strategy and Technology Alliances in February 2016. Christel Heydemann is a graduate of École polytechnique and École Nationale des Ponts et Chaussées. She is a French national.

Helle Kristoffersen, born in 1964, is the strategy-innovation CEO and member of the Executive Committee of the Total group. Before that, she was Director of Strategy & General Secretary of the Gas, Renewables & Power Branch from 2016 to 2019, Director of Strategy and Economic intelligence from January 2012 to September 2016 and Deputy Director of Strategy from 2011 to 2012 of the Total Group. From 1994 onwards, she mainly worked for the Alcatel group, which became Alcatel-Lucent, and is now Nokia. After holding a number of positions within this group, she was Vice-President Group Strategy between 2005 and 2008, and Senior Vice-President Vertical Markets, between January 2009 and December 2010. Helle Kristoffersen is a graduate of the École normale supérieure and École nationale de la statistique et de l'administration économique (ENSAE). She is a Knight of the French Legion of Honor. Born in Denmark, she is a French and Danish national.

Bernard Ramanantsoa, born in 1948, he is Director of several companies as well as universities and Grandes Écoles. Bernard Ramanantsoa began, during his military service, as Lecturer at the École Nationale Supérieure de l'Aéronautique et de l'Espace in 1971 and 1972, before joining SNCF where he became head of the Main Lines Marketing Division in 1978. In 1979, he joined the HEC faculty as professor of Business Strategy and Policy, specializing in the link between strategy and corporate culture. After being appointed as the Head of Faculty and Research, he became the Managing Director of HEC Paris from 1995 to 2015. He gave the institution a decidedly international dimension. Bernard Ramanantsoa is the author of numerous communications and publications in the field of business management. He received the Harvard L'Expansion Prize in 1989 for Technologie et Stratégie d'entreprise and the Prize from the Académie des Sciences Commerciales in 1983 for Stratégie de l'Entreprise et Diversification. He wrote Apprendre et Oser ("Learn and Dare"), published by Albin Michel, and "L'enseignement supérieur français par-delà les frontières: l'urgence d'une stratégie" published by France Stratégie. Bernard Ramanantsoa holds an Engineering degree from the École Supérieure d'Aéronautique et de l'Espace (Sup'Aéro) and has an MBA from the École des hautes études commerciales (HEC), a post-graduate degree in Sociology from Paris Diderot University, a Ph.D. in Management Sciences from Paris-Dauphine University and a further post-graduate degree in the History of Philosophy from Paris-1 Pantheon-Sorbonne University. He is a Knight of the French Legion of Honor and an Officer of the French Order of Merit, Knight of the Palmes Académiques and Officer of the National Malgache Order. He is a French and Malagasy national.

Jean-Michel Severino, born in 1957, is Manager of Investisseurs et Partenaires, an asset management company specializing in investment in SMEs in sub-Saharan Africa. He is also a member of the Académie des Technologies. Until April 2010, he was CEO of the French International Development Agency (AFD), and was previously Vice-President of the World Bank for Asia. Jean-Michel Severino is a Financial inspector, a graduate of the École nationale d'administration (ENA), ESCP, Institut d'études politiques of Paris and holds a Master of Advanced Studies (DEA) in economics and a law degree. He is a French national.

Directors representing the public sector

		Date first appointed	Term ending
Bpifrance Participations (1) represented by Nicolas Dufourcq	Member of the Innovation and Technology Committee	May 28, 2013	Following the 2021 Shareholders' Meeting
Hélène Dantoine (2)	Member of the Audit Committee	March 14, 2019	March 13, 2023
Anne Lange (3)	Member of the GCSER Committee	May 27, 2015	Following the 2023 Shareholders' Meeting

Public financing and investment group for companies, resulting from the merger of OSEO, CDC Entreprises, FSI and FSI Régions, appointed by the Shareholders' Meeting.

Nicolas Dufourcq, born in 1963, has been the Chief Executive Officer of Bpifrance SA, the public investment bank, since February 2013. He began his career at the Ministry of Economy and Finance and then joined the Ministry of Health and Social Affairs in 1992. In 1994, he joined France Télécom, where he created the Multimedia Division, before acting as Chairman of Wanadoo, a France Télécom subsidiary

⁽³⁾ Appointed by the Shareholders' Meeting on the basis of a proposal by the French government and the Board of Directors.

for the Internet and Pages Jaunes. In 2003, he joined Capgemini where he first headed the Central Europe & Southern Europe region, helping lead its recovery plan to success. In September 2004, he was appointed Chief Financial Officer of the Group and member of the Executive Committee. In 2005, he became Deputy Managing Director in charge of Finance, Risk Management, Information Systems, *Delivery* and Purchasing and, from 2007, the Monitoring of the Group's Key Accounts. He is also non-executive Chairman of the Supervisory Board of STMicroelectronics. Nicolas Dufourcq is tax inspector and a graduate of École des hautes études commerciales (HEC) and École nationale d'administration (ENA). He is a French national.

Hélène Dantoine, born in 1971, has been Deputy Director General of the French government Shareholding Agency (APE) since March 1, 2019. She began her career at the French Ministry of Foreign Affairs, working in the Human Rights and Humanitarian Affairs branch of the United Nations and International Organization department. She then worked for the French Permanent Missions to the United Nations in New York before joining the Inspectorate General of Finance in 2005. Advisor to the French Minister of Foreign Affairs in 2009 and 2010, she returned to the Inspectorate General of Finance in 2010. From 2011, she held various positions within the Exploration and Production branch of the Total Group, including New Business Project Director, Vice President Logistics and Operations Support and, in 2017, Vice President Africa – Exploration Subsidiaries. In 2018 she was appointed Senior Vice President Global Government and Public Affairs for Total

SA. Hélène Dantoine is a financial inspector and graduate of École nationale d'administration et de l'Institut d'études politiques de Paris. She also holds a master's degree in law and a DEA in the Study of Latin American societies. She is a French national.

Anne Lange, born in 1968, is an entrepreneur in the new technologies sector and Director. Anne Lange began her career in 1994 working in the Prime Minister's office where she headed the government department for the State control on public broadcasting. In 1998, she joined Thomson as head of strategic planning, then in 2000, the Europe e-business department. In April 2003, Anne Lange was appointed as General Secretary for the Internet rights forum, an agency of the Prime Minister's office. From 2004 to 2014, she successively worked as Vice-President for Europe public sector, Senior Executive Vice-President of global public sector & media operations (based in the US) and Senior Executive Vice-President for innovation in the public sector for the Internet Business Solutions Group at Cisco. She decided to quit Cisco to create her own start-up, the software company Mentis, of which she was CEO until 2017, innovating in the field of the Internet of Things, Cloud and Big Data. Since then, Anne Lange has divided her professional activities between directorships with major groups, technology investment activities and advice to senior staff on business transformation. Anne Lange is a graduate of the Institut d'Études Politiques of Paris and the École nationale d'administration (ENA). She is a French national.

Directors elected by the employees

		Date first appointed	Term ending
Sébastien Crozier	Member of the Audit Committee	December 3, 2017	December 2, 2021
Fabrice Jolys	Member of the GCSER Committee	December 3, 2017	December 2, 2021
René Ollier	Member of the Innovation and Technology Committee	December 3, 2017	December 2, 2021

Sébastien Crozier, born in 1968, is Chairman of CFE-CGC Orange. He is also Honorary Chairman of ADEAS (Association pour la défense de l'épargne et de l'actionnariat salariés). He was in charge of sponsorship for the G7 and the French pavilion of the 2020 Dubai Universal Exhibition within the Orange Group. He began his career in 1990 in the telematic activities for the Alten group, before taking over the Senior Management of a subsidiary as it spun off from the Group. He joined France Télécom Multimédia in 1994 to prepare the launch of online services and as such participated in the launch of Wanadoo. In 1997, he was the producer of one of the biggest concerts in Paris that year, attracting 40,000 people to the Pelouse de Reuilly grounds for more than 24 hours. In 1998, he founded several start-ups in the area of online advertising and Internet access provision as a telecom operator, with more than 1.3 million customers under the Fnac, M6 and Société Générale brands. Following their acquisition in 2001 by France Télécom (which became Orange), he returned to the Group and became head of the strategy and innovation management of part of the Enterprise Division in 2003. He managed several subsidiaries in France and abroad on behalf of the Orange group, in Africa and Latin America, in the areas of innovation and international development. During the 2001-2002 presidential campaign, he acted as Jean-Pierre Chevènement's permanent advisor on logistics and new technologies. Sébastien Crozier studied engineering at the École Supérieure

d'Ingénieurs en Électrotechnique et Électronique (ESIEE) and the Karlsruher Institut für Technologie (KIT) in the field of Artificial Intelligence. He is a French national.

Fabrice Jolys, born in 1973, is currently a sales associate at Orange. He began his career in 1997 at La Poste as a financial advisor, through 2000. He joined the Orange Group in 2001 and began working in labor relations in 2004. Fabrice Jolys was first representative of the staff in the regional management of Brittany, then joined the Central Committee of the Orange Works Council (CCUES) and the economic commission he chaired. Before joining the Orange SA's Board of Directors, he served for three years as Deputy Central Representative. He is a French national.

René Ollier, born in 1960, is currently an operator at UAT (Unité d'Assistance Technique) in Rouen, for Orange's customer calls to "3900." He has spent his entire career at the internal call center. He joined Orange in 1984 at the telephone information service (telephone number "12" at that time). He was deputy central delegate mandated by the SUD trade union federation until December 2017 and, as such, union representative for the Central Committee of the Orange Works Council (CCUES) from 2011 to 2017. He continues to be a member of the secretariat of this federation. He is a French national.

Director appointed by the Shareholders' Meeting and representing employee shareholders

		Start date	Term ending
Philippe Charry	Member of the Innovation and Technology Committee	June 14, 2019	Following the 2020 Shareholders' Meeting

Philippe Charry, born in 1958, is a Member of the Supervisory Board of the Orange Actions Mutual Fund. He is a senior manager assigned to the Île-de-France Department of Orange. He joined the company in 1978 as an operating agent, and then was promoted internally to senior management from 1996. He held various responsibilities in customer relationship management and sales administration in operational units of several regions. Since 2010, he has held trade union offices in the FO COM federation and was Secretary General from June 2015 to June 2019. He is a French national.

A member of the Central Committee of the Orange Works Council (CCUES) and a representative of the Worldwide Works Council participate in the meetings of the Board of Directors.

Changes in the composition of the Board of Directors

The Shareholders' Meeting of May 21, 2019, appointed Anne-Gabrielle Heilbronner as Director, as a replacement for Mouna Sepehri, for a term of four years expiring at the end of the Shareholders' Meeting approving the financial statements for the fiscal year ending on December 31, 2022. The Board of Directors appointed her as member of the Governance and Corporate Social and Environmental Responsibility Committee on May 21, 2019. It also appointed Charles-Henri Filippi as Chairman of the same committee.

Luc Marino resigned from his term of office as Director representing shareholder employees with effect as of June 14, 2019. In accordance with Article 13 of the Bylaws, he was replaced by his replacement, Philippe Charry for his remaining term, i.e. until the end of the Shareholders' Meeting which will approve the financial statements for the year ended December 31, 2019. The Board of Directors appointed him to the Innovation and Technology Committee on June 26, 2019.

Summary presentation of the Board of Directors

On April 16, 2020	Age	Gend	ler Nationali	ty Number of shares	Positions held in other listed companies	First appointed	Term ending	Seniority on the Board	Participation to Commitees
Corporate Officer, Director									
Stéphane Richard	58		French	31,466	0	06/09/2010	2022 GM	9 years	Χ
Independent directors									
Alexandre Bompard	47		French	1,000	1	12/07/2016	2023 GM	3 years	ITC
Charles-Henri Filippi (1)	67	•	French	10,001	1	02/05/2008	2020 GM	12 years	GCSER (Chairman)
Anne-Gabrielle Heilbronner	51		French	1,000	2	05/21/2019	2023 GM	1 year	GCSER
Christel Heydemann	45	•	French	1,000	0	07/26/2017	2020 GM	2 years	Audit Comm.
Helle Kristoffersen	55		French and Dan	1,747 ish	0	06/07/2011	2023 GM	8 years	ITC (Chairman)
Bernard Ramanantsoa	71	•	French and Mala	1,000 agasy	0	06/07/2016	2020 GM	3 years	Audit Comm. (Chairman)
Jean-Michel Severino	62	•	French	1,000	1	06/07/2011	2023 GM	8 years	Audit Comm.
Directors representing the pu	ıblic se	ctor							
Bpifrance Participations (represented by Nicolas Dufourcq)	56	•	French	254,219,602	1	05/28/2013	2021 GM	6 years	ITC
Hélène Dantoine	49		French	0	1	03/14/2019	03/13/2023	1 year	Audit Comm.
Anne Lange	52	•	French	0	3	05/27/2015	2023 GM	4 years	GCSER
Directors representing sharel	nolder e	employ	/ees						
Philippe Charry	61		French	2,121	0	06/14/2019	2020 GM	1 year	ITC
Directors representing the en	nployee	es							
Sébastien Crozier	51		French	3,634	0	12/03/2017	12/02/2021	2 years	Audit Comm.
Fabrice Jolys	46	•	French	76	0	12/03/2017	12/02/2021	2 years	GCSER
René Ollier	59	•	French	0	0	12/03/2017	12/02/2021	2 years	ITC

⁽¹⁾ Lead Director.

5.1.2 Corporate Officers

Corporate Officer, Director

Stéphane Richard has been Chairman and Chief Executive Officer of Orange since March 1, 2011. His directorship was renewed during the Shareholders' Meetings of May 27, 2014, and May 4, 2018, the Board of Directors having reappointed him as Chairman and Chief Executive Officer on the same date, for a four-year term.

The biography of Stéphane Richard can be found in Section 5.1.1 Board of Directors.

Delegate CEOs

On May 4, 2018, the Board of Directors renewed the terms of office of Ramon Fernandez and Gervais Pellissier as Delegate CEOs for the same period as the term of the Chairman and CEO. Ramon Fernandez is also CEO – Finance, Performance and Europe. Gervais Pellissier is responsible for the Group's Transformation and is President of Orange Business Services.

Ramon Fernandez, born in 1967, has been Delegate CEO of Orange SA since January 1, 2016. He is also Delegate CEO - Finance, Performance and Europe. He joined the Orange group on September 1, 2014, as Deputy Managing Director in charge of the Group's finance and strategy. Ramon Fernandez began his career at the French Treasury before joining the International Monetary Fund in Washington from 1997 to 1999. He then returned to the French Treasury and held a number of senior management positions: Head of the Energy, Telecommunications and Raw Materials Department until 2001; Head of the Savings and Financial Markets Department from 2001 to 2002; Deputy Director of International Financial Affairs and Development, and Vice-Chairman of the Club de Paris between 2003 and 2007. He was also Special Advisor to the Minister of the Economy, Finance and Industry (2002-2003) and to the President of the French Republic (2007-2008). In 2008, he was appointed Chief of Staff to the Minister of Labor, Social Relations, Family and Solidarity (2008-2009). Since March 2009, he was the Chief Executive Officer of the French Treasury, Chairman of the France Trésor Agency and Chairman of the Club de Paris. As the Alternate Governor of the World Bank for France and Governor of the African Development Bank before joining Orange, he

represented the French government at the Board of Directors of GDF Suez and CNP Assurances as well as at the Supervisory Board of the Caisse des Dépôts et Consignations. Ramon Fernandez is a graduate of the Institut d'études politiques of Paris and the École nationale d'administration (ENA). He is a Knight of the French Legion of Honor. He is a French national.

Gervais Pellissier, born in 1959, joined Bull in 1983 and held a range of responsibilities in the areas of finance and management control, in France, Africa, South America, and Eastern Europe. In 1994 he was successively appointed financial director of the services and systems integration division, the managed services division and director of management control of the Bull Group and then as its CFO in 1998. From April 2004 to February 2005, Gervais Pellissier served as Deputy Chairman of the Board of Directors and delegated CEO of the Bull Group. From February 2005 to mid-2008, he was Vice-President of the Board of Directors of Bull. Gervais Pellissier joined the Orange Group in October 2005, as project manager for the consolidation of its entities in Spain and reflection on the geographic consolidation within the Group. In January 2006, he was appointed as a member of the Group's General Management Committee, in charge of Finance and Operations in Spain, and in March 2009, he became Deputy Managing Director of Orange SA, with responsibility for Finance and Information Systems. After the Group's new Executive Committee was formed in early April 2010, Gervais Pellissier continued in his role as Deputy Managing Director of Orange SA, with responsibility for Finance and Information Systems. Since November 1, 2011, Gervais Pellissier has been Delegate CEO of Orange SA. Between September 2014 and April 2018, he was Delegate CEO in charge of operations in Europe, excluding France. Since May 2018, he has been Delegate CEO responsible for the Group's Transformation and President of Orange Business Services. Since 2015, he has been a member of the Supervisory Board and a member of the Audit Committee of Wendel, and has been Lead Director since 2018. Gervais Pellissier is a graduate of École des hautes études commerciales (HEC), Berkeley, and the University of Cologne. He is a Knight of the French Legion of Honor and an Officer of the French Order of Merit. He is a French national.

5.1.3 Executive Committee

Pursuant to the provisions of Article L. 225-37-4 of the French Commercial Code, and in order to encourage gender diversity, Orange pays close attention to the representation of women on its Executive Committee.

As of the date of this document, there are 5 women on the 15-member Executive Committee (including Stéphane Richard).

Christine Albanel	Senior Executive Vice-President, Corporate Social Responsibility, Diversity, Partnerships and Inclusiveness
Jérôme Barré	Senior Executive Vice-President, Orange Wholesale and International Networks
Fabienne Dulac	Deputy Chief Executive Officer, Orange France
Ramon Fernandez	Delegate Chief Executive Officer, CEO Finance, Performance and Europe
Hugues Foulon	Senior Executive Vice-President, Strategy and Cyber Security activities
Nicolas Guérin	Senior Executive Vice-President, Group General Secretary and Secretary of the Board of Directors
Mari-Noëlle Jégo-Laveissière	Deputy Chief Executive Officer, Technology and Global Innovation
Valérie Le Boulanger	Senior Executive Vice-President, Group Human Resources
Paul de Leusse	Deputy Chief Executive Officer, Mobile financial services
Béatrice Mandine	Senior Executive Vice-President, Internal and External Communication for the Group and Brand
Alioune Ndiaye	Senior Executive Vice-President, Orange Middle East and Africa
Laurent Paillassot	Deputy Chief Executive Officer, Orange Spain
Gervais Pellissier	Delegate Chief Executive Officer, Group Transformation and President of Orange Business Services
Helmut Reisinger	Senior Executive Vice-President, Orange Business Services

The biographies of Stéphane Richard, Ramon Fernandez and Gervais Pellissier can be found in Sections 5.1.1 *Board of Directors* and 5.1.2 *Corporate Officers*.

Christine Albanel, born in 1955, is Senior Executive Vice-President in charge of Corporate Social Responsibility, Diversity and Inclusiveness. She is also Deputy Chairwoman of the Orange Foundation and Chair of Orange Studio. Christine Albanel was Advisor to the French President on Education and Culture, Chair of the Établissement Public de Versailles from 2003 to 2007, and was appointed Minister of Culture and Communication from 2007 to 2009. She was the speechwriter for President Jacques Chirac for many years, including authoring the famous Vel d'Hiv' speech. Christine Albanel is a member of the French Council of State. She has a degree in modern literature.

Jérôme Barré, born in 1962, has been Senior Executive Vice-President since May 2, 2018 in charge of the Orange Wholesale & International Networks division. He joined the Orange group in 1985, where he worked on the quality and development of the network in Île-de-France and then in Brittany. In 1991, he was named French National Director of Local Authorities. From 1996 to 2010, Jérôme Barré alternated between his national responsibilities and his operational management tasks. From 1996 to 2000, he joined the Consumer Services Department as Director of Service and Quality for the Professional Customer Division, and then as Director of Customer Service at the Retail and Customer Service Division. From 2000 to 2006, he worked as the Regional Director in Burgundy and then in Franche-Comté, and from 2006 to 2010 as the Territorial Director in the North-West Center (Lower Normandy, Upper Normandy, Central Region). In 2010, after having coordinated the negotiations on workplace stress alongside the Group's Human Resources Director after a labor dispute. Jérôme Barré was appointed Head of Customer Relationship Management and Customer Service for the Consumer market at Orange France, where he specifically worked on creating the Orange operational directions. In April 2011, he was appointed Head of Orange Île-de-France, tasked with developing Orange's business in the Île-de-France area. In 2016, he became Senior Executive Vice-President of Human Resources and led the launch of Orange's promise to be a "digital and caring employer." Jérôme Barré is a graduate of the École polytechnique and the École nationale supérieure des télécommunications (ENST).

Fabienne Dulac, born in 1967, is Deputy CEO of Orange France. After having started a doctoral thesis, Fabienne Dulac began her career at the French Interior Ministry, before joining the business community in 1993 with VTCOM, a company which developed multimedia services at the time of the emergence of the Internet and the appearance of a new business sector, where she was Head of Communications and Marketing. Fabienne Dulac joined France Télécom in 1997 within the newly created Multimedia Division. Her responsibilities, as the Head of External Communication, extended to include all of France Télécom's multimedia activities within its range of subsidiaries such as Wanadoo, Voila and Mappy. For a decade, she held various positions within marketing, business development, and customer relations, and witnessed the transformation of the market and the Company, as well as the development of new commercial territories and customer experience at the heart of the operator's strategy. In 2008, she became Head of Sales and Online Customer Relations at Orange France; she brings innovation to the field and drives the Company's digital transformation in terms of sales and customer relations. In 2011, Fabienne Dulac became Head of the Orange North France division, where she was responsible for managing an operational entity with over 5,500 employees. In September 2013, she was appointed Senior Vice-President in charge of Communication of Orange France, before becoming Senior Executive Vice-President in August 2014. Fabienne Dulac holds a Master of Advanced Studies (DEA) in Political Sociology from the Institut d'études politiques of Paris, a master's degree in history and a bachelor's degree in modern literature.

Hugues Foulon, born in 1968, is Senior Executive Vice-President of Strategy and Cyber Security activities. He began his career in 1994 at

Générale des Eaux (Veolia Group) where he was appointed director of a drinking water plant, then director of "Monégasque de Télédistribution" and "Monégasque des Eaux." In 2000, he made his first foray into the world of telecoms by joining Vivendi group's Monaco Telecom as Deputy Chief Executive Officer, in charge of functional departments. In 2005, he joined the Group as Director of Retail Commercial Finance for the Mobile business. He remained there for two years, before moving to Northern Africa and becoming Maroc Telecom's Director of Controlling. In 2007, he returned to Orange, where he took on roles as Management Control Director for the Marketing and Innovation division, Director to the Group's Delegate Chief Executive Officer in charge of Finance, then CFO of OMEA. He was then appointed Head of the Chairman & CEO's office and Secretary of the Group's Executive Committee. He is a graduate of École polytechnique and the École Nationale Supérieure de Techniques Avancées (ENSTA). He is also an auditor of the 66th "defence policy" session of the Institut des Hautes Études de Défense Nationale (IHEDN).

Nicolas Guérin, born in 1968, has been Group Secretary General since March 1, 2018, and Secretary of the Board of Directors. He is also honorary Chairman and director of Cercle Montesquieu and Chairman of the Evaluation and Orientation Committee of the International Chair in Space and Telecommunications Law at the University of Paris XI. Joining the Group's Competition and Regulation Affairs Department in 1998 after his time at SFR, Nicolas Guérin arrived just as the sector was undergoing deregulation. He became head of this department in 2003, before becoming General Counsel and Secretary of the Board of Directors in 2009. In this position, he has been a major contributor to many of the Group's structuring projects, including the roaming agreement with Free in 2012, M&A transactions to expand the Group's foothold in Africa and Europe with the acquisition of Jazztel or diversification projects (including content and Orange Bank). His support has also been essential in the implementation of regulatory requirements in the Enterprise market, or more recently in the next stage of the mobile agreement signed between operators and the French state. He is a graduate of Institut de droit des affaires (IDA) and holds a specialized master's degree in business law and taxation from Université Paris II Panthéon Assas.

Mari-Noëlle Jégo-Laveissière, born in 1968, is Deputy CEO in charge of the Technology and Global Innovation division since May 2, 2018. Since joining the Orange group in 1996, Mari-Noëlle Jégo-Laveissière has held a series of project and management positions: Head of International & Backbone Network Factory, merger between France Télécom and Orange France SA, Head of Group Research & Development, Head of the Consumer Marketing Department of Orange France and Regional Manager where she was responsible for technical and commercial services for consumers and business customers. In 2014, she was named Senior Executive Vice-President in charge of the Innovation, Marketing and Technology (IMT) division. Mari-Noëlle Jégo-Laveissière is a graduate of the École des Mines de Paris and of the École normale supérieure. She also holds a Doctorate in Quantum Chemistry from the Université de Paris XI – Waterloo.

Valérie Le Boulanger, born 1962, was appointed Senior Executive Vice-President Group Human Resources on May 2, 2018. She began her banking career at Crédit du Nord, taking on roles directly relating to banking activities, such as risk management, financial engineering transactions, corporate banking strategy and sales policy before joining the human resources department in 1998 as head of the training department. In 2004 she was named Human Resources Director in the Corporate Relations Department, then Director of Employee Relations at the Crédit du Nord Group, a position she then held at Caisse d'Epargne Île-de-France and later for the BPCE Group. Valérie Le Boulanger joined Orange in August 2016 as Director of Employee Relations, assuming responsibility for collective bargaining, employee relations in France and abroad, and corporate strategy advice for cross-divisional projects at the Group. She is a graduate of the École supérieure de commerce et d'Administration des Entreprises du Havre and has a degree in economics.

Paul de Leusse, born in 1972, is Deputy CEO in charge of mobile financial services and CEO of Orange Bank. He joined the Executive Committee at Orange in May 2018, in order to develop the Group's mobile financial services activities in Europe and Africa. Paul de Leusse worked as a consultant and he became a director at Oliver Wyman, then Bain & Company, from 1997 to 2009. In 2009, he was appointed Director of Strategy at Crédit Agricole SA. In 2011, he joined Crédit Agricole Corporate and Investment Bank as Chief Financial Officer, before being named Delegate Chief Executive Officer. In 2016, he was appointed CEO at CA Indosuez Wealth. Paul de Leusse was a director at Union des Banques Arabes et Françaises between 2011 and 2018 and at Fondation Grameen Crédit Agricole from 2016 to 2018. Paul de Leusse is a graduate of École polytechnique and has a civil engineering degree from Ponts et Chaussées.

Béatrice Mandine, born in 1968, has been Senior Executive Vice-President in charge of Internal and External Communication since May 2, 2018, and of the Brand since May 1, 2013. She joined Orange in May 2007 as Director of the Group's Press Office. Béatrice Mandine was appointed Delegate Director of External Communication in November 2010, then Deputy Director of Communication responsible for External Communication alongside Xavier Couture, Senior Executive Vice-President for Communication and the Brand in July 2012. Béatrice Mandine began her career in 1988 as a journalist at Le Figaro, Marie-Claire and the television channel La Cinq. At the end of 1990, she joined Alcatel as Head of Internal Communication. In 1992, she became Press Officer for Alcatel Radio Space & Defense and joined the press office at Alcatel Alsthom the following year. In 1998, she was appointed Media Director of Alcatel's Consumer Division, and in 2000 she was appointed Head of Press and Public Relations for Alcatel's Mobile Telephony Division. In 2004, Béatrice Mandine joined the Faurecia group as Head of Press Relations and corporate image. She is a graduate of the École supérieure de journalisme (ESJ) and the Institut des hautes études internationales (IHEI).

Alioune Ndiaye, born in 1960, has been Senior Executive Vice-President in charge of Orange Middle East and Africa since May 2, 2018. He began his career in manufacturing at Pechiney. He then joined Sonatel in 1986, taking on planning, audit and management control functions, also participating in the company's privatization

work. He was Chief Financial Officer at Sonatel from 1992 to 2002. In 2002, he returned to Mali in order to create Ikatel as Chief Executive Officer. A few years later, Ikatel became Orange Mali. Alioune Ndiaye was CEO at Orange Mali for 10 years. From October 2012, he was CEO of Sonatel SA and Chairman of the Board of Directors at Sonatel Mobiles, Orange Mali, Orange Bissau, Orange Sierra Léone at Fondation Sonatel. He is a graduate of Université Paris Dauphine and the Institut National des Télécommunications in Evry.

Laurent Paillassot, born in 1965, is deputy CEO in charge of Orange Spain. He began his career in 1989 at Compagnie Bancaire (Paribas Group), before joining Mitchell Madison Group in 1997, an American strategy consultancy specialising in financial activities. In 2000, he joined Caisse d'Epargne Group, firstly at Caisse Nationale des Caisses d'Epargne as Director of Distribution and Partnerships, before becoming CEO of Caisse d'Epargne Financement. From 2005 to 2007, he was also Chairman and Chief Executive Officer at GE Money Bank in France, a subsidiary of General Electric Consumer Finance. Laurent Paillassot was Delegate CEO of LCL (Le Crédit Lyonnais) from 2007 to 2014. He joined Orange in 2014 as Deputy Chief Executive Officer in charge of customer experience and *Mobile Banking*. He has been CEO of Orange Spain since March 2016. He is an engineering graduate from Ponts et Chaussées (1989) and holds an MBA from INSEAD (1996).

Helmut Reisinger, born in 1967, is Senior Executive Vice-President in charge of Orange Business Services, based in Paris. After nine years at Alcatel Autriche heading the Enterprise Division, he was named CEO at NextiraOne Germany, a company owned by capital investment funds, where he was a member of the European Executive Committee, before becoming Vice-President at Avaya, Inc, specialist in communication solutions, for Western Europe. He joined Orange Business Services in July 2007 to head operations in Europe. His responsibilities were broadened in January 2015, taking charge of all commercial activities outside France, including Europe, the Americas, Asia-Pacific, and Africa/Middle East/Russia/Indirect. He graduated from the Vienna University for Economics and Business, in the CEMS master program with international studies at the Hochschule Saint-Gall (Switzerland) and ESSCA Angers (France).

5.1.4 Information on Directors, Officers and senior management

5.1.4.1 Positions held by Directors and Officers

Stéphane Richard

Positions currently held

- Director, Chairman and Chief Executive Officer of Orange
- Director of the Opéra National de Paris
- Director of France Industrie
- Director of Cercle de l'Industrie
- Manager of EURL Rieutord Capital
- Manager of SCI Carré Gabriel
- Manager of SARL Carré Gabriel

International

- Chairman of the Board of Directors and Director at GSMA
- Permanent representative of Atlas Countries Support in Médi Telecom⁽¹⁾

Other positions and offices held over the past five years

- Manager of Rieutord LLC
- Director of the Fondation du Collège de France
- Manager of EURL Ginger
- Managing Partner of SCI du 18 rue Philippe-Hecht

Ramon Fernandez

Positions currently held

- Delegate CEO of Orange
- Chairman of the Board of Directors and Director of Orange Bank⁽¹⁾
- Chairman of the Board of Directors and Director at Compagnie Financière d'Orange Bank⁽¹⁾
- Director of Orange Middle East and Africa (1)
- Member of the Supervisory Board of Iris Capital Management (1)
- Chairman of the Board of Directors and Director of Buyin (1)
- Director of Institut du Capitalisme Responsable

International

- Member of the Supervisory Board of Orange Polska (1) (2)
- Director of Orange Belgium (since July 2018) (1) (2)

Other positions and offices held over the past five years

- Director of Orange Spain (1)
- Director of Médi Télécom⁽¹⁾
- Member of the Steering Committee of Institut Orange (1)
- Member of the Supervisory Board of Euronext NV⁽²⁾
- Member of the Supervisory Board and Member of the Appointments and Remuneration Committee of Euler Hermes Group (2)

Gervais Pellissier

Positions currently held

- Delegate CEO of Orange
- Chairman and Director of Orange Business Services SA⁽¹⁾
- Director of Orange Horizons (1)
- Vice-President, Member of the Supervisory Board and Lead Director of Wendel⁽²⁾
- Founder and Director of the Fondation des Amis de Médecins du Monde

International

- Vice-Chairman and Member of the Supervisory Board of Orange Polska⁽¹⁾⁽²⁾
- Chairman and Director of Orange Spain⁽¹⁾
- Chairman of Fundación Orange

Other positions and offices held over the past five years

- Chairman of the Strategic Committee of Orange Polska⁽¹⁾⁽²⁾
- Chairman of the Board of Directors of Orange Spain Plc⁽¹⁾
- Director of EE
- Director of Dailymotion
- Director and Member of the Strategic Committee of Orange Belgium (1)(2)

Alexandre Bompard

Positions currently held

- Director of Orange, member of the Innovation and Technology Committee
- Chairman and Chief Executive Officer of Carrefour (2)
- Director of the Fondation Carrefour

Other positions and offices held over the past five years

- Director of Éditions Indépendantes
- Chairman and CEO of Fnac Darty (2)
- Chairman and Chief Executive Officer of Fnac Darty Participations et Services
- Director of Darty Ltd
- Director of Fnac Darty⁽²⁾
- Member of the Supervisory Board of Banijay Group
- Member of Le Siècle

⁽¹⁾ Company in which Orange holds an interest.

⁽²⁾ Position in a listed company.

Philippe Charry

Positions currently held

 Director of Orange, member of the Innovation and Technology Committee

Other positions and offices held over the past five years

None

Sébastien Crozier

Positions currently held

- Director of Orange, member of the Audit Committee
- Member of the Supervisory Board of the FCPE Orange Actions
- Honorary Chairman of ADEAS
- Chairman of CFE-CGC Orange

Other positions and offices held over the past five years

- Chairman of Orange Digital Horizons SAS(1)
- Chief Executive Officer of Orange Horizons SAS (1)
- Chairman of Orange Horizons South Africa Ltd(1)
- Legal representative of Orange Horizons Latina (1)
- Member of the Board of Directors of GIE Atout France
- Treasurer of Manifeste pour l'Industrie (June 2019)

Hélène Dantoine

Positions currently held

- Director of Orange, member of the Audit Committee
- Director representing the State on the Board of Directors of Safran⁽²⁾
- Director representing the State on the Board of Directors of SNCE SA

Other positions and offices held over the past five years

- Director representing the State on the Board of Directors of SNCF Mobilités (EPIC) (until December 31, 2019)
- Director of Total Exploration Netherlands BV (until January 31, 2019)
- Manager of Total E&P RDC (until January 31, 2019)
- Chairwoman of Total E&P Senegal
- Chairwoman of Total E&P Madagascar
- Chairwoman of Total E&P Mauritania
- Chairwoman of East Africa Offshore Ventures
- Chairwoman and CEO of Total E&P South Sudan
- Delegate Chief Executive Officer and Director of Total E&P Somalia
- Chairman of the Board and Manager of Total Washington DC Representative Office LLC
- Director and Chairwoman of Total E&P Ethiopia A/S
- Director of Total E&P International K1 Ltd
- Director of Total E&P International K2 Ltd.
- Director of Total E&P International K3 Ltd
- Director of Total E&P International Ltd

Nicolas Dufourcq

Positions currently held

- Permanent representative of Bpifrance Participations to the Board of Orange, member of the Innovation and Technology Committee
- Director and Chief Executive Officer of Bpifrance S.A.
- Chairman and Chief Executive Officer of Bpifrance Participations
- Director and Chief Executive Officer of Bpifrance Financement
- President of Bpifrance Investissement
- President of Bpifrance Assurance Export
- Director of Digital New Deal
- Director of En Temps Réel
- Member of the Strategic Council of Euler Hermes Group

International

 Non-executive Chairman of the Supervisory Board of STMicroelectronics⁽²⁾

Other positions and offices held over the past five years

- Member of the Supervisory Board of Euler Hermes Group
- Chairman of Bpifrance Financement
- Chairman and Chief Executive Officer of FT1CI (June 2019)

Charles-Henri Filippi

Positions currently held

- Lead Director of Orange, Chairman of the GCSER Committee
- Partner-Manager of Lazard
- Director of Nexity ⁽²⁾, Chairman of the Remuneration and Appointments Committee
- Director of Piasa
- Chairman of the Fondation pour l'Opéra Comique
- Director of the Endowment Fund of ADIE
- Director of the Fondation Bettencourt-Schueller
- Director of the Fondation des Treilles

Other positions and offices held over the past five years

- Chairman of Citigroup France
- Director of ADIE (Association pour le Droit à l'Initiative Économique)
- Director of L'Oréal⁽²⁾, Chairman of the Human Resources and Remunerations Committee, and Member of the Audit Committee and the Nominations and Governance Committee
- Member of the Supervisory Board of Femu Qui SA
- Chairman of the Association des Amis de l'Opéra Comique
- Member of the international advisory board of Abertis

⁽¹⁾ Company in which Orange holds an interest.

⁽²⁾ Position in a listed company

Anne-Gabrielle Heilbronner

Positions currently held

- Director of Orange, member of the GCSER Committee
- General Secretary and Member of the Executive Board of Publicis Group (2)
- Chairwoman of Publicis Groupe Services
- Director and Member of the Audit Committee of SANEF(2)
- Director of Somupi
- Chairwoman of WEFCOS
- Representative of Multi Market Services France Holdings on the Shareholders Committee of WEFCOS
- Representative of Multi Market Services France Holdings on the Board of Directors of Régie Publicitaire des Transports Parisiens Metrobus Publicité
- Member of the Executive Committee of Multi Market Services France Holding

International

- Director of US International Holding Company, Inc. (USA)
- Director of Publicis Group Investments B.V (The Netherlands)
- Director of Publicis Holdings Group B.V (The Netherlands)
- Director of Publicis Holdings B.V (The Netherlands)
- Director of BBH Holdings Limited (UK)
- Director of Sapient Corporation (USA)
- Director of Publicis Limited (UK)

Other positions and offices held over the past five years

None

Christel Heydemann

Positions currently held

- Director of Orange, member of the Audit Committee
- Chairwoman and Chief Executive Officer of Schneider Electric France
- Member of the Executive Committee of Schneider Electric (2)
- Chairman of GIMELEC
- Vice-President and Director of Association AX
- Director of France Industrie

Other positions and offices held over the past five years

Director of the Fondation des Ponts et Chaussées

Fabrice Jolys

Positions currently held

- Director of Orange and member of GCSER Committee

Other positions and offices held over the past five years

None

Helle Kristoffersen

Positions currently held

- Director of Orange, Chairwoman of the Innovation and Technology Committee
- CEO Strategy-Innovation and member of the Executive Committee of the Total Group (2)

Other positions and offices held over the past five years

- Director of Strategy and Economic Intelligence at the Total Group (2)
- Director of Strategy & General Secretariat of the Gas, Renewables & Power Branch of the Total Group (2) (August 2019)
- Member of the Supervisory Board of Peugeot (2) (Sept. 2019)
- Director of Direct Énergie (2) (Sept. 2019)
- Member of the Board of Directors of Sunpower (United States)⁽²⁾ (October 2019)
- Member of the Board of Directors of PSL ComUE

Anne Lange

Positions currently held

- Director of Orange, member of the GCSER Committee
- Director of Imprimerie Nationale
- Director of Pernod Ricard (2)
- Director of FFP⁽²⁾

International

- Managing partner of Econocom (Belgium)
- Managing partner of ADARA
- Director of Inditex⁽²⁾

Other positions and offices held over the past five years

Founder and CEO of MENTIS

René Ollier

Positions currently held

 Director of Orange, member of the Innovation and Technology Committee

Other positions and offices held over the past five years

None

Bernard Ramanantsoa

Positions currently held

- Director of Orange, Chairman of the Audit Committee
- Member of the Oddo-BHF Supervisory Board, Audit Committee, Appointments Committee and Strategic Committee
- Director of Établissement public du Château de Versailles, du Musée et du Domaine National
- Member of the Supervisory Board of EDUCIN Topco
- Chairman of Silverchair
- Director of the Institut Catholique de Paris
- Member of the Y SCHOOLS Strategic Committee (formerly ESC Troyes Group)
- Member of the Strategic and Steering Committee of Toulouse Business School
- Director of Le Choix de l'École (Teach for France)
- Member of the Steering Committee of EuropaNova
- Director of Aspen France

International

- Director of Banque Franco-Lao (Laos)
- Director, member of the Audit Committee and the Risk Committee of Bred Bank Cambodia
- Director of Sommet-Education (Switzerland)
- Member of the Advisory Board of Saint-Gall University (Switzerland)
- Member of the Advisory Board of the Getúlio Vargas Foundation (Brazil)
- Member of the Advisory Board of ShARE (Netherlands)
- Member of the Advisory Board of the School of Management at Zhejiang University (China)
- Member of the Advisory Board of ISCAM (Madagascar)

Other positions and offices held over the past five years

- Managing Director of HEC
- Director of the Fondation HEC
- Member of the bureau of the Conférence des grandes écoles
- Member of the Advisory Board of EQUIS (European accreditation body)
- Member of the Supervisory Board of ALBARELLE
- Director of ANVIE
- CEIBS (China): member of the Academic Council
- Director of the Institut Français des Administrateurs (May 2019)
- Member of the Advisory Board of ESADE (Barcelona) (Dec. 2019)

Jean-Michel Severino

Positions currently held

- Director of Orange, member of the Audit Committee
- Director and Chairman of the Audit Committee of Danone (2)
- Manager of I&P SARL (Investisseurs et Partenaires)
- Manager of Emergence Développement
- Chairman of the Board of Directors of EBI SA (Ecobank International)
- Director of Phitrust Impact Investors
- Director of the Fondation Grameen Crédit Agricole
- Director of the Fondation Alstom
- Director of the Fondation Carrefour
- Director of the Fondation Avril
- Director of the Fondation Tunisie Développement
- Director of FERDI (Public interest foundation)

International

- Director of I&P Développement
- Director of I&P Gestion
- Chairman of the Board of Directors of I&P Afrique Entrepreneurs

Other positions and offices held over the past five years

- Director of ACET Ghana
- Director of Convergences
- Director of Adenia Partners
- Director of the Fondation Sanofi Espoir

The business address of all Directors and Officers, in relation to their positions, is that of Orange SA's registered office (see Section 1.1.1 Company identification).

Positions and offices held in 2019 by directors whose terms of office have ended since January 1, 2019

Mouna Sepehri

(Director until May 21, 2019)

- Director of Orange, Chairwoman of the GCSER Committee
- Senior Vice President of the Renault Group, member of the Executive Committee
- Member of the Executive Board of the Renault-Nissan Alliance
- Member of the Supervisory Board of M6 Métropole Télévision (2)
- Director of Fondation Renault

Luc Marino

(Director until June 14, 2019)

- Director of Orange, member of the Innovation and Technology Committee
- Member of the Supervisory Board of the FCPE Orange Actions

5.1.4.2 Information on Company shares held by Directors and Officers

Number of Shares held by Directors and Officers

According to the terms of Article 13 of the Bylaws, each director appointed by the Shareholders' Meeting must hold a minimum number of 1,000 shares of the Company, except the director representing employee shareholders and the directors representing the public

sector, who are exempt in accordance with the law. In the same way, directors elected by employees are not concerned by this obligation.

In addition, the Board of Directors has decided that each of the Corporate Officers shall also hold at least 1,000 registered shares.

The following information is provided as of the date of this Registration Document and to the Company's knowledge:

		Number of shares
Corporate Officer, Director	Stéphane Richard	31,466
Independent directors	Alexandre Bompard	1,000
	Charles-Henri Filippi	10,001
	Anne-Gabrielle Heilbronner	1,000
	Christel Heydemann	1,000
	Helle Kristoffersen	1,747
	Bernard Ramanantsoa	1,000
	Jean-Michel Severino	1,000
Directors representing the public sector	Bpifrance Participations	254,219,602
	Hélène Dantoine	0
	Anne Lange	0
Directors elected by the employees	Sébastien Crozier	3,634
	Fabrice Jolys	76
	René Ollier	0
Director representing employee shareholders	Philippe Charry	2,121
Delegate CEOs	Ramon Fernandez	1,602
	Gervais Pellissier	34,866

Transactions by Directors and Officers on Company securities

The following table details the transactions (reported to the French Financial Markets Authority – AMF) performed on Orange securities during the 2019 fiscal year and between January 1, 2020, and the date of this Registration Document by the persons referred to in Article L. 621-18-2 of the French Monetary and Financial Code.

Name	Financial instrument	Type of transaction	Date of transaction	Number of securities	Average unit price (in euros)	Transaction amount (in euros)
None	None	None	None	None	None	None

To the Company's knowledge, no other transactions having to be reported to the AMF have taken place.

Restrictions regarding the disposal of shares by Directors and Officers

Directors and Officers holding shares under the Orange group's savings plan through mutual funds that are invested in shares of the Company are subject to the lock-up rules applicable to investments in the savings plan under the provisions governing Company savings plans.

Moreover, in the framework of the EU regulation on market abuse and the Article 16 of the Board of Directors' Internal Guidelines prevents members from engaging in any transactions relating to the securities of the listed companies of the Group in the periods preceding the publication of results, and more generally, if they have knowledge of privileged information, as well as from directly or indirectly engaging in short sales with respect to such securities.

To the Company's knowledge, none of the Company's Directors or Officers has agreed any other restriction to his or her freedom to dispose without delay of his or her holding in the Company.

5.1.4.3 Other information

Court rulings and bankruptcy

To the Company's knowledge, in the past five years:

- no Director or Officer has been found guilty of fraud;
- no Director or Officer has been involved in bankruptcy, receivership or liquidation proceedings;
- no corporate officer has been questioned, nor has an official public sanction been pronounced against any of them by the legal or regulatory authorities. In July 2019, Stéphane Richard was cleared of wrongdoing in the "CDR-Tapie" case;
- no Director or Officer has been barred by a court from serving as a member of a management or supervisory body of a listed company or from being involved in the management or business operations of a listed company.

Family ties

To the Company's knowledge, there are no family ties among Company Directors and Officers, or between the Directors and Officers and the Executive Committee members.

Conflicts of interest

Under Article 16 of the Internal Guidelines of the Board of Directors, which may be consulted on the Group's website at www.orange.com, under the heading Group/Governance (see Section 5.2.1.4 Internal Guidelines), each director must notify the Chairman of the Board and the Lead Director of any situation concerning them liable to give rise to a conflict of interest with a Group company.

In particular, Article 10 of the Internal Guidelines of the Board of Directors entrusts the Lead Director with a specific prevention role regarding conflicts of interest which could occur, primarily by carrying out awareness initiatives. The Lead Director informs the Governance and Corporate Social and Environmental Responsibility Committee (GCSER), and the Board of Directors, should he deem it appropriate, of any potential or actual conflicts of interest affecting corporate officers and the other members of the Board of Directors. He/she may make recommendations to the GCSER Committee and the Board of Directors on how to manage potential conflicts of interest of which he/she becomes aware of or which are reported to him/her (see Section 5.2.1.7 Lead Director).

In addition, Article 16.3 of these Internal Guidelines stipulates that for any situation concerning a director that may create a conflict of interest, the director concerned shall refrain from participating in the vote on the corresponding resolution.

Moreover, a declaration relating to the existence or non-existence of a situation of conflict or divergence of interests (even potential) is requested annually from the Company's Directors and Officers as part of the preparation of the Universal Registration Document as well as when taking office and any renewals of office. In its meeting of February 7, 2020, the GCSER Committee also took note of the annual declarations of the Directors and Officers (see Section 5.2.1.2 Independent directors).

To the best of the Company's knowledge and as of the date of this Universal Registration Document, there is no potential conflict of interests between the duties of Directors or Corporate Officers with regard to Orange and their private interests or other duties.

To the Company's knowledge, there is no arrangement or agreement with a major shareholder, customer, supplier or any other third party under which any member of the Board of Directors or Corporate Officer was appointed to the Board of Directors or Company's General Management (respectively).

5.1.4.4 Shares and stock options held by members of the Executive Committee

As of the date of this document, to the best of the Company's knowledge, the members of Orange's Executive Committee, including Stéphane Richard, Ramon Fernandez, and Gervais Pellissier, owned a total of 99,424 Orange shares, representing 0.004% of the capital.

As of the date of this document, the members of the Executive Committee do not hold any stock-options, as the last plan in force expired on May 21, 2017 (see Section 5.4.1.2 History of stock-option grants (table 8)).

5.2 Operation of the management and supervisory bodies

5.2.1 Operation of the Board of Directors

The Board of Directors presides over all decisions relating to the Group's major strategic, economic, employment, financial or technological

policies and monitors the implementation of these policies by the General Management.

5.2.1.1 Legal and statutory rules relating to the composition of the Board of Directors

In accordance with Article 13 of the Bylaws, the Board of Directors consists of 12 members minimum and 22 members maximum, including three directors representing the employees, and one director elected by the Shareholders' Meeting on proposal of the employee shareholders. The term of office for directors is four years.

Pursuant to order no. 2014-948 of August 20, 2014, relating to governance and transactions in the capital of companies with a public shareholding, given that the French state holds more than 10% of the Company's share capital, it is entitled to appoint a representative to the Board of Directors, and a number of positions in proportion to its equity stake are reserved for members that it may nominate. The public sector has three representatives on the Board of Directors: one representative appointed by Ministerial Decree and two directors appointed by the Shareholders' Meeting.

5.2.1.2 Independent directors

The annual assessment of directors' independence was carried out by the Board of Directors on February 12, 2020, on the basis of a proposal by the GCSER Committee. In assessing directors' independence, the Board took into account all of the Afep-Medef Code criteria on Corporate Governance. These criteria state that a director, to be considered independent, must not:

- be nor have been within the last five years:
 - an employee or executive Corporate Officer of the Company,
 - an employee, executive Corporate Officer or director of a consolidated subsidiary of the Company,
 - an employee, executive Corporate Officer or director of the parent company or a consolidated subsidiary of the Company;
- an executive Corporate Officer of a company in which Orange, directly or indirectly, holds a position on the Board of Directors or in which an employee appointed as such, or a person who is currently or was at any time in the previous five years an executive Corporate Officer of Orange, is a director;
- be a customer, supplier, commercial banker, investment banker or advisor:
 - that is material to the Company or its Group,
 - nor for which the Company or its Group represents a significant share of business.

The assessment of the potential significance of the relationship with the Company or its Group must be debated by the Board, and the qualitative and/or quantitative criteria used in this assessment (continuity, economic dependence, exclusivity, etc.) must be explicitly stated in the Corporate Governance Report:

- not have close family ties with a director or officer;
- not have been a Statutory Auditor of the Company within the last five years;
- not have been a director of the Company for more than twelve years. Under this criterion, loss of the status of independent director occurs on the date at which this period of twelve years is reached.

The Afep-Medef Code recommends presenting a summary table of each director's position with regard to independence criteria. The analysis of the Governance and Corporate, Social and Environmental Responsibility Committee (GCSER) was carried out with regard to these criteria, and the summary table is presented at the end of this section.

The three directors representing the public sector and the four directors representing employees or employee shareholders cannot, by definition, be deemed independent under the Afep-Medef Code. Stéphane Richard, the Chairman and CEO, is not considered an independent director because of the executive functions he holds within the Group.

As far as other directors are concerned, the GCSER reviewed, firstly, their annual declarations when preparing this document, including a section on potential conflicts of interests, and, secondly, any business relationships between Orange Group and these directors or companies that employ them, or in which they may hold terms of office (see Section 5.2.1.8 Board and committee activities during the fiscal year).

The GCSER Committee noted that Charles-Henri Filippi had just reached twelve years of seniority on the Board. However, insofar as

his mandate ends at the end of the Shareholders' Meeting of May 19 without proposed renewal, this criterion was not considered likely to call into question his independence for the remaining period of a few weeks.

The GCSER also covered the nature of business dealings with listed companies in which its directors hold terms of office. It appears that some of these companies are Orange Business Services customers for "business" telecommunications services or Group suppliers in the normal course of business and for insignificant amounts across the Orange group. The Board also reviewed any potential advisory services declared performed by the Company's directors.

The Board of Directors considered, given the nature and volume of the business relationships in question and the declaration of independence made by each of the aforementioned directors, that these relationships are insignificant for both the Orange group and for each of the groups or entities to which the directors concerned belong. The Board of Directors concluded that these relationships are therefore not likely to call into question their independence.

Following the discussions, Anne-Gabrielle Heilbronner, Christel Heydemann and Helle Kristoffersen as well as Alexandre Bompard, Charles-Henri Filippi, Bernard Ramanantsoa and Jean-Michel Severino were deemed to be independent according to the criteria of the Afep-Medef Code, i.e. seven of the Board's fifteen members.

Apart from the directors representing employees and employee shareholders who are not taken into account under the Afep-Medef Code for the purposes of calculating the proportion of independent directors, the Board thus has seven independent directors out of eleven, i.e. close to two-thirds of the Board, a proportion which is well within the recommendations of the Afep-Medef Code.

The table below presents the position of each independent director with regard to the independence criteria set in the Afep-Medef Code (Article 9.4).

Directors' independence	Alexandre Bompard	Charles-Henri Filippi	Anne-Gabrielle Heilbronner	Christel Heydemann	Helle Kristoffersen	Bernard Ramanantsoa	Jean-Michel Severino
Criterion 1: is not and has not been an employee corporate officer within the last five years	√	✓	✓	✓	✓	✓	✓
Criterion 2: does not hold cross-directorships	✓	✓	✓	✓	✓	✓	✓
Criterion 3: does not have significant business relationships	✓	✓	✓	✓	✓	✓	✓
Criterion 4: does not have close family ties with a director or officer	✓	✓	✓	✓	✓	✓	✓
Criterion 5: has not been a Statutory Auditor of the Company within the last five years	✓	√	✓	✓	✓	✓	✓
Criterion 6: has not been a director of the Company for more than 12 years	✓	-	✓	✓	✓	✓	✓
Criterion 7: status as non-executive corporate officer – does not receive variable compensation in cash or shares or any compensation relating to the Company's performance	✓	√	√	√	√	√	✓
Criterion 8: major shareholder status – does not participate in the control of the Company	√	√	✓	✓	✓	✓	✓

In this table, the symbol \checkmark means that the independence criterion has been satisfied.

The detailed list of the Positions held by Directors and Officers can be found in Section 5.1.4.

5.2.1.3 Applying the principle of diversity and balanced representation between women and men

The Board ensures that its membership complies with statutory provisions, specifically with regard to diversity and the balanced representation of men and women.

At the date of this document, the Board of Directors comprises five women out of a total 11 directors, i.e. a ratio of 45% of women. This percentage does not take into account the directors elected by the employees or employee shareholder members, pursuant to the French law of January 27, 2011 (on the balanced representation of women and men on Boards of Directors and Supervisory Boards and gender equality at work), and of May 22, 2019 (on the growth and transformation of companies known as the "PACT Act").

Furthermore, pursuant to Article L. 225-37-4 of the French Commercial Code and the Afep-Medef Code, the Company's Internal Guidelines (see Section 5.2.1.4 Internal Guidelines) provide, in its Article 13, that

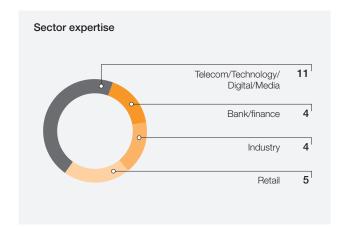
diversity in the membership of the Board and its committees also refers to criteria such as age, nationality, qualifications and professional experiences.

This provision meets directors' expectations, as expressed and renewed during the assessment of the working of the Board and its committees carried out in the last quarter of 2019 relating to the need to diversify the profiles of its members, with expertise in the digital and international spheres.

Diversity of expertise on the Board

An assessment of the key skills and expertise of the members of the Board was carried out and shows that the Board has the necessary qualities to understand the issues presented to it.

The mapping below, carried out by the firm that assessed the working of the Board at the end of 2019, presents a balanced distribution between the various types of skills required and brought to the Board by its fifteen members.







5.2.1.4 Internal Guidelines

In 2003, the Board of Directors adopted Internal Guidelines which define the guiding principles and procedures for its operations and those of its committees. They are available on the website www.orange.com, under the heading <code>Group/Governance</code>.

The Internal Guidelines specify, among other details, the respective responsibilities of the Board of Directors, the Chairman and the Chief Executive Officer, stipulating limits to the latter's powers; they also define the rules governing the composition, powers and operating procedures of each Board committee.

The Internal Guidelines also specify the rules governing the information provided to directors and the meetings of the Board.

The Internal Guidelines have been updated on a number of occasions by the Board of Directors to reflect changes in the Company's governance. Its last update, dated February 12, 2020, updated the references that had become obsolete and in particular replaced the references to "CCUES" by "CSE central" in order to take into account the establishment of the Social and Economic Committee (CSE), a new employee representative body since December 4, 2019. Over the next few months, additional and updated reviews may also be offered to the Board.

5.2.1.5 Chairman of the Board of Directors

Article 1 of the Internal Guidelines of the Board of Directors specifies the role and duties of the Chairman.

The Chairman represents the Board of Directors and, except in unusual circumstances, is the only person authorized to act and speak in the Board's name. He organizes and steers the work of the Board of Directors and ensures the efficient running of corporate bodies in line with the principles of good governance. He serves as a liaison between the Board of Directors and the Company's shareholders, in coordination with the General Management; he monitors the quality of the Company's financial information. When the roles of Chairman of the Board of Directors and Chief Executive Officer are split, he may, in close coordination with the General Management, represent the Company in its upper-level relations with the public authorities, the Group's major partners and its major customers, both within France and internationally. In this case, he is briefed regularly by the Chief Executive Officer on the significant events and situations relating to Group operations, and he may seek any information from the CEO needed to inform the Board of Directors and its committees. The Chairman may meet with the Statutory Auditors in order to prepare the work of the Board of Directors and the Audit Committee. He may attend meetings of Board Committees under the conditions provided for in the Internal Guidelines.

In accordance with Articles 29-1 and 29-2 of French Law No. 90-568 of July 2, 1990, the Chairman of the Board of Directors also has the power to appoint and manage the civil servants employed by the Company.

Pursuant to the Company's Bylaws, the Chairman of the Board of Directors can hold his position until the age of 70.

Committees of the Board of Directors 5.2.1.6

The Board of Directors is supported by expertise from three specialized committees. Their role is to provide informed input for the Board's discussions and assist in preparing its decisions. These committees meet as often as is necessary. Their powers and operating procedures are set out in the Internal Guidelines of the Board of Directors. In line with the Afep-Medef Corporate Governance Code, significant responsibilities are given to independent directors. Orange also believes that it is useful that each committee benefits from the presence of at least one member who represents the public sector and at least one member representing employees or employee shareholders, which contributes to taking into account different opinions in the work of the committees (see Section 5.2.1.8 Board and committee activities during the fiscal year).

Thus, with the exception of the Chairman and Chief Executive Officer, all of the directors sit on a committee, based on the choices discussed and made by the Board.

Composition of the Board Committees as of the date of this document

	Year created	Chairman	Members
Audit Committee	1997	Bernard Ramanantsoa (1)	Sébastien Crozier Hélène Dantoine Christel Heydemann ⁽¹⁾ Jean-Michel Severino ⁽¹⁾⁽²⁾
Governance and Corporate Social and Environmental Responsibility Committee (GCSER Committee)	2003	Charles-Henri Filippi (1)	Anne-Gabrielle Heilbronner ⁽¹⁾ Fabrice Jolys Anne Lange
Innovation and Technology Committee (ITC)	2014	Helle Kristoffersen (1)	Alexandre Bompard (1) Philippe Charry René Ollier Bpifrance Participations (Nicolas Dufourcg)

⁽¹⁾ Independent director.

Audit Committee

In accordance with the Internal Guidelines of the Board of Directors. the Audit Committee has at least three members appointed by the Board. At least two-thirds of members must be independent (excluding directors representing employees or employee shareholder members, who are not taken into account). The Chairman of the Audit Committee is chosen from among the independent directors.

The composition of the Audit Committee complies with the recommendations of the Afep-Medef Code, with three-quarters of its directors, excluding directors representing employees or employee shareholder members, being independent, and with no Corporate Officer on the Committee. The composition of the Audit Committee also complies with the provisions of Article L. 823-19 of the French Commercial Code relating to setting up a specialized committee to follow-up questions relating to the preparation and control of accounting and financial information.

In this regard, the Committee monitors the financial reporting process and the effectiveness of internal control and risk management systems relating to accounting and financial reporting procedures. It issues a recommendation regarding the Statutory Auditors nominated for appointment, organizes the selection process and submits a reasoned recommendation to the Board regarding their choice and their compensation terms and conditions. It monitors the Statutory Auditors' fulfillment of their assignment and approves, where applicable, the provision of services other than the certification of the financial statements, for such services that are not prohibited by law or Orange's rules. The committee also studies all investment or divestment projects that meet the criteria set out in Article 2 of the internal rules of the Board of Directors, and prepares related deliberations of the Board. The Audit Committee may also request that any audit or internal/external study be carried out on any matter it considers to fall within its remit.

Furthermore, the Chairman of the Audit Committee is assigned a particular role, and reports on the execution of their functions to the Board of Directors on a regular basis, as well as the outcome of any financial statement certification assignments, the manner in which this assignment has contributed to the integrity of the financial information and the role they have played in this process. He immediately informs the Board of any difficulties encountered and submit a summary of the Audit Committee's discussions.

The responsibilities of the Audit Committee are detailed in Article 7 of the Internal Guidelines of the Board of Directors.

⁽²⁾ Audit Committee's financial expert.

Financial Expertise within the Audit Committee

Members of the Audit Committee are required to have or to gain financial or accounting expertise. The Audit Committee, in accordance with the provisions of Article L. 823-19 of the French Commercial Code and Section 407 of the US Sarbanes-Oxley Act, must also comprise at least one person with specific expertise in the field of finance, accounting or statutory auditing, and must be independent (the "financial expert").

Jean-Michel Severino was appointed financial expert of the Audit Committee during the Board of Directors meeting of October 25, 2017, due to his role as Financial Inspector, his past functions as CEO of the Agence française de développement (AFD, French international development agency) and Vice-President of the World Bank for Asia, and his current position as manager of the fund management company IRP

Governance and Corporate Social and Environmental Responsibility Committee

In accordance with the Internal Guidelines of the Board of Directors, the Governance and Corporate Social and Environmental Responsibility (GCSER) Committee has at least three members appointed by the Board.

Its composition is in line with the recommendations of the Afep-Medef Code, as the ratio of independent directors is two out of three (excluding director elected by the employees, who is not included in this calculation).

The Committee, whose creation is a recommendation of the Afep-Medef Code, has major areas of responsibility, namely appointments and compensation, Corporate Social Responsibility, and governance. In particular, it exercises the powers of the specialized committees responsible for the appointment and reappointment of directors, as well as the compensation of corporate Officers. In these areas, it is tasked in particular with making proposals to the Board of Directors, as well as to the Chairman and, as necessary, the CEO. The CEO also keeps the Committee informed of any new appointments to the Group Executive Committee; the Committee may offer its opinion on the terms and conditions for calculating the compensation of these new members, or regarding multi-year variable compensation plans (long-term incentive plans) or free share award plans in place at Orange group. The Committee also ensures, with regard to replacement plans, that a process is in place for reappointment deadlines and in situations requiring specific attention.

The Committee also examines, in line with the Group's strategy, the main thrust of the human resources and corporate social and environmental responsibility policies drawn up, based on discussions with the Group's stakeholders. Once a year, it reviews the Ethics Committee's report on the Group-wide actions to implement the ethical practices program, and is informed about the roll-out of the Group's compliance programs.

Article 8 of the Internal Guidelines of the Board of Directors details the responsibilities of the Committee.

Innovation and Technology Committee

In accordance with the Internal Guidelines of the Board of Directors, the Innovation and Technology Committee has at least three members appointed by the Board.

The Committee notably reviews the major multi-annual investment programs and the major technology partnerships entered into by the Group, the Group's strategic policies in terms of innovation and technology, and its performance in this respect.

Article 9 of the Internal Guidelines of the Board of Directors details the responsibilities of the Committee.

Joint Committee of Board Committees

In accordance with Article 11 of the Internal Guidelines of the Board of Directors – and without constituting a specialized committee of the Board itself – the Audit Committee, GCSER and the Innovation and Technology Committee meet in a joint forum once a year under the chairmanship of the Chairman of the Audit Committee or by the oldest member present. This Joint Committee is responsible for preparing the work of the Board of Directors relative to internal control and risk management systems. It met on October 4, 2019.

The Internal Guidelines state that the Company's Senior Management must present the corporate risk mapping and risk matrix to the Joint Committee, in particular the effectiveness of the risk management system, the major risks facing the Group and the mechanisms for preventing and detecting fraud.

Ad hoc committees

Article 5 of the Internal Guidelines of the Board of Directors provides that the Board may decide, for certain technical issues relating to the Company's operations and/or issues that may involve conflicts of interest and on which the Board of Directors is expected to give its view or make a decision, to establish an *ad hoc* committee to review these matters in consultation with the Company's Senior Management. Article 5 was amended at the request of the Board on December 5, 2018, in order to enable any director to participate in such committees, provided that they have no conflicts of interest

The Board of Directors appoints the Chairman, who is chosen from among the Committee's independent directors.

5.2.1.7 Lead Director

The Internal Guidelines of the Board of Directors allow the Board to appoint a Lead Director from among the independent directors at the proposal of the GCSER Committee. A Lead Director must be appointed if the same person is both Chairman of the Board of Directors and Chief Executive Officer.

The Board of Directors' meeting of December 7, 2016, appointed Charles-Henri Filippi as Lead Director. He remains a member of the GCSER Committee and is the Chairman since 2019. The powers of the Lead Director are defined in Article 15.1 of the Company's Bylaws (calling and chairing of Board meeting if Chairman is unavailable), and in Article 10 of the Internal Guidelines, which also defines these tasks.

Duties of the Lead Director

The main mission of the Lead Director is to ensure smooth relations between the Board of Directors and the Company's General Management. To this end, the Lead Director is responsible for:

- management of conflicts of interest: the Lead Director informs the GCSER Committee and, where appropriate, the Board of Directors, of any potential or actual conflicts of interest affecting the directors and officers of which he/she becomes aware or which are reported to him/her. Where necessary, the Lead Director makes recommendations on how to manage such conflicts;
- crisis situations: at the request of the Board of Directors, the Lead Director ensures that Corporate Governance enables the Company to cope with any exceptional crisis situations which it might confront;
- assessment of the Board of Directors: the Lead Director may be called on to comment during the GCSER Committee's assessment of the work of the Board of Directors and its committees;
- report on activity: the Lead Director reports on the performance of the Lead Director's duties annually to the Board of Directors. At Shareholders' Meetings, the Chairman of the Board of Directors may invite the Lead Director to report on the Lead Director's work.

Powers of the Lead Director

The powers of the Lead Director are subject to the limits on those of the Board of Directors and its committees:

- convening the Board of Directors/Agenda: the Lead Director may, pursuant to Article 15.1 of the Company's Bylaws, ask the Chairman of the Board of Directors to call a Board meeting on a given agenda or propose additional agenda items to the Chairman of the Board of Directors. The Lead Director may convene the Board of Directors if the Chairman is unable to do so and may chair Board meetings when the Chairman is absent;
- information for directors: the Lead Director ensures that the directors are able to carry out their duties in the best possible conditions, and in particular that the directors have all necessary information ahead of Board meetings;
- committees of the Board of Directors: the Lead Director is not barred from serving as Chairman of any Board committee. The Lead Director may, on proposal of the committee's Chairman, contribute to the work of the committees related to the Lead Director's duties;
- resources: the Lead Director has access through the Company's Senior Management to all documents and information required to carry out the Lead Director's duties;
- compensation: the Board of Directors determines, when the Lead Director is appointed, the amount of compensation the Lead Director receives for this role. In addition, the Lead Director can be reimbursed, against receipts, for any expenses incurred in the execution of the Lead Director's duties, notably travel costs.

In accordance with a decision of the Board of Directors of 25 October 2017, the Lead Director was identified as the General Management contact regarding situations regarding matters of compliance, especially in order to be able to report to all members of the Board on the effectiveness of the compliance system and its level of risk. The Lead Director participates annually in a meeting of the Risk Committee (see Section 5.2.2.3 Group Executive Committee and Governance Committees).

Finally, the Lead Director meets with the Company's investors and shareholders on a regular basis, as provided for by the Afep-Medef Code. In 2018 and 2019, the Lead Director participated, alongside Senior Management, in a number of meetings dedicated to the Company's governance in preparation for the Annual General Meeting.

5.2.1.8 Board and committee activities during the fiscal year

Board activities

The Board of Directors met eleven times during the 2019 financial period. These meetings had a collective attendance rate of 89.9%. Individual attendance rates are presented in the table located at the end of this section. Information on the method for allocating and the payment of attendance fees is presented in Section 5.4.2.1 *Amount of compensation paid or allocated for 2019 activity*. The typical Board meeting lasts around four hours.

Each meeting is generally preceded by a meeting of one or more of the Board's committees with a view to preparing its work and deliberations. The issues discussed by the committees are reported on by their Chair(s) to the Board of Directors.

In addition to the regular events in the course of the Company's operations (review of operational performance, quarterly results, half-year and annual financial statements, budget review, risk factors, approval of Corporate Officers compensation, etc.), the Board reviewed a summary of the acquisitions made for OBS (Orange Business Services) since 2013, with three particular focus points on Enovacom,

Business & Decision and Basefarm, an update on the conclusion of a new sports rights distribution contract relating to football matches in Spain, the summary of the first two years of Orange Bank, and the process of purchasing 5G frequencies. More specifically, in 2019, the Board authorized the disposal of the residual (2.49%) stake in the share capital of BT Group and all of the 95.5% in Orange Niger. It examined the plan to acquire SecureData and authorized the acquisition of SecureLink, stressing the particular selectivity that the management must apply in the current context where high technology companies are highly valued.

It is regularly kept informed of news within the Company such as the signing of agreements and internal elections.

During the first half of 2019, the Board followed the progress of the so-called France Telecom social crisis trial, which took place from May to July 2019, and noted that Orange, represented by its Secretary General, endeavoured to be present in a constant and systematic manner at all hearings of the Paris Criminal Court. During its meeting of December 27, 2019, the Board was presented with an analysis of the consequences of the Court decision notified on December 20, 2019.

The Board of Directors approved the Group guidelines from the new Engage 2025 strategic plan and consulted in the second half of 2019 with the CCUES (which in February 2020 became the Central Social and Economic Committee) on the strategic positioning. This annual consultation of the CCUES took place during the Board meeting on December 3, 2019.

After productive discussions, the Board proposed extending the long-term incentive plan (LTIP) for Corporate Officers, for the 2020-2022 period, and reviewed the related performance criteria. The appropriateness of the criteria chosen compared with the new strategic positioning was in particular discussed. This plan will be submitted for approval by the Shareholders' Meeting of May 19, 2020 (see Section 5.4.1). The Board of Director's review of points related to the appointment, compensation and evaluation of Corporate Officers is done in the absence of the interested parties.

On October 4, 2019, it also studied the existence and monitoring of the effectiveness of internal control and financial and non-financial risk management systems in the form of a joint meeting of the three committees in the Board of Directors' meeting.

The Board of Directors was presented with a report on the implementation of the Group vigilance plan and the new non-financial performance reporting obligations. It also approved the information on the corporate social and environmental issues of the Group included in the Report of the Board of Directors to the Shareholders' Meeting.

The Board also conducted an assessment of its operations. This took place in the fourth quarter of 2019 with the help of an independent consultancy (see Section 5.2.1.9 *Periodic review of the operations of the Board of Directors and its committees*).

At Board meetings held on February 20, 2019, and February 12, 2020, Charles-Henri Filippi reported on the performance of his duties as Lead Director in 2018 and 2019.

The main topics covered in the latest report are:

- the monitoring of potential crisis situations which could undermine the Company's governance;
- the quality of relations within the Board and between the Board of Directors and the General Management;
- the monitoring, in cooperation with the GCSER Committee, of the regular review of independence and any potential cases of conflicts of interest.

The Lead Director also regularly reported on subjects relating to his mission at the Board meetings.

Committee activities

Audit Committee

The Audit Committee met nine times in 2019. These meetings had a collective attendance rate of 91%.

It met regularly with Orange's senior management and the main managers of the Group's Finance Department, as well as with the Head of the Group Audit, Control and Risk Management Department and the Statutory Auditors in order to review with them their respective action plans and a follow-up on these plans.

Financial Reporting

In 2019, the Committee analyzed the statutory and consolidated financial statements for the 2018 fiscal year and the first half of 2019, together with the first and third quarter results for 2019. In its meeting on February 10, 2020, it reviewed the results of the fourth quarter of 2019, as well as the statutory and consolidated financial statements for the 2019 fiscal year. It verified that the processes for producing accounting and financial information complied with regulatory and legal requirements, especially in terms of internal control. In this respect, the Committee reviewed the draft Management Report and heard the Statutory Auditors' Reports. During a specific session, it also examined the 2020 budget and the financial trajectory until 2023 with regard to the strategic angles proposed for the period from 2020 to 2025. The significant risks and off-balance sheet commitments and their accounting impact, as well as the results of the asset impairment tests were also discussed.

In addition, the Committee reviewed all financial communications before their publication.

Internal Control and Risk Management, Ethics

Before approving each set of financial statements, the Committee undertook a review of the significant litigations in which the Group is involved.

Moreover, the Committee examined the results of the annual evaluation of the internal financial control system, which were presented to it by the Group Internal Control Department, and concluded that the system was effective (see Section 2.2.3.2 Summary of works on Internal Control implemented under Section 404 of the Sarbanes-Oxley Act).

The Committee also examined the major risks that, should they materialize, the Company believes could have a significant, adverse effects on its business, financial position or profits, particularly in light of its risk mapping. It also ensured that the recommendations formulated by the Audit, Control and Risk Management Department after the internal audit assignments were correctly implemented. The findings of the audit assignments as well as the agenda of the upcoming audit assignments were presented. The description of significant risks is in Section 2.1 *Risk factors*.

Finally, the Committee was presented with the external audit plan.

Management of Debt and Cash

The Committee regularly examined the Group's policy on debt refinancing and cash management.

In June 2019, it considered a proposal to increase the ceiling for the annual emissions of debt securities, with a view to having greater flexibility, and was consulted on the implementation of a charter governing the issuing of "green bonds" for ecological, social and sustainability purposes.

Expansion Plans and Strategic Plan

The Committee was informed about the position of the Group's equity

interests in Africa and the Middle East and reviewed the asset impairment tests conducted at the end of 2019 at the Group's main subsidiaries and equity interests, based on the entities' updated strategic plans, in order to take the 2020 budget as well as geopolitical and macroeconomic changes into account.

On the occasion of the launch of the auction procedure for the awarding of 5G frequencies in France, and given the issues at stake for the Group, it recommended to the Board the creation of an *ad hoc* committee within the framework of Internal Guidelines.

Furthermore, the Committee examined the outlook and main financial lines of the Engage 2025 new strategic plan.

Statutory Auditors

The Committee reviewed the fees for the Statutory Auditors for 2019 and the financial terms of their work during the year. A technical committee was set up, in which the Chairman of the Audit Committee participated, as part of the selection process for the panel of statutory auditors. This committee carried out work with a view to recommending a panel of statutory auditors to the Board of Directors, to replace E&Y, whose mandate will end at the 2021 Shareholders' Meeting.

Governance and Corporate Social and Environmental Responsibility Committee (GCSER Committee)

The GCSER Committee met nine times in 2019. These meetings had a collective attendance rate of 100%.

Compensation of Corporate Officers

At the beginning of 2019, the Committee determined the target proposals and calculation methods for the variable portion of the compensation of the Chairman and CEO and the Delegate CEOs for 2019. The calculation of the annual variable compensation of Corporate Officer compensation is based on a weighted average of four indicators that focus on the Group's growth, profitability, quality of service, and CSR performance. These indicators, their relative weighting and the results achieved are described in Section 5.4 Remuneration and benefits paid to Directors, Officers and Senior Management.

The proposed targets for Corporate Officers in 2020 were examined, debated and finalized in February 2020.

In addition, the Committee monitored the implementation of the long-term incentive plan (LTIP) for Corporate Officers and members of the Executive Committee for the 2017-2019 and 2018-2020 periods. In February 2020, on the Committee's recommendation, the terms and conditions for the 2019-2021 LTIP were renewed for 2020-2022, with certain changes to take account of the new strategic lines of the Engage 2025 plan presented on December 4, 2019.

The terms, procedures and conditions of these LTIPs are described in Section 5.4.1.

Lastly, the Committee prepared the breakdown of compensation for directors in respect of the 2019 fiscal year and defined the executive compensation policy for the 2020 fiscal year in the light of the changes made by order No. 2019-1234 of November 27, 2019 relating to the compensation for directors of listed companies (see Section 5.4.2 Board of Directors' report on the compensation of non-executive corporate officers).

Governance and operation of the Board

The Committee reviewed the Board's Corporate Governance report attached to the Management Report.

It also reviewed, like every year, each of the independent directors' positions in terms of the independence criteria set out in the Afep-Medef Code, in view of the position of Charles-Henri Filippi, whose term of office expires at the end of the Shareholders Meeting of 2020 (see Section 5.2.1.2 *Independent directors*).

During its meeting of February 7, 2020, the Committee took note of annual declarations made by Orange's corporate officers, in which certain information is required: number of Orange shares held and any related-party transaction, terms of office and positions held in 2019, personal position, potential conflicts of interest, etc.

Members of the GCSER Committee noted that in light of the annual declarations made by corporate officers, no specific conflicts of interest had been identified. This review, together with other work carried out by the Committee, enabled it to recommend to the Board that it categorize seven directors as independent within the meaning of the Afep-Medef Code (see Section 5.2.1.2 Independent directors).

The Committee also considered the annual activity report of the Lead Director.

Finally, in the last quarter of 2019, the Committee entrusted an assessment of the operating procedures of the Board and its committees to an external consultancy, in line with the recommendation of the Afep-Medef Corporate Governance Code, including the measurement of the effective contribution of the directors (see Section 5.2.1.9 Periodic review of the work of the Board of Directors and its committees).

Nomination

In March 2019, the Committee discussed the composition of the Board of Directors and recommended that the Board submit to the Shareholders' Meeting of May 21, 2019 the reappointment of Helle Kristoffersen, Alexandre Bompard and Jean-Michel Severino, all three of whom are independent directors.

Mouna Sepehri, whose term expired at the Shareholders' Meeting of May 21, 2019, did not request the renewal of her mandate. The Committee noted this, and in spite of her strong contribution to the work of the Board, looked at several profiles of people with expertise in the governance of large groups and CSR. It recommended the appointment of Anne-Gabrielle Heilbronner, elected by the Shareholders' Meeting of May 21, 2019.

Otherwise, the committee also recommended, on proposal from the government, the renewal of the mandate of Anne Lange, director representing the public sector.

The Committee also acknowledged, on June 14, 2019, the resignation of Luc Marino, the director representing employee shareholders; his replacement Philippe Charry took up his position on the Board and was appointed member of the Innovation and Technology Committee.

In October 2019, the Committee discussed the composition of the Board of Directors and recommended that the Board submit to the Shareholders' Meeting of May 19, 2020, the reappointment of Christel Heydemann and Bernard Ramanantsoa, both of whom are independent directors and whose profiles and expertise were considered to be appropriate for maintaining the diversity of the members of the Board recommended by the Afep-Medef Code regarding the composition of the Board of Directors.

Since this involves the office of the director representing employees who are shareholders, an office also expiring on the Shareholders' Meeting of May 19, 2020, the GCSER Committee recommended that the Board of Directors delegate to the Chairman and CEO all powers regarding the organization and implementation of preliminary consultation

with shareholder employees, with a view to proposing a candidate to the Shareholders' Meeting, and it has been regularly informed of the result of this pre-consultation during its meeting on February 7, 2020.

Finally, the Committee examined the procedures leading up to the replacement of Charles-Henri Filippi, Chairman of the GCSER Committee and Lead Director, whose mandate also ends at the end of the General Meeting of May 19, 2020. The Committee noted that, due to having been in office twelve years, Charles-Henri Filippi could not have his term as independent director renewed; it therefore proposed that an independent consultant be hired to select a profile meeting the requirements of the Board and of Article 13.2 of its Internal Guidelines, according to the terms of which it must "ensure the diversity of professional qualifications and experience in connection with the Group businesses."

Acknowledging rapid changes in the telecommunications sector and with a view to enriching discussions on the Board about innovation and technology, the Committee proposed that the next director should have expertise in the area of innovation in the digital sector, work (or have worked) abroad and exercise (or have exercised) a General Management function.

This selection task, carried out between the months of October 2019 and February 2020, lead to a recommendation from the GCSER Committee during its meeting on February 7, 2020, approved by the Board of Directors during its meeting on February 12. As a result of this process, the candidature of Mr Frédéric Sanchez will be presented at the next Shareholders' Meeting. The biography of Mr Sanchez is presented in Section 6.6 Report of the Board of Directors on the resolutions submitted to the Combined General Meeting May 19, 2020 (see resolution no. 5). The Board of Directors will appoint a new Lead Director and a new Chairman of CGRSE after the Shareholders' Meeting of May 19, 2020.

CSER, ethics, compliance

The Committee reviewed the strategy and important issues related to the Group's corporate social and environmental responsibility policies. It examined the major achievements in 2019 in this area. The Committee reported to the Board of Directors on its work on this subject

The progress of the roll-out of the program to prevent corruption within the Group, in particular relating to the implementation of measures resulting from French Law of December 9, 2016, known as the "Sapin II" Law, or from decree no. 2017-1180 of July 19, 2017, on the publication of non-financial information, was presented to the Committee, in particular the implementation of the Code of Conduct and "non-financial performance disclosure obligations", and the roll-out of the Group's anti-corruption vigilance plan. The Board of Directors was informed of this matter.

The Committee also examined the annual report on ethics and compliance and studied the Group-wide actions to implement the ethical practices and compliance program (see Section 2.2 Activity and risk management framework). It also assessed the implementation of the vigilance plan and the new non-financial performance reporting obligations.

Finally, as part of the periodic review of the Board's work (see Section 5.2.1.9 *Periodic review of the work of the Board of Directors and its committees*), the Committee continued its discussions on the development and monitoring of Director and Officer replacement plans.

Labor

The Committee monitored changes in the yearly indicators of the employee satisfaction survey. At its meeting held on November 21, 2019, the Committee was presented with a detailed annual report on workplace gender equality and equal pay at Orange, specifically covering the proportion of women making up the workforce, an analysis

of pay gaps, and the awareness-raising campaigns rolled out in 2019, and prepared the relevant Board discussions. It was also informed that a policy for ensuring a gender balance on the governing bodies, introduced by the Afep-Medef Code in January 2020, must be described in the Corporate Governance Report.

Innovation and Technology Committee (ITC)

The ITC met twice in 2019. These meetings had a collective attendance rate of 67%.

The Committee met the members of the Orange Scientific Committee for a presentation of the research strategy and the key issues in the area of value creation. It also traveled to Lille, with other members of the Board of Directors, for a field visit on the deployment of 5G, and took an interest in cyber defense activities (B2B and B2C scope).

Joint Committee

During a joint meeting in October 2019, members of the Audit Committee, the GCSER and the ITC studied the effectiveness of the risk management mechanism, with an appraisal of 2019 and a focus on the major risks for the Group, in particular from the perspective of technological competition between the US and China, network service quality commitments from Orange and environmental risks.

Ad hoc committees

An ad hoc committee, as provided for by Article 5 of the Internal Guidelines, was created, after a decision of the Board of Directors on 28 October 2019. This committee, which will work from the first half of 2020, will focus on the auction process in France for 5G frequencies.

Strategic seminars

Pursuant to its Internal Guidelines, the Board of Directors met with the members of the Executive Committee on January 9, 2019, and November 18, 2019. At these meetings, directors heard presentations on and discussed the Group's financial, strategic, employee relations and regulatory positions, as well as the results of actions undertaken in France and around the world, and discussed certain areas of diversification (Cloud, cyber security, financial services). The seminar of November 18 was more focused on the presentation of the new Engage 2025 strategic plan, with particular focus on infrastructure and 5G issues, Data and artificial intelligence, outlook in the Africa and the Middle East region, as well as Orange Bank and financial services, which helped to inform the directors' reflections and the debates that followed during the meetings of the Board.

Individual attendance of Board members

In accordance with Article 10.1 of the Afep-Medef Code, the table below presents the attendance rate of each member of the Board of Directors in 2019:

This table takes account of the participation of directors in both of the Board's seminars as well as the combined meeting of the three committees on October 4, 2019.

	Attendance of members of the Board of Directors				
	Board of Directors	Audit Committee	GCSER	ITC	
Stéphane Richard	100%	NA	NA	NA	
Alexandre Bompard	83%	NA	NA	33%	
Philippe Charry ⁽¹⁾	100%	NA	NA	100%	
Sébastien Crozier	100%	100%	NA	NA	
Hélène Dantoine (1)	90%	75%	NA	NA	
Charles-Henri Filippi	100%	NA	100%	NA	
Anne-Gabrielle Heilbronner ⁽¹⁾	100%	NA	100%	NA	
Christel Heydemann	92%	90%	NA	NA	
Fabrice Jolys	92%	NA	100%	NA	
Helle Kristoffersen	83%	NA	NA	67%	
Anne Lange	100%	NA	100%	NA	
Luc Marino (1)	100%	NA	NA	100%	
René Ollier	92%	NA	NA	100%	
Bernard Ramanantsoa	100%	100%	NA	NA	
Jean-Michel Severino	75%	90%	NA	NA	
Bpifrance Participations represented by Nicolas Dufourcq	42%	NA	NA	33%	

⁽¹⁾ Directors' attendance rates are calculated based on their term of office in 2019, it being specified that:

In addition, Mouna Sepehri, whose mandate ended at the May 21, 2019 Shareholders' Meeting, was only able to attend one Board of Directors meeting. Her attendance is not in this table and is not taken into account for the calculation of the collective attendance of the Board and its committees.

⁻ Hélène Dantoine was appointed director as of March 14, 2019;

Anne-Gabrielle Heilbronner was appointed director as of May 21, 2019;
 Luc Marino handed the Chairman of the Board his resignation from the position of director representing shareholder employees on June 14;

⁻ Philippe Charry, replacement director representing shareholder employees, joined the Board of Directors following Luc Marino's departure

5.2.1.9 Periodic review of the work of the Board of Directors and its committees

The operating procedures of the Board of Directors and of its committees are alternatively assessed internally via self-assessment, as was the case in 2018, and externally with the help of an independent consultancy, as was the case in 2019.

The GCSER Committee, followed by the Board, took note of the results of the self-assessment carried out by the Board and its committees. All directors participated in this assessment.

During the GCSER Committee discussions, followed by those of the Board of Directors at its meeting of February 12, 2020, directors expressed a very positive opinion about the operation of the Orange Board of Directors. A large majority of directors are satisfied with the dynamic (quality of the interaction between the directors and with members of management team) and the performance of the Board (quality of decisions made and how issues are managed). Directors believe that the governance bodies operate effectively and that the Board works in a collegial and cooperatives fashion, in accordance with the best practice recommended by the Afep-Medef code.

The areas of improvement suggested mainly relate to:

- better anticipation of replacements, supported by a regular review of the make-up of the Board;
- more diverse profiles on the Board (continue search for international profiles and those with strong skills in technology and innovation, improve the operation of the innovation and technologies Committee);
- more care in dealing with the arrival of new directors (put in place a more structured integration process, to be built with Board members);
- care in relation to the duration of the Board meetings (leave the Board more time for discussion, in-depth analysis of issues playing a greater role in committee meetings);
- more exhaustive monitoring of decisions in order to ensure the Board is fully informed.

Finally, this assessment was an opportunity for the consultancy firm to update the mapping of skills and expertise of the Board members, presented in Section 5.2.1.3.

5.2.1.10 Description of the procedure for assessing current agreements in place

As a result of the law of May 22, 2019, on the growth and transformation of companies known as the "PACT Act," Boards of Directors of listed companies must put in place a procedure for regularly assessing whether agreements covering ongoing operations and concluded under normal conditions meet these criteria.

On December 3, 2019, the Orange SA Board of Directors adopted an internal procedure to assess whether the agreements concluded between (i) Orange SA and (ii) the corporate officers of Orange SA or the public sector (including the French government, Bpifrance Participations, central government administrations and companies controlled by the government) or any company in which an Orange SA corporate officer holds a position, can continue to be described as agreements which "relate to ongoing operations concluded under normal conditions."

As part of the procedure, the Group Legal Department is responsible for (i) centralizing the recording of these free agreements with the legal departments of the Orange SA divisions and (ii) carrying out a subsequent evaluation.

The agreements are assessed before they are signed, agreements are classified on a case-by-case basis by the legal department in question, with the support of the operational, financial and compliance departments of the Group, on the basis of cumulative criteria (the operation must be both current and concluded under normal conditions), and a re-examination of these agreements is planned on an annual basis. An annual in-depth check is also carried out on significant agreements, in order to ensure that they continue to meet the criteria for current and normal agreements at the level of Orange SA. These are, for example, agreements which are subject to significant commitments for Orange SA or decisions made in Group investment committees.

A report on this procedure will be presented for approval to the Orange SA Board of Directors every year. The Board will look at the effectiveness of the said procedure for assessing current agreements concluded under normal conditions and in place in the Group.

5.2.2 Operation of the General Management

5.2.2.1 Form of exercise of General Management

On February 23, 2011, the Board of Directors decided to combine the roles of Chairman and Chief Executive Officer and to appoint Stéphane Richard as Chairman of the Board of Directors with responsibility for the General Management of the Company. It considered this management structure to be the most appropriate for the Company's organization and operation, because it allows the General Management to benefit from his business knowledge and experience in order to bring forward and defend the Company's strategy, offering greater transparency between General Management and the Board of Directors, while optimizing coordination of operations within the Group and facilitating agile decision-making.

In this context, with an Executive Committee (see 5.2.2.3 Executive Committee and Group governance committees) thanks, on the one hand, to the presence of two Delegate CEOs with defined areas of expertise alongside the Chairman and Chief Executive Officer, and, on the other hand, of a statutory Lead Director with significant roles and powers, the presence of seven independent directors and the frequent

meetings of the Board of Directors (11 meetings in 2019) and its committees, Orange has ensured the existence of the means to guarantee robust governance that focuses on efficiency and performance while ensuring a balance of power. In addition, each of the three committees of the Board of Directors (Audit Committee, GCSER Committee and ITC) is chaired by an independent director. During the assessment process carried out at the end of 2019, and as with previous assessments, directors were individually consulted and combining the roles of Chairman and Chief Executive Officer was considered to be the most appropriate given the Company's position.

5.2.2.2 Limits set on the Chairman and Chief Executive Officer's authority

The Chairman and Chief Executive Officer is invested with extensive powers to act in the Company's name. He exercises his powers within the limits of the corporate scope and subject to those limits that the law and Internal Guidelines of the Board of Directors expressly reserve for the latter. He is supported in this task by the Delegate Chief Executive Officers and the Executive Committee.

Article 2 of the Internal Guidelines of the Board of Directors provides that the Chairman and CEO must obtain the Board's prior authorization before committing the Company to:

- investments or divestments exceeding €200 million per transaction falling within the consolidation scope, and when the total consolidated exposure exceeds the Board's prior authorization for such an investment; or
- any new investment (excluding acquisitions of telecoms spectrum) under the Group's major multi-annual technology programs in its main territories (such as FTTH, 5G, etc.) in an average amount per annum exceeding 2.5% of the Group's investments budgeted during the year in question.

In addition, acquisitions of telecom spectrum by the Group in the territories representing at least 10% of the consolidated revenue must be subject to prior presentation to the Board of Directors, with the latter setting a maximum auction price.

Investments or divestments remain, as the case may be, subject to independent review by the governing bodies of the subsidiaries in question.

Furthermore, any investment or divestment that falls outside the scope of the Company's strategy and involves a transaction in excess of €20 million must first be approved by the Board of Directors. Where relevant, the Board of Directors must be kept informed of any significant new developments regarding such transactions.

The Chief Executive Officer must also obtain annual authorization from the Board of Directors, within ceilings determined by it, to allow the Company to issue bonds or equivalent securities or arrange syndicated bank facilities.

5.2.2.3 Executive Committee and Group governance committees

The Executive Committee, under the authority of the Chairman and CEO, is responsible for managing the Group and coordinating the implementation of its strategy. It oversees the achievement of operational, labor relations and technical objectives, as well as of those relating to the allocation of financial resources. Its meetings are generally held weekly. Its composition is specified in Section 5.1.3.

Stéphane Richard has delegated a series of powers and signing authority to each member of the Executive Committee, each of whom has applied them in their respective area of expertise.

Several specialized committees reporting to the Executive Committee were created to apply or oversee the implementation of its directives throughout the Group. The main committees that support Group governance are the Group Investment Committee, the Treasury and Financing Committee, the Tax Committee, the Claims and Commitments Committee, the Risks Committee, the Employment and Skills Committee and the Disclosure Committee. Each committee has adopted Internal Guidelines or a charter defining their operating and deliberation procedures. These committees are also responsible for monitoring risk management with regard to financial liabilities, thereby helping to limit the Group's overall exposure.

The Group Investment Committee, which operates under the authority of the Chairman and CEO, is chaired by the Delegate CEO in charge of Finance, Performance and Europe, and includes four other permanent members: the Delegate CEO in charge of Group Transformation, the Deputy CEO, the Chief Technology and Global Innovation Officer, the Senior Executive Vice-President in charge of Strategy and Cyber Security activities and the Secretary General. The internals guidelines of this committee (terms of reference) evolved in March 2020. Its role is to review projects implying financial

commitments, off-balance sheet commitments and non-financial implications for the Group, also focusing on value creation. Other than in extraordinary circumstances, the Committee has decision-making authority on investment projects in IT and service platforms exceeding €10 million as well as bids in response to tender offers on the Enterprise market whose financing needs exceed €10 million, and on other investment projects exceeding €30 million (including implied operational expenses). It also rules on mergers and asset disposals, and the financing needs of subsidiaries in the event of an increase in the Group's financial exposure. This Committee meets as often as it deems necessary and in general once a week.

The Treasury and Financing Committee, chaired by the Delegate CEO Finance, Performance and Europe, sets the guidelines for managing the Group's debt and financing on a quarterly basis, especially in respect of its liquidity, interest rate, exchange rate and counterparty risks. The financial monitoring of the subsidiaries is also presented to the Committee. The Committee also reviews past management (key debt figures, completed transactions, financial results, etc.). It met four times in 2019.

The Tax Committee is chaired by the Delegate CEO Finance, Performance and Europe. Its role is to review the major tax issues in order to determine their accounting consequences, if any. The materiality threshold for tax matters that must be submitted to the Tax Committee is €10 million. This Committee meets twice a year. However, the Committee may convene special meetings to assess and approve the tax options to be taken on issues that are particularly important for the Group. The Tax Committee met three times in 2019.

The Claims and Commitments Committee, which is chaired by the General Secretariat, examines the Group's significant litigations and contractual commitments, in order to ensure, in particular, that the related risks are as necessary taken into consideration as accounting provisions. The Committee's mandate also includes approving the information in the notes to the financial statements on significant litigations. The Committee met seven times in 2019.

The Risks Committee, which operates under the authority of the Chairman and Chief Executive Officer, is chaired by the Delegate CEO Finance, Performance and Europe. It is made up of members of the Executive Committee, eleven of whom are permanent members. The Committee's role is to review the Group's principal risks and to propose to the Executive Committee all decisions regarding risk management and the quality of internal control, as well as to assist General Management in its risk management reporting to the Audit Committee and Board of Directors. In this respect, the Committee validates the risk mapping, validates and monitors the execution of the annual internal audit program and ensures the monitoring of the implementation of audit recommendations and corrective action plans. It monitors fraud and corruption prevention programs and reviews identified cases during meetings with the Lead Director. It is also informed of the main work on internal control, and ensures the consistency of the internal control and internal audit plans with the risk management objectives. In 2019, the Committee met five times.

The Employment and Skills Committee, which operates under the authority of the Chairman and CEO, is chaired, by delegation by the Group Senior Executive Vice-President in charge of Human Resources. It is made up of members of the Executive Committee or, by delegation, of their representatives. The Committee plays a key role in implementing the Group's employment policy. The Employment and Skills Committee examines restructuring projects that may have a significant effect on jobs and skills, and job outlook and changes in the Group's business lines, divisions and countries. It also looks at all plans for external hires in France. In this context, it issues recommendations on each candidate presented. The Committee meets several times a month.

The Disclosure Committee operates under the authority of the Delegate CEO Finance, Performance and Europe. It is chaired, by delegation, by the Group Chief Accounting Officer, and includes the relevant Department heads within the accounting, legal, internal audit, controlling, investor relations and communications fields. It ensures integrity, accuracy, and compliance with applicable laws and regulations and recognized practices, and ensures the consistency and quality of the Group's financial information. It carries out this mission within the procedural framework for the preparation and validation of financial information as defined by the Group. Accordingly, it examines all financial disclosures made by the Company: the consolidated financial statements, the annual and half-yearly financial reports, the reference document (now called the Universal Registration Document) filed with the AMF, the US Annual Report (Form 20-F) filed with the SEC, and any press releases containing financial information and presentations to institutional investors. In addition, the Committee looks at financial communication distributed by the principal listed subsidiaries. It met 20 times in 2019.

In addition, in terms of the Group's governance, the following committees help to guide strategy in the area of non-financial performance and diversity at Orange.

The Group Ethics Committee deals with issues of compliance, ethics and social responsibility at Orange. It is made up of six members of the Executive Committee, the Group's Inspector General and the Chief Compliance Officer. During a meeting in July 2019, the decision was made to expand its role to steering non-financial performance. It now reviews, notably, the "declaration of non-financial performance" (DNFP) and the "Orange group vigilance plan," which are included in the Management Report presented to the general meeting of shareholders. The Group Ethics Committee met twice in 2019.

The Professional Equality Strategy Committee, created in 2011, guides Orange's policy in the area of gender equality in the workplace. It is made up of members of the Executive Committee and representatives of Group entities. This committee sets the main lines of the policy for gender equality in the workplace, focusing on four main areas: equal pay, women's access to positions of responsibility, balanced gender representation in all of the Group's business areas including technical fields, and private life/work life balance. The Professional Equality Strategy Committee met twice in 2019.

5.3 Reference to a Code of Corporate Governance

Orange refers to the Afep-Medef Corporate Governance Code for listed companies revised in January 2020, which may be consulted on the Orange, Afep and Medef websites.

Under the Comply or Explain rule provided for in Article L. 225-37 of the French Commercial Code, the Company states its compliance with the recommendations of the Afep-Medel Code as of the date of

this document, with the exception of the rule on the loss of independent director status (Article 9.5.6 of the Afep-Medef Code), which occurs after twelve years. We note that Charles-Henri Filippi's mandate reached a length of twelve years on February 5, 2020, and that his mandate ends after the General Meeting of May 19, with no proposed extension (see Section 5.2.1.2 Independent Directors).

Main differences with the rules of the New York Stock Exchange

Orange has endeavored to take the New York Stock Exchange (NYSE) Corporate Governance standards into account. However, since the Company is not a US company, most of these rules do not apply to it, and the Company is allowed to follow the rules applicable in France instead. Accordingly, Orange has elected to refer to the Afep-Medef Code, where the recommendations differ in some respects from the NYSE governance rules applicable to US companies listed on the NYSE.

The main differences between Orange's practices and the rules applicable to US companies are described in Orange's annual report (Form 20-F) filed with the Securities and Exchange Commission of the United States.

5.4 Remuneration and benefits paid to Directors, Officers and Senior Management

5.4.1 Report of the Board of Directors on compensation and benefits paid to corporate officers

The Company refers to the Afep-Medef Corporate Governance Code for listed companies (revised version of January 29, 2020) as a general baseline, and in particular for compensation matters.

This report presents the itemized total compensation and benefits of any kind paid or awarded during the fiscal year ended December 31, 2019, to directors and officers as well as the policy regarding the compensation of corporate officers for their positions, pursuant to Article L. 225-37-2 I of the French Commercial Code.

This report was prepared under the aegis of the Governance and Corporate Social and Environmental Responsibility Committee (GCSER Committee).

5.4.1.1 Compensation policy for corporate officers

Orange aims to define and put in place a balanced and socially equitable compensation policy for its corporate officers.

The executive compensation policy is consistent with the Group's strategy. It is not only a management tool for attracting, motivating, and retaining the talent the Company needs, it is also a way to meet the expectations of shareholders and other stakeholders, particularly in terms of transparency, performance and respect for CSR commitments.

All compensation and benefits are analyzed by item, then comprehensively, to obtain the appropriate balance among fixed and variable, individual and group, and short and long-term compensation.

Orange ensures that the criteria governing the annual and multi-year variable components of the corporate officers are aligned with those of all the company's managers.

The compensation policy for corporate officers is set by the Board of Directors on the recommendation of the GCSER.

Governance

The general principles and criteria for the compensation of corporate officers and their assessment are prepared and examined by the GCSER, which then makes recommendations to the Board of Directors for decision.

The GCSER may use external benchmarks to assess the levels of compensation of corporate officers. In this respect, surveys are regularly used in order to ensure that compensation levels and structures are competitive in relation to a panel of comparable companies, including companies based in France and abroad which are competitors of the Group in telecommunications, as well as service companies, some of which have a government shareholder.

The GCSER listens to observations and requests made by investors and makes a point of taking them into account, while maintaining a consistent compensation policy, subject to the constraints imposed by the confidentiality of the information published.

Finally, the GCSER ensures the consistency of corporate officer and director compensation policies with regard to the variable annual share $\,$

and the allocation of performance shares and more generally the balance of compensation packages within Orange with the analysis of changes in equity ratios.

The GCSER defines, at the end of Y-1, the structure of corporate officer compensation and at the start of year Y the targets and criteria governing variable compensation packages, in connection with the Group's strategy and the contribution demanded from corporate officers.

In 2019, the GCSER examined the compensation of corporate officers in four meetings.

The issue of the compensation of corporate officers was dealt with during four meetings of the Board of Directors in 2019. Corporate officers do not participate in the discussions of the Board of Directors about their own pay.

Compensation structure for corporate officers

The compensation structure for each of the corporate officers consists mainly of compensation in the form of yearly fixed compensation and variable compensation, and multi-year variable compensation. Each of these items is more fully detailed below.

Fixed compensation

Fixed compensation of corporate officers is based on:

- the importance and complexity of their responsibilities;
- the experience and path of those holding these positions;
- and market analysis for comparable positions.

Annual variable compensation

The purpose of annual variable compensation is to inspire corporate officers to achieve the annual performance targets set for them by the Board of Directors, consistent with the Company's strategy. Pursuant to the Afep-Medef Code, the potential amount of variable compensation is expressed as a percentage of fixed compensation.

This variable share depends on performance levels applied to financial (50%) and non-financial (50%) parameters that represent expected overall performance. The entire variable portion is determined by precise targets, most importantly a quantitative performance measurement, including for non-financial indicators.

Multi-year variable compensation

In 2015 and 2016, corporate officers benefited from two long-term incentive plans in cash (LTIP 2015-2017 and LTIP 2016-2018).

Since 2017, the Board of Directors has decided to modify the LTIP scheme as further means of retaining corporate officers and aligning their interests with the interests of the Company and the shareholders. In line with market practices, the scheme is based on a performance share allocation plan and on criteria that recognize the officers' direct contribution to the Company's long-term overall performance. This scheme also benefits employees holding key positions within the Orange group.

Exceptional compensation

Until 2018, the Board of Directors had applied the principle by which corporate officers might be paid exceptional compensation in certain circumstances that should be disclosed in detail and supported with evidence, subject however to the shareholders' approval. Since this option was not used in 2018 or in prior years, the Board of Directors voted, for the sake of transparency, that this provision could no longer be used from 2019.

Attendance fees

Corporate officers do not receive attendance fees for the duties and offices carried out in the Group's companies.

Plans related to termination of service

There is no compensation or benefit owed or likely to be owed because of the termination or change of office of corporate officers, nor any commitment to pay any compensation in consideration for a non-competition clause.

However, if a Corporate Officer is appointed via external hiring, the Board of Directors reserves the right to apply such provisions in keeping with the law and in compliance with the Afep-Medef Code.

Supplemental retirement plan

Corporate officers do not benefit from any supplemental retirement plan for their services in excess of the mandatory base and supplemental plans.

If, before the Officer took office, he or she was eligible for the defined benefit retirement plan set up for employees classified as "off the matrix" (a plan which was canceled for people recruited from 2011), that plan's coverage is suspended, and no rights are generated during the term of office. Furthermore, upon termination of service, the period during which the Director held office will not be taken into account, in terms of either seniority or compensation, in the calculation of pension.

Benefits in kind

Corporate officers may, if they wish, have a company car with chauffeur; consulting firm services for personal legal assistance relating to their roles, capped at 100 hours a year for the Chairman and CEO, and 20 hours for the other corporate officers; an annual health check; Internet or telephone access; and the equipment, particularly IT equipment, needed to perform their duties.

Miscellaneous

The Chairman and CEO as well as the Delegate CEOs are enrolled in the Orange group's death and disability and supplemental health insurance plans, which are applicable to corporate officers (see Section 6.7 Statutory Auditors' Special Report on regulated agreements).

5.4.1.2 Amount of compensation paid or allocated to corporate officers for 2019

Tables No. 1 to 11 below follow the standard presentation as recommended in Annex 4 of the Afep-Medef Code (28).

Summary of the compensation, stock options and shares allocated to each corporate officer (table No. 1)

(in euros)	2019	2018
Stéphane Richard		
Gross compensation in respect of fiscal year (detailed in table 2) Valuation of options allocated throughout the year	1,616,383	1,870,762
Valuation of LTIP performance shares allocated throughout the year	273,000	392,875
Total	1,889,383	
Ramon Fernandez		
Gross compensation in respect of fiscal year (detailed in table 2) Valuation of options allocated throughout the year	895,274	1,104,471 -
Valuation of LTIP performance shares allocated throughout the year	140,400	202,050
Total	1,035,674	
Gervais Pellissier		
Gross compensation in respect of fiscal year (detailed in table 2)	890,388	1,112,387
Valuation of options allocated throughout the year Valuation of LTIP performance shares allocated throughout the year	140,400	202,050
Total	1,030,788	

Performance shares awarded in 2018 and 2019 under the 2018-2020 LTIP and 2019-2021 LTIP share performance plans were valued at their grant date at the IFRS fair value. The valuation of these shares is therefore given in the table above for the sake of transparency. However,

to the extent that the 2018 compensation already includes the cash payments related to the 2016-2018 LTIP, the sum of the two aggregates is not shown in 2018 since it is not representative of the compensation of corporate officers.

Summary of the compensation paid to each corporate officer (table No. 2)

Gross amounts (in euros)	20	19	2018		
	Amounts due in respect of fiscal year	Amounts paid during the fiscal year	Amounts paid in respect of fiscal year	•	
Stéphane Richard					
Fixed compensation Variable compensation Multi-year variable compensation (LTIP) Exceptional compensation Attendance fees ⁽¹⁾	950,000 655,120	950,000 626,124 300,000	932,930 626,124 300,000	932,930 533,250 300,000	
Benefits in kind	11,263	11,263	11,708	11,708	
Total	1,616,383	1,887,387	1,870,762	1,777,888	
Ramon Fernandez					
Fixed compensation Variable compensation Multi-year variable compensation (LTIP) Exceptional compensation Attendance fees	600,000 278,280 NA	600,000 294,235 200,000 NA	600,000 294,235 200,000 NA	600,000 296,250 160,000 NA	
Benefits in kind	16,994	16,994	10,236	10,236	
<u>Total</u>	895,274	1,111,229	1,104,471	1,066,486	
Gervais Pellissier					
Fixed compensation Variable compensation Multi-year variable compensation (LTIP) Exceptional compensation	600,000 278,280	600,000 294,235 200,000	600,000 294,235 200,000	600,000 355,500 200,000	
Attendance fees Benefits in kind	NA 12,108	NA 12,108	NA 18,152	NA 18,152	
Total	890,388	1,106,343	1,112,387	1,173,652	

⁽¹⁾ Stéphane Richard has waived his right to receive attendance fees.

NA: not applicable.

Fixed compensation

In accordance with the resolutions approved by the Shareholders' Meeting of May 21, 2019, the compensation of Stéphane Richard remained the same at €950,000 annually, as did that of Ramon Fernandez and Gervais Pellissier at €600,000 annually.

Annual variable compensation

In 2019 Stéphane Richard received a variable share of €626,124 in respect of the 2018 fiscal year, approved by the Shareholders' Meeting of May 21, 2019. Ramon Fernandez and Gervais Pellissier received a variable share of €294,235 in respect of the same fiscal year.

In 2019, Stéphane Richard was entitled to a variable portion of 80% of his annual fixed compensation on an achieved targets basis, and up to 100% for out-performance.

For 2019, Ramon Fernandez and Gervais Pellissier were entitled to a variable portion, on an achieved targets basis, capped at 60% of their annual fixed compensation.

Reminder of targets and results achieved for 2019

In 2019, the annual variable compensation of the corporate officers was based on the weighted average of four indicators emphasizing the Group's growth, its profitability, customer experience, and CSR performance. The expected performance levels were set by the Board of Directors, with financial indicators based on the Group's budget.

To calculate the percentage attainment, an elasticity curve is constructed so that the percentage can be allocated with respect to each indicator and its attainment level.

Growth in revenue (for 20%)

The revenue growth target (on a comparable basis) set for corporate officers in 2019 was in line with the Group's budget.

With growth of 0.6%, the elasticity curve puts the attainment percentage of this indicator at 0%.

Operating cash flow (for 30%)

The operating cash flow objective set for the corporate officers for 2019 was in line with the Group's budget. With an operating cash flow of €5,568 million the elasticity curve of this indicator put the attainment percentage at 91.1% for Stéphane Richard, Ramon Fernandez and Gervais Pellissier.

Customer Experience (for 17%)

The customer experience indicator is divided in two sub-indicators: a mass market customer experience indicator (B2C customer survey) which accounts for 75% of the result, and a global B2B customer experience indicator (B2B customer survey) for 25%.

The B2C and B2B Sub-indicators are average recommendation scores given by customers (Mean Recommendation Score, or MRS). These surveys are conducted in several countries: in France, in the Europe

region as well as the MEA region, and with the Enterprise customers of Orange Business Services.

In 2019, the target for the B2C indicator was 79; the final figure was 81.2. For the B2B indicator, the target was 7.47 and the actual figure was 7.66.

The elasticity curve applied to the B2C indicator put the attainment percentage at 113.75% for Stéphane Richard and 100% for Ramon Fernandez and Gervais Pellissier.

The elasticity curve applied to the B2B indicators put the attainment percentage at 111.88% for Stéphane Richard and at 100% for Ramon Fernandez and Gervais Pellissier.

CSR performance (for 33%)

The target was to achieve overall progress in the six indicator components:

 three are related to the result of the employee survey, which is conducted on an annual basis by an external agency giving a 70%

- weighting. Results are reviewed based on the employees' perceptions in connection with three topics: skills, collective agility, commitment;
- three relate to changes in HR indicators, with a 30% weighting: the NPS (Net Promoter Score), the frequency of work-related accidents (TFRAC) and the percentage of women in management networks.

The result for each component is measured in the following way:

- target not attained: result of -1;
- target attained: result of 0;
- target surpassed: result of +1.

The three items of the employee survey rose in relation to 2018. The result is +3.

The TFRAC and the percentage of women in management networks are "on target." The learner NPS, for its part, are "target surpassed." The result is +1.

Criterion 2019 e		experience o	bjectives	Scoring 5
	Minimum	Actual	Maximum	
Employee survey	-3	3	3	Delegate CEO 70%; CEO 87.5%
HR indicators	-3	1	3	Delegate CEO 30%; CEO 32.5%
Total				DGD 100%; PDG 120%

The elasticity curve applied to this indicator gives 120% for Stéphane Richard and 100% for Ramon Fernandez and Gervais Pellissier.

Amount of variable portion in respect of 2019

→ Attainment percentage for Stéphane Richard

Criterion	Variable compensation results 2019					
	Weight	Threshold	Target	Maximum		
Organic growth in revenue	20.00%	Budget -0.5pt	Budget	Budget +1pt	0.0%	
Operating cash flow	30.00%	Budget -2.5%	Budget	Budget +5%	27.3%	
B2C customer experience	12.75%	75.0	79.0	83.0	14.5%	
B2B customer experience	4.25%	7.07	7.47	7.87	4.8%	
Employee experience	33.00%				39.6%	
Weighted total	100.00%				86.2%	

→ Attainment percentage for Ramon Fernandez and Gervais Pellissier

Criterion	Variable compensation results 2019					
	Weight	Threshold	Target	Maximum		
Organic growth in revenue	20.00%	Budget -0.5pt	Budget	Budget	0.0%	
Operating cash flow	30.00%	Budget -2.5%	Budget	Budget	27.3%	
B2C customer experience	12.75%	75.7	79.7	79.7	12.8%	
B2B customer experience	4.25%	7.07	7.47	7.47	4.3%	
Employee experience	33.00%				33.0%	
Weighted total	100.00%				77.3%	

The application of these attainment rates to the corporate officers' respective variable targets yields the following variable portion amounts:

Corporate officer	Fixed compensation (in euros)	Target (in %)	Rate of attainment (in %)		2019 variable compensation due (in euros)
Stéphane Richard	950,000	80%	86.20%	68.96%	655,120
Ramon Fernandez	600,000	60%	77.30%	46.38%	278,280
Gervais Pellissier	600,000	60%	77.30%	46.38%	278,280

Performance share plans

In respect of the LTIP 2019-2021, 35,000 shares were allocated to Stéphane Richard and 18,000 to Ramon Fernandez and Gervais Pellissier under performance and presence conditions in accordance with the thirteenth and fourteenth resolutions approved by the Shareholders Meeting of May 21, 2019.

Results of the LTIP 2017-2019

The performance conditions of this plan are measured using the following two indicators:

- Total Shareholder Return (TSR) for 50%: comparative change between the Orange TSR and the TSR of the Stoxx Europe 600 Telecommunications index over the duration of the plan;
- organic cash flow, as defined by the plan, measured over three fiscal years and compared annually with the budget forecast.

The result is adjusted in accordance with five criteria based on the *Essentials2020* strategic plan: adjusted EBITDA, diversification revenue, average mobile and fixed data speed and the mobile Brand Power and Net Promotor Score (NPS). Each criterion is scored +3% if the objective is met and -3% if not.

Total Shareholder Return (TSR)

The TSR was met in the 2017-2019 period. Orange's TSR was 17.359% higher than that of the Telecommunications Stoxx Europe 600, which was +1.908%. This gives a valuation of 50%.

Organic cash flow, as defined by the plan

The target was attained for 2017 and 2019 and not attained for 2018. This gives a valuation of 33.33%.

Adjustment criteria

The combined results of the five adjustment criteria give +3%:

Criterion	Weight	Net income	Scoring 5	Objectives
Diversification revenue	3.00%	attained	3.00%	€1 bn
Mobile and fixed data speeds	3.00%	attained	3.00%	mobile speeds: 35 Mps fixed speeds:160 Mps
Brand Power	3.00%	not attained	-3.00%	increased in at least 2/3 of the countries
NPS	3.00%	not attained	-3.00%	leader on 75% customer base
Adjusted EBITDA(1)	3.00%	attained	3.00%	attained 3-year budget
Adjustment total			3%	

⁽¹⁾ Transition from Adjusted EBITDA to EBITDAaL in 2019.

Valuation in number of shares

Adding the results on the two criteria, with an adjustment of 3%, gives a result of 85.83%.

Corporate officer	Target	Rate of attainment (in %)	Shares acquired LTIP 2017-2019
Stéphane Richard	25,000	85.83%	21,458
Ramon Fernandez	17,000	85.83%	14,592
Gervais Pellissier	17,000	85.83%	14,592

Breakdown of benefits in kind 2019

Corporate officers received the following benefits in kind in 2019:

Benefits in kind	Company car	Health check	Legal advice	Internet/ telecommu- nications
Stéphane Richard Ramon Fernandez Gervais Pellissier	×	X X	X X	×

Equity ratios

The 2019 equity ratio and the ratios of the four previous years are published in line with the AFEP recommendations defined in December 2019:

- company chosen: Orange SA, which represents 88% of the permanent workforce in France (75,341 on permanent contracts);
- scope: all private or public employees, civil servants excluding ex-patriates present for all years Y-1 and Y;
- compensation taken into account: compensation (in full-time equivalent for part time employees) and benefits in kind paid in year Y on a gross basis and LTI allocated in year Y valued at the IFRS fair value.

	ratio	2015	2016	2017	2018	2019
Stéphane Richard	versus average	25.1	26.8	32.2	39.2	37.9
	versus median	29.3	30.9	36.9	44.8	43.0
Ramon Fernandez	versus average	NA	18.7	19.3	22.9	22.0
	versus median	NA	21.6	22.1	26.2	24.9
Gervais Pellissier	versus average	20.5	19.9	21.7	24.8	21.9
	versus median	23.9	22.9	24.8	28.4	24.8

2018 and 2019 are atypical since they simultaneously present the payment of a cash LTIP and the allocation of an LTIP in performance shares at the start of the plan.

As already noted in the 2018 Reference Document, the 2015-2017 cash LTIP paid in 2018 and the allocation of the 2018-2020 performance shares LTIP are both taken into account in the calculation of the 2018 ratio. Likewise, the 2016-2018 cash LTIP paid in 2019 and the award of the 2019-2021 performance shares LTIP are both taken into account in the calculation of the 2019 ratio.

In this respect, in order to make the rises or falls in corporate officer compensation clearer in link with performance evolution (as shown below), the table below presents a pro-forma calculation of the ratios by allocating the cash LTIP amounts at the start of the plan, i.e. in 2015 for the 2015-2017 LTIP and 2016 for the 2016-2018 LTIP:

	ratio	2015	2016	2017	2018	2019
Stéphane Richard	versus average	30.8	32.4	32.2	33.8	32.7
	versus median	36.0	37.4	36.9	38.6	37.0
Ramon Fernandez	versus average	NA	22.4	19.3	20.0	18.5
	versus median	NA	25.8	22.1	22.9	20.9
Gervais Pellissier	versus average	24.3	23.6	21.7	21.2	18.4
	versus median	28.3	27.2	24.8	24.3	20.8

Table presented for information only.

Performance evolution

amounts in accordance with IFRS (in millions of euros)	2015	2016	2017	2018	2019
Revenue	40,236	40,708	40,859	41,381	42,238
% change	2,0%	1,2%	0,4%	1,3%	2,1%
Adjusted EBITDA/ EBITDAaL (1)	12,418	12,564	12,680	13,005	12,860
% change	2,1%	1,2%	0,9%	2,6%	(1,1)%
Operating income	4,742	3,917	4,778	4,829	5,927
% change	3,7%	(17,4)%	22,0%	1,1%	22,7%

^{(1) 2015-2018} Adjusted EBITDA; 2019 EBITDAaL.

Stock options granted during the fiscal year to each corporate officer (table no. 4)

During the 2019 fiscal year, neither Orange SA nor any other of the Group's companies granted any stock options to corporate officers.

Stock options exercised during the fiscal year by each corporate officer (table no 5)

None.

Performance shares allocated during the fiscal year to each corporate officer (table no. 6)

Corporate officer	Grant date	Number of shares granted	Value of the grant (in euros) (IFRS fair value)	of shares	First allowable date for selling some of them	Performance conditions
Stéphane Richard	July 24, 2019	35,000	273,000	March 31, 2022	50% 4/1/2022	yes
Ramon Fernandez	July 24, 2019	18,000	140,400	March 31, 2022	50% 4/1/2022	yes
Gervais Pellissier	July 24, 2019	18,000	140,400	March 31, 2022	50% 4/1/2022	yes

Nota: Performance shares represent 0,0013% of the share capital for Stephane Richard and 0,00068% for the Delegate CEOs.

Performance shares vested to each corporate officer during the fiscal year (table No. 7)

None.

History of stock-option grants (table no. 8)

The last stock option plan matured on May 21, 2017. Gervais Pellissier, the only corporate officer to have received options from this last plan has not exercised any of them.

History of performance share grants (table No. 9)

	LTIP 2017-2019	LTIP 2018-2020	LTIP 2019-2021
Date of Shareholders' Meeting	June 1, 2017	May 4, 2018	May 21, 2019
Date of Board of Directors meeting	July 26, 2017	July 25, 2018	July 24, 2019
Total number of freely allocated shares	1,597,000	1,681,000	1,669,000
Number of shares allocated to Stéphane Richard	25,000	35,000	35,000
Number of shares allocated to Ramon Fernandez	17,000	18,000	18,000
Number of shares allocated to Gervais Pellissier	17,000	18,000	18,000
Acquisition date	March 31, 2020	March 31, 2021	March 31, 2022
First disposal possible for corporate officers	50% on 4/1/2020	50% on 4/1/2021	50% on 4/1/2022
Performance conditions	yes	yes	yes
Number of shares acquired	1,246,361	2,000	
Number of shares cancelled		80,000	29,000
Number of residual shares		1,599,000	1,640,000

Summary of the multi-year variable compensation paid to each corporate officer (table No. 10)

Amount (in euros)	LTIP 2015-2017	LTIP 2016-2018
Stéphane Richard	300,000	300,000
Ramon Fernandez	160,000	200,000
Gervais Pellissier	200,000	200,000

Other benefits granted to corporate officers (table No. 11)

Corporate officers	Employment Contract	Supplemental retirement plan	Compensation or benefits due or likely to be due upon termination or change of office	Compensation payable under a non-competition clause
Stéphane Richard	No	No	No	No
Ramon Fernandez	No	No	No	No
Gervais Pellissier	No	No	No	No

Stéphane Richard's work contract was terminated on March 1, 2010, when he was appointed Chief Executive Officer.

Gervais Pellissier's work contract was suspended on November 1, 2011, when he was appointed Deputy Chief Executive.

Ramon Fernandez's work contract was suspended on January 1, 2016, when he was appointed Deputy Chief Executive.

5.4.1.3 Compensation structure for corporate officers for 2020

The principles of the compensation policy for corporate officers are described in Section 5.4.1.1 Compensation policy for corporate officers.

The Board of Directors has taken into account the approval level at the Shareholders' Meeting for the resolutions concerning the compensation of corporate officers for 2019 (including the vote of the *Orange Actions* FCPE employee savings fund in which management representatives do not participate and which represented 4.9% of the capital and 8.2% of the voting rights) and the submissions and requests of investors.

The proposal is therefore made that the compensation of corporate officers remain unchanged in each of the components for 2020, with just a few adjustments of indicators or of criteria to make the compensation packages more in line with the Company's strategy. In addition, components of 2020 compensation are presented with for the purposes of increased transparency and clarity, in particular in relation to the 2020-2022 performance shares LTIP plan.

Impacts of the COVID-19 pandemic crisis

Considering the uncertainties linked to the current crisis, and even though, based on the information available to date, Orange does not expect a significant deviation from its financial objectives for 2020, these objectives could be affected although it is not yet clear what the scale of this impact will be.

However, the Board of Directors has not been able so far to determine more relevant objectives. It has therefore decided, in order to determine the variable share of executive compensation, to keep the 2020 performance objectives set before the crisis, which may now be far more difficult to achieve.

The probability that the Corporate Officers variable compensation be as a consequence significantly reduced is not to be dismissed. The Board of Directors has therefore wished, in line with the legislation in this area, to reserve the limited right to adjust the annual variable compensation, should the fall in this annual variable compensation be clearly out of steps with commitments and quality of work undertaken by Corporate Officers to manage the effects of the crisis.

Were this adjustment option to be applied, it would be in a manner that ensures its outcome reflects both the performance of the Corporate Officers and of the Group in the context of the COVID-19 pandemic. The maximum overall attainment rate of results for the corporate officers annual variable compensation under this option is 40%.

Further, it should be noted that any negative financial impact of the crisis of the 2020 financial results will impact not only LTIP 2020-2022 but also LTIP 2018-2020 and 2019-2021 through the 2020 organic cash flow indicator which dictates a significant share of Orange final vesting rights under these plans.

Summary of proposed changes

Component of compensation Changes proposed Reason Multi-year variable compensation No change in structure Organic Cash Flow was chosen because this indicator is in guidances communicated Organic Cash Flow replaces Operational to the market. Organic Cash Flow Cash Flow. corresponds to the purest indicator for EBITDAaL introduced as third financial measuring generation of cash flow, prior to indicator payment of licenses/spectrums and excluding litigations which are more difficult to anticipate in terms of amount. Organic Cash Flow seemed all the more relevant since it represents cash flow generated prior to the reimbursement of financial debts, shareholder compensation and any M&A operations. EBITDAaL allows us to monitor the implementation of both actions taken to develop revenues and levers on costs when the market situation becomes more difficult. Performance Shares (LTIP 2020-2022) In connection with the Engage 2025 No change in structure strategic plan, a composite CSR indicator Addition of a composite CSR indicator and made up of two criteria, taking account of removal of adjustment criteria the environmental commitment desired by the company, has been added to LTIP indicators with a total weighting of 20%. Also, for more clarity and transparency, the principle of adjustment criteria has not been used for the 2020-2022 LTIP.

Fixed compensation

The fixed compensation of corporate officers will remain unchanged in 2020:

- annual fixed compensation of the Chairman and CEO: €950,000;
- annual fixed compensation of the Delegate CEOs: €600,000.

In accordance with the provisions of Article L. 225-37-2 of the French Commercial Code, this point is the subject of a resolution to validate these fixed compensation levels for corporate officers (ex-ante "say on pay") and the vote will be submitted for the approval of the Shareholders' Meeting on May 19, 2020 (see Section 6.5 *Draft resolutions*, 13th and 14th resolutions).

Annual variable compensation

The Board of Directors has decided that the procedures for calculating the variable compensation of the corporate officers would remain unchanged for 2020:

- target amount of variable compensation if objectives met: 80% of the Chairman and CEO's fixed compensation and 60% of the Deputy CEOs' fixed compensation;
- out-performance up to 100% for the Chairman and CEO and no out-performance payment for the Deputy CEOs if the targets are surpassed.

Corporate officer	Fixed compensation (in euros)	Target %	Amount on target (in euros)	Min %	Max %	Maximum amount achievable (in euros)
Stéphane Richard	950,000	80%	760,000	0.00%	100.00%	950,000
Ramon Fernandez	600,000	60%	360,000	0.00%	60.00%	360,000
Gervais Pellissier	600,000	60%	360,000	0.00%	60.00%	360,000

Annual variable compensation structure

- financial indicators representing 50% of annual variable compensation, of which:
 - growth in revenue for 15%,
 - operating Cash Flow for 15%,
 - EBITDAaL for 20%;
- non-financial indicators representing 50% of annual variable compensation, of which:
 - customer experience for 17%:
 - B2C customer experience with respect to the Retail market (weight 75%),

- B2B customer experience with respect to the Enterprise market (weight 25%),
- CSR performance for 33% based on:
 - the employee survey conducted yearly by a reputable outside firm for 70%. Results are reviewed based on the employees' perceptions in connection with three topics: skills, collective agility, commitment,
 - three HR and CSR indicators: the learner NPS, the frequency of work-related accidents (TFRAC) and the percentage of women in management networks for 30%.

→ For the Chairman and CEO

Criterion	2020 performance objectives				
	Weight	Threshold	Target	Maximum	
Organic growth in revenue	15.00%	Budget -1pt	Budget	Budget +1pt	0-18.75%
Organic cash flow	15.00%	Budget -2.3%	Budget	Budget +5%	0-18.75%
EBITDAaL	20.00%	Budget -€47m	Budget	Budget +1%	0-25%
B2C customer experience	12.75%	77.2	81.2	85.2	0-15.94%
B2B customer experience	4.25%	7.17	7.57	7.97	0-5.31%
CSR performance: employee survey	23.10%	(3)	0	3	0-28.88%
CSR performance: HR indicators	9.90%	(3)	0	3	0-12.37%
Weighted total	100.00%				0-125%

→ For the Delegate CEOs

Criterion	2020 performance objectives				
	Weight	Threshold	Target	Maximum	
Organic growth in revenue	15.00%	Budget -1pt	Budget	Budget	0-15%
Organic cash flow	15.00%	Budget -2.3%	Budget	Budget	0-15%
EBITDAaL	20.00%	Budget -€47m	Budget	Budget	0-20%
B2C customer experience	12.75%	77.2	81.2	81.2	0-12.75%
B2B customer experience	4.25%	7.17	7.57	7.57	0-4.25%
CSR performance: employee survey	23.10%	(3)	0	-	0-23.10%
CSR performance: HR indicators	9.90%	(3)	0		0-9.90%
Weighted total	100.00%				0-100%

Hiring

If a person outside the Company is appointed corporate officer, these same principles will apply, it being specified that if they arrive during the fiscal year, the amount owed will be pro-rated to the time in office.

Termination of service

Should he or she leave the Group, the variable share for that corporate officer will be pro-rated to their time in office.

Multi-year variable compensation

The Board of Directors has decided to put in place a new share-based LTIP for 2020-2022 in line with the previous plans. A resolution on this share-based plan will be submitted for approval by the Shareholders' Meeting on May 19, 2020, to authorize the Board of Directors to award free shares to corporate officers and to certain staff members holding key positions within the Group (see Section 6.5 *Draft Resolutions*, 19th resolution).

The use of a long-term cash incentive scheme may once again be considered in the future, if regulatory changes or any other circumstance were to make it difficult or impossible for the Company

to use a performance share-based scheme. Otherwise, if the Shareholders' Meeting of May 19, 2020, does not approve the 19th resolution, the Board of Directors may decide to pay for the 2020-2022 LTIP in cash.

Performance indicators

The Board of Directors has applied the following two indicators for the new LTIP, which still has a fixed term of three years:

- a market indicator, the Total Shareholder Return (TSR) based on the relative performance of the total return for shareholders over three fiscal years, compared to the Stoxx Europe 600 Telecommunications reference index, for a weighting of 40%;
- the organic cash flow whose growth is measured on a multi-year basis over the term of the plan, for a weighting of 40%;
- a CSR composite indicator, for a weighting of 20%, made up of the following criteria:
 - the renewable electricity rate, 10%,
 - changes in CO₂ rate per customer usage, 10%.

Performance conditions

- organic cash flow:
 - organic cash flow will be assessed over the plan period in relation to the target fixed by the Board of Directors,
 - if the result is below 95% of the target: no allocation,
 - if the result is above or equal to the target: 100% of the allocation,
 - linear variation between 80% and 100% between the two previous limits;
- TSR:
 - if the Orange TSR is greater than or equal to the change in the Stoxx Europe 600 Telecommunications benchmark index over the plan period: 100% award. However, should the Orange TSR reach the objective but be negative, the result would be submitted to the approval of the Board of Directors,
 - if the change in Orange TSR is below the benchmark: no award;
- composite CSR indicator, for each CSR criterion:
 - if the result is lower than the target defined by the Board of Directors: no allocation,
 - if the result is above or equal to the target: 100% of the allocation.

Adjustment criteria

The Board of Directors voted, for the sake of transparency and simplicity, not to choose the principle of adjustment (adjustment criteria) which applied to the previous LTIPs.

Attendance condition

The acquisition of shares is subject to the condition that the corporate officers are still in office on the date of the definitive assessment of the performance conditions for the definitive acquisition period.

However, in certain cases where the beneficiary's service is terminated before the expiration of a three-year LTIP period, achievement of performance conditions will be appraised in the following exceptional conditions:

- if the beneficiary's services are terminated due to death or disability, the TSR, organic cash flow and CSR indicator targets will be considered achieved over the three-year period;
- if the beneficiary's services are terminated due to the non-renewal of his or her office:
 - performance of TSR, organic cash flow and CSR indicator will be appraised taking into account the results approved for each year over the period preceding the termination of services,
 - and the allocation of shares will be pro-rated to his or her time with the Company as a Corporate Officer.

It is also stipulated that if the beneficiary is no longer a corporate officer while remaining in the Group during the plan period, they shall retain their right to the allocated shares under the plan.

Maximum award

The number of performance shares that could be allocated to corporate officers on an achieved-target basis is 35,000 shares for the Chairman and CEO and 18,000 shares for the other corporate officers.

Lock-up period

The corporate officers must hold at least 50% of the shares they receive until the end of their office. Moreover, corporate officers have formally made the commitment not to hedge these shares through derivative instruments until the end of their term of office.

5.4.2 Board of Directors' report on the compensation of non-executive corporate officers

5.4.2.1 Amount of compensation paid or allocated for 2019 activity

The Board of Directors' Meeting of February 12, 2020, laid down the conditions for calculating compensation of directors and decided to allocate attendance fees (henceforth called compensation) for the 2019 fiscal year.

Applying these procedures, the total amount of compensation allocated to directors for their office in respect of the 2019 fiscal year amounts to €646,972, the Chairman and CEO waived his right to receive the compensation allocated to him in respect of his executive office (as

has been the case since his appointment). The variable share of this amount, linked to attendance and participation in the work of the Board and its committees, represents 78,60% of the sums to pay in respect of 2019.

The payment of compensation of non-executive officers will be made in the month following the Combined General Meeting of May 19, 2020, subject to approval by the latter. Compensation allocated to directors representing the government will be paid to the government budget. In addition, the directors elected by the employees have requested that their compensation be paid to their trade union organization.

Compensation for activity (in euros)	Gross amounts paid in 2020 (for the 2019 fiscal year)	Gross amounts paid in 2019 (for the 2018 fiscal year)	Gross amounts paid in 2018 (for the 2017 fiscal year)
Directors			
Alexandre Bompard	32,000	24,000	32,000
Bpifrance Participations	22,000	30,000	30,000
Philippe Charry ⁽¹⁾	19,472		
Sébastien Crozier ⁽¹⁾	54,000	50,000	2,778
Hélène Dantoine (3)	37,972		
Charles-Henri Filippi	79,000	63,000	57,000
Anne Gabrielle Heilbronner	30,111		
Christel Heydemann	50,000	46,000	14,306
Fabrice Jolys ⁽¹⁾ Helle Kristoffersen	52,000	48,000	2,778
Anne Lange (2)	36,000 54,000	42,000 46,000	38,000 40,000
René Ollier ⁽¹⁾	38,000	40,000	40,000
Bernard Ramanantsoa	70,000	59,000	52,000
Jean-Michel Severino	46,000	48,000	44,000
Former directors	10,000	10,000	11,000
Daniel Bertho ⁽¹⁾	NA	NA	33,194
Ghislaine Coinaud ⁽¹⁾	NA	NA	39,194
José-Luis Duran	NA	NA	15,694
Daniel Guillot ⁽¹⁾	NA	NA	37,194
Hélène Marcy ⁽¹⁾	NA 22 522	15,417	38,000
Luc Marino (1)	20,528	22,583	40.000
Lucie Muniesa ⁽³⁾ Mouna Sepehri	NA 5,889	34,306 56,000	42,000 48,000
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	•	
Total	646,972	624,306	570,916

- (1) Directors having requested that their attendance fees be paid directly to their trade union.
- (2) Director proposed by the French government, 15% of whose attendance fees are paid to the government's budget.
- (3) Directors representing the French government, whose attendance fees are paid to the government's budget

NA: not applicable.

5.4.2.2 Compensation policy of non-executive directors

In accordance with the law, the maximum amount of compensation that can be paid annually to directors is set by the Shareholders' Meeting. The resolution approved remains valid until a new decision is made by the Shareholders' Meeting. The Shareholders' Meeting of May 27, 2014, set this amount at €750,000, due in particular to the increased work of the Board's Committees.

Within the limit decided by the Shareholders' Meeting, and on a proposal from the GCSER Committee, the Board of Directors decides at the start of each year on the amount of compensation that it will allot to its members for the past year and the allocation rules, as well as the procedures for calculating the attendance fees for the current fiscal year. These details are then submitted to the Shareholders' Meeting for approval.

During its meeting of February 12, 2020, the Board of Directors, in accordance with decree no. 2019-1234 on the compensation of the corporate officers of listed companies, decided the compensation policy for non-executive corporate officers. It decided to renew, for 2020, the allocation rules and methods for calculating fixed compensation for 2019, namely:

- a fixed amount of €10,000 per director per year calculated pro rata temporis where applicable;
- an amount directly related to the attendance rate and to the participation in the work of the Board and its committees, namely:
 - €2,000 per meeting of the Board of Directors and the Strategic Seminar.
 - — €2,000 per meeting of the Audit Committee, the GCSER Committee
 and the Innovation and Technology Committee,

 €1,000 additional per Committee meeting for the Chairmen of the aforesaid Committees.

In addition, Internal Board Guidelines provide for:

- the creation of ad hoc committees, when the Board of Directors decides to assign, on an exceptional basis, a task to one (or several) of its members or one (or several) third parties, with the Board of Directors deciding the main characteristics of this task (Article 5);
- the appointment by the Board of Directors, on the proposal of the Governance, Social and Environmental Responsibility Committee, of a Lead Director amongst Independent Directors (Article 10).

In this context, it is recommended that the following scale be used:

- a fixed amount, decided by the Board of Directors during the creation of an ad hoc committee, applying Article 5 of the internal Board regulations, particularly taking account of the nature and duration of the committee's assignment and of the time needed to complete it;
- a fixed amount of €15,000 per year for the Lead Director for the assignment.

it is specified that the compensation of the members of the *ad hoc* committee, where applicable, or of the Lead Director, can be paid in the same form as the compensation allocated to directors (attendance fees), and in these two cases under the same conditions relating to any maximum amount and reductions applying to sums allocated under director compensation.

The activity of directors representing shareholder employees and directors representing employees is compensated under the same conditions as any other director.

5.4.2.3 Other compensation

The table below shows the compensation paid to the directors elected by the employees and to the director elected by the Shareholders' Meeting to represent the employee shareholders, excluding attendance fees (already mentioned above).

Gross amounts (in euros)	Amounts paid in 2019	Amounts paid in 2018
Philippe Charry ⁽¹⁾	55,894	
Sébastien Crozier	207,312	203,819
Fabrice Jolys	41,242	38,220
Luc Marino ⁽²⁾	33,173	43,049
René Ollier	37,308	36,728

⁽¹⁾ From June 14, 2019. (2) Until June 14, 2019.

plans, LTIP).

The directors elected by staff and the director elected by the Shareholders' Meeting are employed by Orange SA as civil servants or private company employees contractually covered by the national telecommunications collective bargaining agreement. Like staff members of the Orange Group, they benefit from free share allocation plans (where applicable in the form of multi-year variable compensation

With the exception of this compensation, non-executive Directors and Officers receive no compensation other than that paid for their office.

Furthermore, there are no contracts linking any member of the Board of Directors to Orange SA or any of its subsidiaries that provide for the granting of any benefits to this director at the end of his or her term.

5.4.3 Compensation of members of the Executive Committee

The overall gross amount, excluding employer costs, of compensation due for the 2019 fiscal year from Orange SA and controlled companies to all members of the Orange Executive Committee is €13,459,174.

This amount includes all compensation due and allocated in respect of the 2019 fiscal year: gross salaries, bonuses (including annual variable shares), LTIP, benefits in kind, profit sharing and incentives (excluding any employer's matching contribution regarding the last two items).

The employment contracts of the members of the Executive Committee (excluding corporate officers), signed from January 1, 2015, include a clause providing for contractual severance pay not exceeding 15 months of salary based on total annual gross compensation (including any termination pay provided for by contractual agreements).

The members of the Executive Committee do not receive attendance fees for their positions as Directors or Officers of Orange group's subsidiaries.

During the fiscal year 2019, they received no stock options.

The Board of Directors has put in place three multi-year incentive plans, LTIP 2017-2019, LTIP 2018-2020 and LTIP 2019-2021, that

apply to members of the Executive Committee on the same terms as to the corporate officers. The 2017-2019 LTIP foresees 14,000 shares for the Deputy CEOs and 10,000 shares for the Senior Executive Vice-Presidents. The 2018-2020 and 2019-2021 LTIP foresee 15,000 shares for the Deputy CEOs and the Senior Executive Vice-Presidents in charge of business units and 10,000 shares for the other members of the Executive Committee.

The LTIP for the 2020-2022 period which will be the 19th resolution submitted to the Shareholders Meeting of May 19, 2020, will apply to members of the Executive Committee on the same terms as to the corporate officers, with the same share-based payments as the 2019-2021 LTIP.

Stock options granted to the top 10 employees that are not corporate officers and options exercised by them

During the 2019 fiscal year, neither Orange SA nor any other of the Group's companies granted any stock options to employees.

During 2019 no options were exercised by employee beneficiaries. As of December 31, 2019, employees do not hold any more options.

5 — Corporate Governance

Remuneration and benefits paid to Directors, Officers and Senior Management

Shareholder Base and Shareholders' Meeting

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6.1 Share capital

6.1.1 Amount and history of the share capital

As of December 31, 2019, the share capital of Orange SA was 10,640,226,396 euros. It was divided into 2,660,056,599 fully-paid shares with a notional value of four euros each. The share capital has not increased over the last two fiscal years.

6.1.2 Securities giving access to the capital

Under the terms of the settlement agreement signed in 2002 ending the partnership with MobilCom to develop the mobile business in Germany, on March 3, 2003, Orange issued 430,705 perpetual bonds redeemable for shares (TDIRA) with a notional value of 14,100 euros, for an overall amount of 6,073 million euros, reserved for members of the banking syndicate and for creditor equipment suppliers of MobilCom. As of December 31, 2019, 57,981 TDIRA were outstanding with a total notional amount of 818 million euros and 45,232 TDIRA were outstanding as of the date of this document. See Notes 12.4 TDIRA and 18 Subsequent events to the consolidated financial statements.

Potential issuance of new shares

The table below shows the number of new shares which would be issued if all securities giving access to capital, outstanding as of December 31, 2019, were converted or redeemed in shares and all stock options existing on the same date were exercised, as well as the number of shares that would make up the Company's capital following the issuance of these shares.

Corresponding shares	•
Perpetual bonds redeemable for shares ⁽¹⁾ Stock options ⁽²⁾ 33,818,054	
Sub-total 33,818,054	1.92
Capital as of December 31, 2019 2,660,056,599	98.08
Total 2,693,874,653	3 100

Note 14.7 Earnings per share to the consolidated financial statements (Section 3.3) presents the weighted average number of shares outstanding and diluted, calculated in accordance with IAS 33 Earnings per share.

6.1.3 Authorized capital increases

The Orange SA Shareholders' Meeting of May 21, 2019 approved various financial authorizations that delegated to the Board of Directors the authority to increase the capital of the Company by issuing shares or other securities, with or without preferential subscription rights (public offering, contribution of securities, etc.) and subject to certain conditions (outside takeover offer periods for the Company's securities,

The Orange SA Shareholders' Meeting also delegated authority to the Board of Directors to carry out capital increases reserved for the members of the Group's savings plan.

Currently valid delegations granted to the Board of Directors by the Shareholders' Meeting in terms of capital increases and the use made of these delegations are mentioned in Section 6.6 Report of the Board of Directors on the resolutions.

The Shareholders' Meeting of May 19, 2020 will once again be asked to grant fresh authorizations to the Board of Directors to carry out capital increases (see Section 6.6 Report of the Board of Directors on the resolutions).

6.1.4 Treasury shares - Share Buyback Program

The Shareholders' Meeting of May 21, 2019 renewed the Share Buyback Program for 18 months with a limit of 10% of the share capital outstanding at the time of the Meeting. On February 12, 2020 the Board of Directors decided to ask the Shareholders' Meeting of May 19, 2020 to renew this authorization under the same conditions.

A description of the program for 2020 appears in the Report of the Board of Directors on the sixteenth resolution submitted to the Shareholders' Meeting of May 19, 2020 (see Section 6.6 Report of the Board of Directors on the resolutions).

In the context of AMF decision No. 2018-01 of July 2, 2018, Orange and Rothschild Martin Maurel entered into a new share liquidity contract on February 11, 2019, replacing the contract executed in May 2007. This latter agreement reduced the resources allocated to the liquidity account which on the date of its implementation, amounted to 950,000 Orange shares and 37,393,500 euros. On December 31, 2019, the liquidity account held 875,000 Orange shares and 39,340,302 euros.

See Note 12.4 to the consolidated financial statements.
 See Section 5.4.1 and Note 6.3 to the consolidated financial statements.

6

Summary of purchases and sales of treasury shares during the 2019 fiscal year

Objective of the purchases	Number of shares held as of December 31, 2018	Number of shares purchased	Gross weighted average price (in euros)		Gross weighted average price (in euros)	Number of shares held as of December 31, 2019	% capital
Shares allocated to employees Liquidity contract	6,904,491 309609	2,000,000 21,156,644	13.62 13.95	15,023 ⁽¹⁾ 20,612,753	0 14.00	8,889,468 853,500 ⁽²⁾	0.33% 0.03%
Total	7,214,100	23 156 644		20,627,776		9,742,968	0.36%

⁽¹⁾ Free shares granted in accordance with Article L. 225-197-3 of the French Commercial Code to the heirs and assignees of beneficiaries of free share award plans having died or having

Major shareholders

6.2.1 Distribution of capital and voting rights

Holder	Decemb	per 31, 201	19	Decemb	per 31, 201	18	December 31, 2017		
	Number of shares	% of capital	% of voting rights	of shares	% of capital	% of voting rights	Number of shares	% of capital	% of voting rights
Bpifrance Participations (1) French State	254,219,602 356,194,433	9.56% 13.39%	8.23% 21.31%	254,219,602 356,194,433	9.56% 13.39%	8.21% 21.26%	254,219,602 356,194,433	9.56% 13.39%	8.26% 20.92%
Total Public Sector	610,414,035	22.95%	29.54%	610,414,035	22.95%	29.47%	610,414,035	22.95%	29.18%
Group Employees (2) Treasury shares Float	144,262,978 9,742,968 1,895,636,618	5.42% 0.37% 71.26%	8.99% 0.00% 61.47%	146,230,726 7,214,100 1,896,197,738	5.50% 0.27% 71.28%	9.20% 0.00% 61,33%	143,353,298 497,625 1,905,791,641	5.39% 0.02% 71.64%	8.80% 0.00% 62.02%
Total	2,660,056,599	100%	100%	2,660,056,599	100%	100%	2,660,056,599	100%	100%

The public sector (the French State and Bpifrance Participations) and the Orange Actions mutual fund (formerly called Cap'Orange) of the Group's savings plan have double voting rights for their shares held in registered form for over two years (see Section 6.4.1 Rights, preferences and restrictions attached to shares).

The French State and Bpifrance Participations jointly hold 22.95% of the capital and 29.54% of voting rights at Shareholders' Meetings, taking into consideration the double voting rights.

As of December 31, 2019, the mutual funds invested in Orange shares represented 5.07% of the Company's capital and 8.39% of voting rights at Shareholders' Meetings. The regulations governing the mutual funds state that voting rights attached to securities held as fund assets are exercised by the Supervisory Boards of these funds. In the absence of an express reference in the regulations to the cases where the Supervisory Boards must gather the prior opinions of unit holders, the Supervisory Boards decide on the tender of securities held as fund assets to public tender or exchange offers, in accordance with Article L. 214-164 of the French Monetary and Financial Code.

As of the date of this document, no shareholder other than the French State, Bpifrance Participations and Group employees (in particular via the Orange Actions mutual fund) held, to Orange's knowledge, directly or indirectly, more than 5% of the capital or voting rights.

6.2.1.1 Changes in the distribution of capital over the last three fiscal years

In the last three fiscal years, the Company has bought and sold treasury shares and, notably in December 2019, bought 2 million treasury shares as part of its 2019 Share Buyback Program (see Section 6.1.4 Treasury shares - Share Buyback Program). These purchases are intended to fulfill obligations related to the "Orange Vision 2020" free share award plan and the long-term incentive plan (LTIP) for corporate officers and certain Group employees.

To Orange's knowledge, there has been no major change in the distribution of the capital and voting rights since December 31, 2019.

become incapacitated before the end of the plans' vesting period (Conquête 2015 and Orange Vision 2020).

(2) Position as of December 27, 2019 in order to take account of the transfer of title payment date at D+2 (business days).

Public financing and investment group for enterprises, resulting from the merger of OSEO, CDC Entreprises, FSI and FSI Régions.
 Includes equities held as part of the Group's savings plan, in particular via *Orange Actions* and Orange Ambition International mutual funds, or directly by members of staff in registered form (including those delivered in 2009 from the "Next Reward" free share award plan).

6.2.1.2 Information on shareholders' agreements

On February 23, 2016, the AMF was notified of the execution, on February 18, 2016, of a new shareholders' agreement between the French Republic and Bpifrance Participations. This agreement replaces the previous shareholders' agreement signed between the same parties on December 24, 2012, formalizing the existing joint action between them with respect to their shareholding in Orange.

The shareholders' agreement has been established for a period of two years (renewable), and stipulates that the parties will:

consult each other on the vote of Shareholders' Meeting resolutions:
 commit to exchange their respective views and seek a common

position on the resolutions, without being under obligation to reach a common position;

consult each other on the form (within the meaning of Article
 L. 228-1 of the French Commercial Code) of their Orange securities.

6.2.1.3 Additional information on the distribution of the float

Orange regularly identifies its shareholders via the procedure known as "Identifiable Bearer Shares" (IBS). As of December 31, 2019, institutional investors held 64.6% of the capital and individual investors 6.6%, remaining at their previous year's level.

Geographical distribution of institutional investors at December 31, 2019

France United Kingdom	29% 15%
Other European countries	22%
Europe Total	66%
North America	28%
Rest of the World	6%
Total	100%

Source: TPI survey and analysis of NASDAQ OMX.

6.2.2 Direct or indirect control of Orange SA

As of the date of this document, the public sector (French State and Bpifrance Participations) has three representatives out of a total of 15 members of the Board of Directors of Orange (see Section 5.1.1 *Board of Directors*).

As of December 31, 2019, Orange's main shareholder, the French State, jointly with Bpifrance Participations, held 22.95% of the share capital and 29.54% of voting rights. As is the case with all Orange's shareholders, these shares carry double voting rights when held in registered form for over two years (see Sections 6.2.1.2 *Information on shareholders' agreements* and 6.2.1 *Distribution of capital and voting rights above*). While not giving it the ability to exercise control over the Company, based on the percentage of the public sector's holding in the past, these shareholders could block the adoption of resolutions by the general meeting requiring a qualified majority vote.

In light of the recommendations of the Afep-Medef Code, revised in January 2020, Orange has put in place Corporate Governance rules to ensure the proper operation of the Board of Directors and its specialist committees in respecting the interests of all shareholders. The Board of Directors comprises seven independent directors including one Lead Director (See Section 5.2 Operation of the management and supervisory bodies). Orange therefore feels there is no risk that the French State's control could be used in an abusive way.

Excluding the French State and Bpifrance Participations, no physical person or legal entity, directly or indirectly, alone, jointly or in concert, exercises or could exercise control over Orange.

To Orange's knowledge, there is no agreement which, if implemented, could, at a later date, entail a change in its control.

6.3 Dividend distribution policy

A dividend of 0.50 euros per share in respect of the 2019 fiscal year will be proposed to the Shareholders' Meeting of May 19, 2020. In view of the payment on December 4, 2019 of an interim dividend of 0.30 euros, the balance of the dividend will be, subject to approval by the Shareholders' Meeting, 0.20 euros per share and will be paid in cash on June 4, 2020. The ex-dividend date will be June 2, 2020.

For the 2020-2023 period, the objective to distribute a dividend of 0.70 euro per share will be reviewed at a later date in light of the evolving situation. The Board of directors has provided for the right to offer shareholders the option of being paid a 2020 interim dividend in Orange shares.

6

6.4 Statutory information on shares and general meetings

6.4.1 Rights, preferences and restrictions attached to shares

Orange has only issued ordinary shares. Each share shall entitle its holder to a portion of the corporate profits and assets proportional to the amount of capital represented thereby. Furthermore, each share shall entitle its holder to vote and be represented in the Shareholders' Meetings in accordance with provisions of the law and of the Bylaws. Ownership of one share implies, ipso jure, adherence to the Bylaws and the decisions of the Shareholders' Meeting.

There is no clause in the Bylaws providing for double or multiple voting rights for shareholders. However, in accordance with legal stipulations, double voting rights are automatically awarded for all shares held in registered form by the same holder for at least two years.

The shareholders shall only be liable for losses within the limits of their contributions to the Company's capital.

Payment of dividends

The terms and conditions for the payment of the dividends approved by the Shareholders' Meeting are determined by the Shareholders' Meeting, or in lieu, by the Board of Directors. However, cash dividends must be paid within a maximum of nine months after the close of the fiscal year, unless extended by court order. The Ordinary Shareholders'

Meeting may grant each shareholder, for all or part of the dividends to be distributed, an option between payment of the dividends in cash or in shares, subject to legal requirements.

Interim dividends may be distributed before the approval of the financial statements for the fiscal year when the balance sheet established during or at the end of a fiscal year and certified by a Statutory Auditor shows that the Company has made a profit since the close of the last fiscal year, after recognizing the necessary depreciation, amortization and provisions and after deducting prior losses, if any, and the sums to be allocated to reserves, as required by law or the Bylaws, and including any retained earnings. The amount of such interim dividends may not exceed the amount of the profit so defined.

Dividends not claimed within five years after the payment date shall be deemed to expire and revert to the French state.

Disposal and transfer of shares

Shares are freely negotiable, subject to applicable legal and regulatory provisions. They shall be registered in a share account and are transferred by means of a transfer order from account to account.

6.4.2 Actions necessary to modify shareholders' rights

Shareholders' rights may be modified as allowed by law. Only the Extraordinary Shareholders' Meeting is authorized to amend any and all provisions of the Bylaws. The Meeting may not, however, increase shareholder commitments, except for properly executed transactions resulting from a share consolidation.

6.4.3 Rules to participate in and call Shareholders' Meetings

Access to, participation in and voting rights at Shareholders' Meetings

Shareholders' Meetings are composed of all shareholders whose shares are paid up and for whom a right to attend Shareholders' Meetings has been established by registration of the shares in an account in the name either of the shareholder or of the intermediary holding their account where the shareholder is not resident in France, by midnight (Paris time) on the second business day preceding the Meeting.

The shares must be registered within the time limit specified in the preceding paragraph either in an account in their own name maintained by the Company, or in the bearer share accounts maintained by the authorized intermediary.

If it sees fit to do so, the Board of Directors may distribute personalized admission cards to shareholders and require them to produce these cards at the Meeting.

Shareholders participating via video-conferencing or other means of telecommunications which meet legal and regulatory conditions and allow identification shall be deemed present for the calculation of quorum and majority at Shareholders' Meetings. The Board of Directors organizes, in accordance with legal and regulatory requirements, the participation and vote of these shareholders at the Shareholders' Meeting, assuring, in particular, the effectiveness of the means of identification.

Any shareholder may, in accordance with legal and regulatory requirements, vote without attending the Meeting or grant a proxy to any other physical person or legal entity of his or her choice. Shareholders may, in accordance with legal and regulatory requirements, send their vote or proxy, either by hard copy or via electronic means of telecommunication, until 3pm (Paris time) the day before the Shareholders' Meeting. Transmission methods are set forth by the Board of Directors in the notice of Meeting and the notice to attend.

Shareholders sending in their vote within the time limit specified under this section, by means of the form provided by the Company to shareholders, are deemed present or represented at the Meeting.

The forms for sending in a vote or a proxy, as well as the certificate of attendance, can be completed in electronic format duly signed under the conditions specified by the applicable laws and regulations. For this purpose, the recording of the electronic signature on the certificate can be made directly on the Internet site established by the organizer of the Meeting.

Shareholders who are not resident in France may be represented at a Shareholders' Meeting by a registered intermediary who may participate subject to legal requirements.

Notice of Shareholders' Meetings

Shareholders' Meetings are convened by the Board of Directors, or, failing that, by the Statutory Auditors, or by any person empowered for this purpose. Meetings are held at the registered office or at any other location indicated in the notice to convene. Subject to exceptions provided by law, notice must be given at least 15 days before the date of the Shareholders' Meeting. When the Shareholders' Meeting cannot deliberate due to the lack of the required *quorum*, the second Meeting and, if applicable, the second postponed Meeting, must be called at least ten days in advance in the same manner as used for the first notice.

Ordinary Shareholders' Meeting

Ordinary Shareholders' Meetings are those Meetings called to make any and all decisions that do not amend the Bylaws. An Ordinary Meeting shall be convened at least once a year within six months of the end of each fiscal year in order to approve the annual and consolidated financial statements for the fiscal year in question or, in case of postponement, within the period established by court order. On the first convocation, the Meeting may validly deliberate only if the shareholders present or represented by proxy or voting by mail represent at least one-fifth of the shares entitled to vote. Upon the second convocation, no *quorum* is required. Decisions are made by

a majority of votes held by the shareholders present, represented by proxy, or voting by mail.

Extraordinary Shareholders' Meeting

Only the Extraordinary Shareholders' Meeting is authorized to amend any and all provisions of the Bylaws. Subject to the legal provisions governing capital increases from reserves, profits or share premiums, the resolutions of the Extraordinary Meeting shall be valid only if the shareholders present, represented by proxy or voting by mail represent at least one-fourth of all shares entitled to vote when convened for the first time, or one-fifth when convened for the second time. If the latter *quorum* is not reached, the second Meeting may be postponed to a date no later than two months after the date for which it was called. Subject to the same condition, the second Meeting shall make decisions by a two-thirds majority of the shareholders present, represented by proxy, or voting by mail.

6.4.4 Declarations of threshold crossing

In addition to the legal obligation to inform the Company and the French Financial Markets Authority (Autorité des marchés financiers – AMF) when thresholds of 5%, 10%, 15%, 20%, 25%, 30%, 331/3%, 50%, 662/3%, 90% and 95% of the capital and voting rights are crossed, any individual or legal entity, acting alone or jointly with others, who acquires directly or indirectly, as defined by Articles L. 233-7 et seq. of the French Commercial Code, a number of shares, voting rights or securities representing shares equal to 0.5% of the capital or voting rights in Orange is required, within five trading days from the date of registration of the securities that result in reaching or crossing such threshold, to report to Orange by registered letter with return receipt, the total number of shares, voting rights and securities giving access to the capital that such individual or entity holds.

This declaration must be repeated in accordance with the conditions indicated above each time a new 0.5% threshold is reached or crossed, whether crossing above or below, for any reason whatsoever, including beyond the 5% threshold.

In the event of failure to comply with any of the provisions set forth above, the shareholder or shareholders in question shall be deprived of the voting rights attached to any shares or securities in excess of the thresholds, subject to legal provisions and limits, if one or more shareholders holding at least 0.5% of the capital or voting rights so requests at a Shareholders' Meeting.

6.5 Draft resolutions to be submitted to the combined ordinary and extraordinary shareholders' meeting of May 19, 2020

The draft resolutions listed hereinafter were approved by the Board of Directors on February 12 and April 16, 2020. Additional draft resolutions have been included in the agenda of the Shareholders' Meeting pursuant to Article L. 225-105 of the French Commercial Code.

The final draft of the resolutions proposed to the Shareholders' Meeting will be published on the website www.orange.com, see *Group/Individual shareholders/Shareholders' Meeting* and in the notice as specified in Article R. 225-66 of the French Commercial Code.

Resolutions within the competence of the Ordinary Shareholders' Meeting

First resolution

Approval of the statutory financial statements for the fiscal year ended December 31, 2019

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Management Report of the Board of Directors as well as the Statutory Auditors' Report, hereby approve the Company's annual financial statements for the fiscal year ended December 31, 2019, as presented, as well as the transactions reflected in the statutory financial statements and summarized in these reports. The shareholders at the Shareholders' Meeting fix the profit for the fiscal year at 2,859,492,739.52 euros.

Second resolution

Approval of the consolidated financial statements for the fiscal year ended December 31, 2019

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Management Report of the Board of Directors as well as the Statutory Auditors' Report on the consolidated financial statements, hereby approve the consolidated financial statements for the fiscal year ended December 31, 2019 as presented, as well as the transactions reflected in the consolidated financial statements and summarized in these reports.

Third resolution

Allocation of income for the fiscal year ended December 31, 2019, as stated in the Company's annual financial statements

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Management Report of the Board of Directors as well as the Statutory Auditors' Report on the Company's annual financial statements:

- i. note that since the profit for the fiscal year is 2,859,492,739.52 euros and the retained earnings are 7,575,654,950.16 euros (before deduction of the interim dividend provided for in (iii) hereinafter), the distributable income amounts to 10,435,147,689.68 euros;
- ii. decide to distribute to the shareholders, as a dividend, an amount of 0.50 euro per share, and to allocate the balance of the distributable income to the "Retained earnings" account;

iii. note that, considering the interim dividend of 0.30 euro per share paid on December 4, 2019, the balance of the dividend to be paid amounts to 0.20 euro per share.

The ex-dividend date shall be June 2, 2020 and the balance of the dividend payable shall be paid on June 4, 2020.

The shareholders at the Shareholders' Meeting grant full powers to the Board of Directors to determine the total dividend amount, in particular considering the number of treasury shares at the payment date, and, consequently, to determine the amount of the balance of the distributable income that shall be allocated to the "Retained earnings" account.

It is specified that the balance of the dividend to be paid is eligible up to the gross amount received for the 40% tax allowance pursuant to Article 158-3-2 of the French General Tax Code, benefiting individuals residing in France for tax purposes.

Dividends paid with respect to the last three fiscal years, were as follows:

Year	Number of shares (excluding treasury shares)	Dividend per share	Portion of dividend eligible for the 40% tax allowance
2016	2,659,846,780	0.60€	100%
2017	2,658,547,775	0.65 €	100%
2018	2,652,992,864	0.70 €	100%

Fourth resolution

Agreements provided for in Article L. 225-38 et seq. of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Statutory Auditors' Special Report regarding the agreements provided for in Article L. 225-38 et seq. of the French Commercial Code, approve the new authorized agreements entered into during the fiscal year ended on December 31, 2019.

Fifth resolution

Appointment of Mr. Frédéric Sanchez as a new director

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, note that the term of office of Mr. Charles-Henri Filippi will expire at the end of the present Shareholders' Meeting and decide, upon the proposal of the Board of Directors and in accordance with the terms provided for in Article 13 of the by-laws, to appoint as new director Mr. Frédéric Sanchez for a period of four years expiring at the close of the Shareholders' Meeting approving the financial statements for the fiscal year ended on December 31, 2023.

Sixth resolution

Renewal of the term of office of Mrs. Christel Heydemann as director

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, note that the term of office of Mrs. Christel Heydemann will expire at the end of the present Shareholders' Meeting and decide, upon the proposal of the Board of Directors and in accordance with the terms provided for in Article 13 of the by-laws, to renew its term of office for a period of four years expiring at the close of the Shareholders' Meeting approving the financial statements for the fiscal year ended on December 31, 2023.

Seventh resolution

Renewal of the term of office of Mr. Bernard Ramanantsoa as director

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, note that the term of office of Mr. Bernard Ramanantsoa will expire at the end of the present Shareholders' Meeting and decide, upon the proposal of the Board of Directors and in accordance with the terms provided for in Article 13 of the by-laws, to renew its term of office for a period of four years expiring at the close of the Shareholders' Meeting approving the financial statements for the fiscal year ended on December 31, 2023.

Eight resolution

Appointment of Mrs. Laurence Dalboussière as director representing the employee shareholders

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, as a result of the adoption of the twentieth resolution by the Combined Ordinary and Extraordinary Shareholders' Meeting held on May 4, 2018 regarding the modification of Article 13 of the by-laws of the Company, and having reviewed the Report of the Board of Directors, decide to appoint as director representing the employee shareholders, Mrs. Laurence Dalboussière, whose replacement is Mr. Thierry Chatelier, for a period of four years expiring at the close of the Shareholders' Meeting approving the financial statements for the fiscal year ended on December 31, 2023.

Ninth resolution

Approval of the information referred to in Article L. 225-37-3 I. of the French Commercial Code, pursuant to Article L. 225-100 II. of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors according to Article L. 225-37 of the French Commercial Code, approve, pursuant to Article L. 225-100 II. of the French Commercial Code, the information referred to in article L. 225-37-3 I. of the French Commercial Code, as presented in sections 5.4.1.2, 5.4.2.1 and 5.4.2.3 of the Company's 2019 Universal Registration Document.

Tenth resolution

Approval of the elements of compensation paid during the fiscal year ended December 31, 2019 or allocated for the same fiscal year to Mr. Stéphane Richard, Chairman and Chief Executive Officer, pursuant to article L. 225-100 III of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors provided for in Article L. 225-37 of the French Commercial Code, approve, pursuant to Article L. 225-100 III. of the French Commercial Code, the fixed, variable and exceptional items comprising the total compensation and benefits of any kind paid during the fiscal year ended on December 31, 2019 or allocated in respect of the same fiscal year to Mr. Stéphane Richard, as set out in section 5.4.1.2 of the Company's 2019 Universal Registration Document.

Eleventh resolution

Approval of the elements of compensation paid during the fiscal year ended December 31, 2019 or allocated for the same fiscal year to Mr. Ramon Fernandez, Deputy Chief Executive Officer *Delegate*, pursuant to Article L. 225-100 III of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors provided for in Article L. 225-37 of the French Commercial Code, approve, pursuant to Article L. 225-100 III. of the French Commercial Code, the fixed, variable and exceptional items making up the total compensation and benefits of any kind paid during the fiscal year ended December 31, 2019 or allocated in respect of the same fiscal year to Mr. Ramon Fernandez, as presented in section 5.4.1.2 of the Company's 2019 Universal Registration Document.

Twelfth resolution

Approval of the elements of compensation paid during the fiscal year ended December 31, 2019 or allocated for the same fiscal year to Mr. Gervais Pellissier, Deputy Chief Executive Officer *Delegate*, pursuant to Article L. 225-100 III of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors provided for in Article L. 225-37 of the French Commercial Code, approve, pursuant to Article L. 225-100 III. of the French Commercial Code, the fixed, variable and exceptional items making up the total compensation and benefits of any kind paid during the fiscal year ended December 31, 2019 or allocated in respect of the same fiscal year to Mr. Gervais Pellissier, as presented in section 5.4.1.2 of the Company's 2019 Universal Registration Document.

Thirteenth resolution

Approval of the compensation policy for the Chairman and Chief Executive Officer, pursuant to Article L. 225-37-2 of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, pursuant to Article L. 225-37-2 II. of the French Commercial Code, approve the compensation policy for the Chairman and Chief Executive Officer by virtue of his office, as detailed in section 5.4.1.3 of the Company's 2019 Universal Registration Document.

Fourteenth resolution

Approval of the compensation policy for the Deputy Chief Executive Officer Delegates, pursuant to Article L. 225-37-2 of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, pursuant to Article L. 225-37-2 II. of the French Commercial Code, approve the compensation policy for the Deputy Chief Executive Officer Delegates by virtue of their office, as detailed in section 5.4.1.3 of the Company's 2019 Universal Registration Document.

Fifteenth resolution

Approval of the compensation policy for non-executive directors, pursuant to Article L. 225-37-2 of the French Commercial Code

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, pursuant to Article L. 225-37-2 II. of the French Commercial Code, approve the policy for the compensation of non-executive directors by virtue of their office, as detailed in section 5.4.2.2 of the Company's 2019 Universal Registration Document.

Sixteenth resolution

Authorization to be granted to the Board of Directors to purchase or transfer shares in the Company

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors, authorize the Board of Directors pursuant to Articles L. 225-209 et seq. of the French Commercial Code, to purchase shares in the Company, up to a limit of 10% of the share capital outstanding on the day of this meeting in the following conditions:

- the maximum purchase price shall not exceed 24 euros per share, it being specified that in the event of transactions affecting the capital, in particular by capitalization of reserves followed by the issuance and free allocation of shares, and/or through a stock split or reverse stock split, this price will be adjusted accordingly;
- the maximum amount of funds allocated to the share Buyback program is 6,384,135,837.60 euros;
- acquisitions carried out by the Company pursuant to this authorization may in no event cause it to hold, directly or indirectly, at any time, more than 10% of the shares comprising the share capital:
- acquisitions or transfers of shares may be carried out at any time, in compliance with applicable legal and regulatory provisions. However, the Board of Directors may not, unless prior authorization is obtained from the Shareholders' Meeting, make use of this delegation of authority from the filing of a takeover offer by a third party for the Company's securities, and until the end of the period of acceptance of the offer;

- acquisitions or transfers of shares may be carried out by any means, under conditions pursuant to the law, in particular on regulated markets, organized multilateral trading systems or over-the-counter, including through block disposals or purchases or by use of derivative securities traded on the regulated markets;
- the present authorization is valid for a period of 18 months.

These share acquisitions may be carried out for any purpose permitted by law, the objectives of this share Buyback program being:

- (i) to comply with obligations related to:
 - a. stock option plans and other allocations of shares to the employees of the Company or affiliates and notably to allocate shares to employees of the Company and its Group entities as part of (i) the Company's profit sharing scheme, (ii) any stock purchase or stock option plan or program, including any free share awards, for the benefit of the employees and Corporate Officers or some of them, or (iii) any Orange Group employee shareholding plan (including any disposal of shares provided for in Article L. 3332-24 of the French Labor Code), and to carry out any hedging transactions related to these plans or programs,
 - securities giving access to shares in the Company (including to carry out any hedging transactions as a result of the obligations of the Company relating to these securities), including to the securities subscribed for by employees or former employees of the Company and entities of its Group;

- (ii) to ensure the liquidity of the share of the Company by a financial services provider (prestataire de services d'investissement) pursuant to a liquidity contract compliant with the decision of the French Financial Markets Authority (Autorité des marchés financiers – AMF) n° 2018-01 of July 2, 2018;
- (iii) to keep shares for subsequent exchange or for payment as part of potential external growth transactions;
- (iv) to reduce the capital of the Company in accordance with the twenty-first resolution of this Shareholders' Meeting, subject to its adoption.

The shareholders at the Shareholders' Meeting grant full powers to the Board of Directors, with the right to delegate in accordance with the conditions provided for by the law, to decide and implement the present authorization, to clarify its terms and to decide details, to place all market orders, enter into all agreements, draw up all documents, in particular those providing information, carry out all formalities, including to allocate or reallocate the shares acquired for the different objectives sought, and make all declarations to all organizations and, generally, do whatever is necessary.

The delegation granted by the shareholders at the Combined Ordinary and Extraordinary Shareholders' Meeting held on May 21, 2019 in its fifteenth resolution is terminated, with immediate effect, in respect of the unused portion.

Resolutions within the competence of the Extraordinary Shareholders' Meeting

Seventeenth resolution

Amendment of Article 2 of the By-laws to insert the Company's purpose

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Extraordinary Shareholders' Meetings, after having reviewed the report of the Board of Directors, decide to include the "purpose" of the Company in its By-laws, and, consequently, decide to amend the Company's By-laws as follows:

The title of Article 2 is amended as follows: "ARTICLE 2 - CORPORATE SCOPE AND PURPOSE";

A new paragraph is added at the end of Article 2 of the Company's By-laws regarding the "purpose" of the Company, drafted as follows:

"The purpose of the Company is as follows: 'As a trusted partner, Orange gives everyone the keys to a responsible digital world."

The other provisions of Article 2 of the By-laws remain unchanged.

Eighteenth resolution

Amendments to Article 13.1 and Article 13.2 of the By-laws regarding the election of directors elected by the employees

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Extraordinary Shareholders' Meetings, having considered the report of the Board of Directors, decide to amend Article 13.1 and Article 13.2 of the Company's By-laws as follows:

"1. The company is administered by a Board of Directors consisting of a minimum of twelve and a maximum of twenty-two members, including:

three directors representing the employees of the company and those of its direct or indirect subsidiaries (within the meaning of Article L. 225-27 of the French Commercial Code) whose registered office is

located on French territory, from either the college of engineers, managers and related workers, or the college of other employees; the distribution of seats by college shall be based on the employees' structure as recorded on July 1st prior to the date of the vote, with two representatives for the college representing more than half of the employees and one representative for the other college;

one director representing employee shareholders (or contributors to a corporate mutual fund holding shares of the Company), appointed by the shareholders' meeting.

In the event of a vacancy, as a result of death or by resignation, of one or more seats of directors appointed by the shareholders' meeting, apart from the director representing employee shareholders, the Board of Directors may, between two general meetings, make appointments on a provisional basis subject to the approval of the next ordinary shareholders' meeting, within the limits and conditions provided by law.

2. The method of voting in order to fill each seat of director representing employees is the method provided in the applicable legal and regulatory provisions notably Article L. 225-28 of the French Commercial Code and decree no. 2004-977 dated 17 September 2004.

In particular, the election shall take place:

when there is only one seat to be filled in an electoral college, by a two-round majority vote in that college;

in the other college, by the proportional list system on a plurality basis and without crossovers.

Voters and eligible for election are the members of the staff who meet the conditions provided for by law. Where there is only one seat to be filled in an electoral college, each candidacy must include, in addition to the name of the candidate, the name of his or her replacement in the event of a vacancy for any reason whatsoever. In the other college, each list of candidates for the election of representatives must include at least four names.

The term of office for employee directors shall be four years.

Newly elected employee directors shall assume office upon expiry of the term of office of their predecessors.

The term of office of an employee director who himself ceases to be an employee shall cease as a result. The vacant seat is replaced as provided for in article L. 225-34 of the French Commercial Code.

Elections shall be held such that a second vote may take place before the outgoing directors relinquish their office.

During each election, the Board of Directors shall establish the list of subsidiaries and arrange elections on a date allowing the time limits set out below to be observed.

The time limits to be observed for each election are as follows:

- the date of the election is made public at least eight weeks before the vote:
- the list of electors is made public at least six weeks before the vote;
- candidacies shall be registered at least five weeks before the vote, it being specified that candidates must be members of the electoral college that they wish to represent;
- the list of candidates shall be made public at least four weeks before the vote;
- the documents needed for mail-in votes shall be sent at least three weeks before the vote.

If there are no candidacies in one of the electoral colleges, the corresponding seat (s) shall remain vacant until the next election of directors representing employees.

The vote can be expressed by electronic method and/or paper documents.

When expressed on paper documents, the vote shall take place in the course of a single day, at the place of work and during normal working hours. However, the following persons are entitled to a mail-in vote:

- staff members who are expected to be absent on the day of the vote;
- staff members who are remote from the polling station to which they are assigned, by virtue of the nature or conditions of their employment;
- staff members working on sites where there is no polling station.

When expressed by electronic method and/or paper documents, the terms and procedures for the organization and conduct of the election of directors representing employees, which are not specified by applicable legal or regulatory provisions, or by these by-laws, shall be established by the Board of Directors, or by the Chairman of the Board acting upon delegation, as the case may be by implementing any Group agreement (accord de groupe) that would have been concluded in relation to this election, for companies within the perimeter set forth in the first sub-paragraph of 1 above."

The other provisions of Article 13 of the By-laws remain unchanged.

Nineteenth resolution

Authorization given to the Board of Directors to allocate Company's shares for free to Corporate Officers and certain Orange group employees without shareholder preferential subscription rights

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Extraordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report, authorize, pursuant to Articles L. 225-197-1 et seq. of the French Commercial Code, the Board of Directors to allocate for free, at one time and according to conditions it shall determine, up to the limits set in this authorization, existing or new Company's shares to Corporate Officers (within the meaning of Article L. 225-197-1 Part II of the French

Commercial Code) and certain employees of the Company or companies or groups affiliated with the Company within the meaning of Article L. 225-197-2 of the French Commercial Code.

This authorization is granted for a period of 12 months as from this Shareholders' Meeting.

The total number of shares allocated for free pursuant to this resolution shall not represent more than 0.07% of the capital of the Company on the date of this Shareholders' Meeting, it being stated that the total number of shares allocated for free to Corporate Officers of the Company under this resolution shall not exceed 100,000 shares.

The shareholders at the Shareholders' Meeting resolve that any award decided by the Board of Directors according to this resolution will be subject to the achievement of the following performance conditions, as these conditions may be specified by the Board of Directors.

The performance conditions are the following:

- the Group's organic cash flow (for 40% of the final vesting), for which
 the achievement of the target will be appraised at the end of a three
 year period (including the year in which the shares will have been
 allocated for free) in comparison to the organic cash flow target set
 for this multi-year period as previously approved by the Board of
 Directors;
- relative change of the Orange Total Shareholder Return (TSR) (for 40% of the final vesting), the performance of which will be assessed after a three years period by comparing (i) the change of the Orange TSR calculated by comparing the average *Orange Share* price between September 1, 2019 and December 31, 2019 (14.15 euros) to the average *Orange Share* price between September 1, 2022 and December 31, 2022, (ii) to the change in the sector's TSR calculated according to the same methodology using the "Stoxx Europe 600 Telecommunications" index as the benchmark or any other index that would replace it, it being understood that the result will be recorded according to the "hit or miss" principle between the changes in the TSR Orange and the TSR of the sector calculated on the basis of the "Stoxx Europe 600 Telecommunications" benchmark index:
- the rate of CO₂ per customer use (for 10% of the final vesting) and the Group's rate of renewable electricity (also for 10% of the final vesting), the achievement of which will be assessed at the end of a three year period (including the year in which the shares will have been allocated for free), in order to support the Orange Group's ambition in terms of social and environmental responsibility as part of its strategic plan Engage 2025.

The Board of Directors will determine the vesting period, which may not end before March 31, 2023 and in no event be less than two years, it being stipulated that:

- no minimum period of retention will be applicable to the beneficiaries;
- that the beneficiaries shall still be employed within the Group on the date of assessment of the performance conditions of the vesting period.

As an exception to the foregoing, the Company's beneficiaries corporate officers shall hold at least 50% of the shares they receive until the end of their duties.

In case a beneficiary becomes disabled, as determined by law, the final allocation of the shares may occur before the end of the vesting period and the attendance condition may be removed.

In the event the allocation under this resolution takes the form of existing shares, these shares should be acquired by the Company, as part of the share Buyback program authorized by the sixteenth resolution submitted to the present Shareholders' Meeting under Article L. 225-209 of the French Commercial Code or any share Buyback program applicable before or after the date of this Shareholders' Meeting.

The shareholders at the Shareholders' Meeting acknowledge and resolve, as may be necessary, that this authorization entails the waiver by shareholders of any rights over the shares allocated for free on the basis of this resolution in favor of the beneficiaries of the allocation.

The shareholders at the Shareholders' Meeting give full powers to the Board of Directors to:

- decide the apportionment of the allocation for free between existing and new shares;
- specify the conditions and, where necessary, the allocation criteria
 for the shares, in particular the allocation percentages in accordance
 with the Group's organic cash flow and the percentage to be
 allocated on the basis of the Group's rate of renewable electricity,
 depending on whether or not the respective objectives set are
 achieved:
- set, subject to the conditions and limits prescribed by law, the dates on which the allocations for free shall take place;
- identify the beneficiaries, the number of shares allocated to each, and the terms and conditions for allocation and delivery of the shares:
- decide the conditions under which the number of shares allocated shall be adjusted; and
- more generally, with the right, within the limits prescribed by law, to sub-delegate, enter into all agreements, draw up all documents, carry out all formalities and official declarations and take all other necessary actions.

The delegation granted by the shareholders at the Combined Ordinary and Extraordinary Shareholders' Meeting held on May 21, 2019, in its twenty-eighth resolution, is terminated, with immediate effect, in respect of the unused portion.

Twentieth resolution

Delegation of authority to the Board of Directors to issue shares or complex securities reserved for members of savings plans without shareholder preferential subscription rights

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Extraordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report, delegate to the Board of Directors, for a term of 18 months, the power to decide, on one or more occasions, the issue of (i) shares in the Company or (ii) securities that are equity securities giving access to existing shares in the Company or to the allocation of debt securities of the Company or (iii) securities giving access to shares to be issued in the Company, reserved for members of Company savings plans (and/or members of any other plan for which Article L. 3332-18 of the French Labor Code allows a reserved capital increase under similar conditions) set up within the Company or its Group.

For purposes of this delegation, the Group means the Company and French or foreign companies consolidated in the Company's financial statements under Articles L. 3344-1 and L. 3344-2 of the French Labor Code.

The nominal amount of an immediate or future capital increase of the Company resulting from all issues carried out pursuant to this delegation is set at 200 million euros, without taking into account the nominal value of the shares to be issued, to preserve, in accordance with the law, the rights of the holders of the securities giving access to the shares.

The subscription price of the new shares shall be equal to the average quoted share price during the 20 trading days preceding the day of the decision establishing the opening date of the subscriptions, reduced by the maximum discount provided for by law on the day the Board of Directors makes its decision; it being specified that the Board of Directors can reduce this discount if it so deems appropriate, in particular in the event of an offer to the members of a Company savings plan on the international market and/or abroad in particular in order to meet the requirements of the applicable local laws.

The Board of Directors may allocate, free of charge, to the aforementioned beneficiaries, in addition to shares to be subscribed for in cash, existing or new shares, which need not be of the same type as the cash-paid shares, as a replacement for all or part of the above-mentioned discount and/or employer's contribution, it being understood that the advantage resulting from this allocation cannot exceed the applicable legal or regulatory limits. The nominal amount of any immediate or future capital increase resulting from the allocation of shares will be charged against the maximum amount referred to above (200 million euros).

The shareholders at the Shareholders' Meeting decide to suppress the shareholder preferential subscription rights for the securities to be issued pursuant to this delegation in favor of the aforementioned beneficiaries, the said shareholders waiving any right to the securities allocated for free under this delegation (including the part of capitalization of reserves, income or premiums due to the allocation of said securities made pursuant to the present delegation).

The shareholders at the Shareholders' Meeting acknowledge that this delegation entails the waiver by shareholders of their preferential subscription rights for shares to which the securities that may be issued pursuant to this delegation may give access.

The Board of Directors, with the right to delegate in accordance with the conditions provided for by the law, shall have full powers for the purpose of implementing this delegation and in particular to:

- determine the characteristics, amount and terms of each securities issue:
- determine that the issues may be made directly in favor of the beneficiaries or through the intermediary of employee saving funds (UCITS) or like bodies;
- decide the list of companies or groups whose employees and former employees may subscribe for issued shares;
- determine the nature and terms and conditions of the capital increase, as well as the terms of issuance;
- acknowledge the completion of the capital increase;
- determine, if applicable, the amount of the sums to be capitalized up to the limit set above, the equity account (s) from which they are drawn as well as the date from which the shares thus issued carry the right to dividends;
- if it deems appropriate, charge the costs for the capital increases against the amount of premiums related to these increases and take from this amount the amounts required to bring the statutory reserve account to the tenth of the new capital after each increase; and
- take all measures to complete the capital increases, carry out the formalities as a consequence thereof, in particular those relating to listing of the securities issued, and amend the by-laws in relation to these capital increases, and generally do whatever is necessary.

The delegation granted by the shareholders at the Combined Ordinary and Extraordinary Shareholders' Meeting held on May 21, 2019, in its twenty-ninth resolution, is terminated, with immediate effect, in respect of the unused portion.

Twenty-first resolution

Authorization to the Board of Directors to reduce the capital through the cancellation of shares

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Extraordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report,

- delegate, for a period of 18 months, to the Board of Directors full powers for the purpose of canceling, on one or more occasions, up to a maximum of 10% of the Company's share capital, by periods of 24 months, all or part of the Company's shares acquired as part of the authorized share Buyback programs in the sixteenth resolution submitted to this Shareholders' Meeting or as part of share Buyback programs authorized before or after the date of this Shareholders' Meeting;
- decide that the surplus of the purchase price of the shares over their nominal value will be charged to the "Share premiums" account or to any account of available reserves, including the statutory reserve, within a the limit of 10% of the capital reduction carried out;
- delegate full powers to the Board of Directors, with the right of delegation in accordance with the law, to carry out the capital reduction resulting from the cancellation of the shares and the aforementioned charging, as well as to amend the by-laws accordingly.

The delegation granted by the shareholders at the Combined Ordinary and Extraordinary Shareholders' Meeting held on May, 21 2019 in its thirty-first resolution is terminated, with immediate effect, in respect of the unused portion.

Twenty-second resolution

Amendment to Article 13 of the Bylaws to take into account registered shares directly held by employees whose free allocation has been allowed by the Extraordinary Shareholders' Meeting of the Company prior to the publication of French Law N° 2015-990 of August 6, 2015 on the growth, activity and equal economic opportunities

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Extraordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors, decide to amend Section 3, Article 13 of the Bylaws of the Company, in order to take into account the registered shares directly held by the employees whose free allocation has been allowed by the Extraordinary Shareholders' Meeting of the Company prior to French Law N° 2015-990 of August 6, 2015 on the growth, activity and equal economic opportunities.

As a consequence, the first paragraph of Article 13.3 of the Bylaws of the Company, "the Director representing the employee shareholders shall be appointed pursuant to applicable legal and regulatory provisions and to the Bylaws of the Company by the shareholders' general meeting upon a motion proposed by the shareholders referred to in Article L. 225-102 of the French Commercial Code" shall be completed as follows: "It is specified that registered shares directly held by the employees whose free allocation has been allowed by extraordinary shareholders' meetings of the Company prior to the publication of French Law N° 2015-990 of August 6, 2015 on the growth, activity and equal economic opportunities are taken into account for the determination of the proportion of share capital held by the employees pursuant to the aforesaid Article L. 225-102."

The other terms and conditions of Article 13.3 of the Bylaws remain unchanged.

Twenty-third resolution

Payment in shares of the interim dividends – Delegation of powers to the Board of Directors whether or not to offer an option between payment of the interim dividend in cash or in shares

The shareholders at the Shareholders' Meeting, acting under the conditions of *quorum* and majority required for Ordinary Shareholders' Meetings, having reviewed the Report of the Board of Directors, authorize pursuant to paragraph 3 of Article 26 of the Bylaws and Articles L. 232-12 and L. 232-18 and seq. of the French Commercial Code, the Board of Directors, in the event that it decides to distribute an interim dividend for fiscal year 2020, to propose or not to propose to the shareholders an option for the payment of the interim dividend in cash or in Orange shares for the entire interim dividend, according to the terms and conditions described below.

In the event of a decision by the Board of Directors to implement the option of a payment in shares, the issue price of Orange shares delivered in payment of the interim dividend, in the event of the exercise of such option, shall be determined by the Board of Directors, and, pursuant to Article L. 232-19 of the French Commercial Code, shall not be less than 90% of the average of the first prices on the Euronext Paris market over the twenty trading sessions prior to the date of the decision of payment less the net amount of the interim dividend, the said issue price shall be rounded up in this way to the next higher euro cent.

The conversion of the dividend into shares on the basis of the issue price thus determined will be made on a net basis, i.e. after reduction, when applicable, of the amount of the advance payment of non-discharging flat-rate withholding tax and/or social contributions and additional contributions (for shareholders who have their tax residence in France) or withholding tax at a rate determined in accordance with the shareholder's country of tax domicile (for shareholders who do not have their tax residence in France).

If the amount of the interim dividends for which the option is exercised does not correspond to a whole number of shares, the shareholder may receive a directly lower number of shares completed by an equalization payment in cash. Shares delivered in payment will bear right to dividends.

As a consequence, the shareholders at the Shareholders' Meeting grant full powers to the Board of Directors, with the right to delegate, to implement this resolution, should it decide so, and in particular, to:

- define the terms and conditions of implementation of this option of payment in shares (including setting the period of the exercise of the option and the date of payment of the interim dividend) and carry out all operations related or subsequent to the exercise of the option;
- charge the costs for the capital increase against the amount of the premium related to this increase, and take from this amount the amounts required to bring the statutory reserve account to the tenth of the new capital;
- acknowledge the number of shares issued and the completion of the capital increase, and amend the Bylaws accordingly; and
- more generally, carry out all formalities necessary for the issuing, the listing of the securities issued under this resolution, and do whatever is necessary in compliance with the law and regulation in force at the date of the operations in question.

Twenty-fourth resolution

Powers for formalities

The shareholders at the Shareholders' Meeting confer full powers on the holder of an original, a copy or an extract of the minutes of this Shareholders' Meeting for the purpose of carrying out all legal or administrative formalities and making all filings and public disclosures provided by under current law.

6.6 Report of the Board of Directors of February 12 and April 16, 2020 on the resolutions submitted to the Combined Ordinary and Extraordinary Shareholders' Meeting of May 19, 2020

Presentation of resolutions within the competence of the Ordinary Shareholders' Meeting

First and second resolutions

Approval of the statutory and consolidated annual financial statements

Under the terms of the first and second resolutions, it is proposed that the Shareholders' Meeting approve the separate annual financial statements of the Company as well as the consolidated annual financial statements of the Group at December 31, 2019.

It is hereby specified that with respect to fiscal year 2019, the costs or expenses mentioned under Article 39-4 of the French General Tax Code amounted to 2,260,707 euros and the tax related thereto amounted to 778,361 euros.

Third resolution

Allocation of income and approval of dividend amount

It is the responsibility of the shareholders at the Shareholders' Meeting to decide on the allocation of the income for fiscal year 2019 and payment of a dividend to shareholders.

With a distributable income of more than 10 billion of euros at December 31, 2019, considering the profit for fiscal year 2019 is close to 2.9 billion of euros and the retained earnings are more than 7.5 billion of euros (before deduction of the interim dividend paid on December 4, 2019), your Company has a very strong balance sheet and abundant liquidity. Moreover, it is worth noting that the statutory reserve is already equal to the minimum required and therefore does not require any provision.

Nevertheless, taking into account the prudence required in the light of the persisting uncertainties regarding the deep and the length of this unprecedented crisis due to the COVID-19 epidemic, your Board of Directors wished to decrease the dividend announced during the communication of its financial statements on February 13, and proposes to the shareholders at the Shareholders' Meeting to decide to distribute, as a dividend for the fiscal year 2019, an amount of 0.50 euro per share instead of 0.70 euro to shareholders.

Taking into account the interim dividend of 0.30 euro per share paid on December 4, 2019, the balance to be distributed would be 0.20 euro per share.

This decision to reduce the dividend for 2019 has been taken in a search for balance and responsibility taking into account all Orange's stakeholders. It will enable to strengthen even more the balance sheet of your Company, which is currently among the strongest of the sector.

The balance of the dividend to be distributed would be paid on June 4, 2020 to shareholders entitled to the dividend, i.e. to those who hold Orange shares and are entitled to receive a dividend relative to 2019, on the ex-dividend date (for France, this is two business days prior to the date of payment, i.e. June 2, 2020).

The interim dividend paid on December 4, 2019 amounts to 795,901,391.40 euros and based on the number of shares eligible to receive dividends at December 31, 2019, the total amount of the balance of the dividend to be paid amounts to 530,062,726.20 euros. It should be noted that treasury shares do not give right to dividends.

As the number of shares with dividend rights may change up until the payment date, the Shareholders' Meeting would grant full authority to the Board of Directors to determine the definitive total amount of the dividend, the balance of the distributable income and, consequently, the amount to be posted to the "retained earnings" account.

Pursuant to Article 117 quater of the French General Tax Code, individuals resident in France for tax purposes are subject to a flat-rate levy on dividends received (currently 12.8%), plus the contribution provided for in Article L. 136-7 of the French Social Security Code (currently 17.2%). However, as an express and irrevocable option, these individuals may request that their dividends be included in their net income, under the conditions set out in Article 200 A of the French General Tax Code, in order to benefit from the 40% tax allowance pursuant to paragraphs 2 and 3 of Article 158 of the French General Tax Code.

The table below summarizes the amount of dividends paid with respect to the last three fiscal years which were fully eligible for the tax allowance provided for in Article 158-3-2 of the French General Tax Code:

Fiscal Year	cal Year Number of shares		Portion of dividend eligible for the 40% tax allowance
2016	2,659,846,780	€0.60	100%
2017	2,658,547,775	€0.65	100%
2018	2,652,992,864	€0.70	100%

The Company shares held by the Company do not carry rights to dividends.

Fourth resolution

Approval of the agreements referred to in Articles L. 225-38 et seq. of the French Commercial Code

The fourth resolution proposes that the Shareholders' Meeting, after reviewing the Statutory Auditors' special report on regulated agreements and commitments referred to in Articles L. 225-38 et seq. of the French Commercial Code, approve the two new agreements entered into by your Company.

On June 26, 2019, Orange SA's Board of Directors authorized the conclusion:

- on the one part, of an agreement with the Ministry of Europe and Foreign Affairs, on behalf of the French State, in connection with the organization of the G7 summit meeting held in Biarritz (France) on August 24-26, 2019 whereby Orange SA undertook to provide technical services in the form of infrastructure investments and expenses (mobile coverage, network, etc.) and the provisions of services (voice and data, WiFi, LAN, etc.) and "Program Management Office" services for an amount totaling approximately 10 million euros;
- and on the other hand, of an agreement with COFREX (Compagnie Française des Expositions), the French exhibition company wholly-owned by the French State charged with preparing and

Report of the Board of Directors of February 12 and April 16, 2020 on the resolutions submitted to the Combined Ordinary and Extraordinary Shareholders' Meeting of May 19, 2020

organizing France's participation in Dubai 2020 World Expo, whereby Orange SA undertook, notably, to provide a fleet of mobile phones, to produce the equipment to ensure network coverage and the connectivity of the entire French Pavilion, and other services such as providing and installing dedicated equipment and their cabling and connections for an estimated amount totaling approximately 1.8 million euros.

A description of these regulated agreements is provided in the in the Statutory Auditors' special report.

For that reason, the French State will abstain from voting on the fourth resolution submitted to the Shareholders' Meeting, in application of article L. 225-40 of the French Commercial Code.

Finally, agreements previously authorized, of which the effects continued, are also subject to the Statutory Auditors' Special Report, of which the shareholders are required to take note.

In addition, these agreements were presented to the Board of Directors on February 12, 2020 for annual review, in accordance with the provisions of Article L. 225-40-1 of the French Commercial Code.

The relevant agreements are the same as those referred to in the Statutory Auditors' Special Report which is submitted to your Shareholders' Meeting, namely, the amendments signed with Novalis to extend to Corporate Officers the benefit of the Group's policies covering (i) healthcare costs and (ii) death, incapacity and disability. The Corporate Officers concerned are Stéphane Richard, Ramon Fernandez and Gervais Pellissier.

Fifth resolution

Appointment of a new director

The term of office of Mr. Charles-Henri Filippi as independent director expires at the end of the Shareholders' Meeting.

Based on Mr. Charles-Henri Filippi's 12 years of office, the GCSER Committee noted that it was not possible to renew his term as an independent director. On that basis, it proposed to associate the services of an independent consulting firm tasked with selecting a profile meeting the Board's needs and the requirements of the Internal Guidelines, notably in terms of the obligation of "ensuring diversity with respect to qualifications and work experiences in line with the Group's business".

In response to the rapid changes in the telecommunications sector and the goal of contributing to the discussions in Board meetings in the field of innovation and technology, the GCSER has proposed that the profile of director to be selected possesses expertise in the area of digital technologies, works or has worked in an international environment and exercises or has exercised an executive management function.

Based on the selection process, the GCSER issued a recommendation on February 7, 2020, which was approved by the Board of Directors on February 12, 2020. Pursuant to the above, Mr. Frédéric Sanchez's candidacy will be submitted to the Shareholders' Meeting.

This appointment would take place under the conditions set out in Article 13 of the Bylaws for a period of four years, expiring at the end of the Shareholders' Meeting which will approve the financial statements for the year ended December 31, 2023, i.e. 2024.

Frédéric Sanchez, born in 1960, is Chairman of Fives group. He began his career at Renault in 1985 in Mexico and the U.S., before joining Ernst & Young at the end of 1987 as a mission manager. In 1990, he joined Fives-Lille group, where he held various positions before becoming Chief Financial Officer in 1994, then Chief Executive Officer in 1997, and finally Chairman of the management board in 2002. Fives – the new name of the "Compagnie de Fives-Lille" since 2007 – became a simplified joint stock company (SAS) in 2018, headed by Frédéric Sanchez as Chairman. Under his leadership, Fives has accelerated its development by strengthening its international presence and portfolio of activities through major acquisitions and the

opening of regional offices in Asia, Russia, Latin America and Middle East. Since 2002, the Group's sales have tripled. In addition, Frédéric Sanchez is Chairman of MEDEF International, and Chairman of the France-United Arab Emirates and France-Saudi Arabia business councils of MEDEF International. He is also a member of the Supervisory Board of STMicroelectronics N.V. and Théa Holding SAS, and a director of Bureau Veritas SA and Compagnie des Gaz de Pétrole Primagaz SAS. Finally, he is honorary co-chairman of the Alliance Industrie du Futur. Frédéric Sanchez is a graduate of HEC (1983) and Sciences-Po Paris (1985) and holds a post-graduate degree in Economics from the University of Paris-Dauphine (1984). He is a French national.

Sixth and seventh resolutions

Renewals of directors

The appointments of Mrs. Christel Heydemann and Mr. Bernard Ramanantsoa will expire at the end of the Shareholders' Meeting. You are asked, pursuant to the terms provided for in Article 13 of the Bylaws, to renew their appointments as directors for a period of four years expiring at the close of the Shareholders' Meeting convened to approve the financial statements for the fiscal year ended on December 31, 2023.

These two directors are independent. Their independent status was assessed by the GCSER Committee and reviewed by the Board of Directors on February 12, 2020 as part of the annual review of directors' independence and when reviewing the draft resolutions on the reappointment of directors.

Detailed biographies of the directors whose reappointment is proposed can be found in the Universal Registration Document (Section 5.1.1 *Board of Directors*).

Christel Heydemann has been a member of the Board of Directors since July 26, 2017 (i.e. for 2 years and 9 months at the close of the 2020 Annual General Meeting).

A graduate of École polytechnique and École Nationale des Ponts et Chaussées, Christel Heydemann has extensive experience in business development, strategy and digital technologies acquired over her professional career, in particular in the telecommunications sector.

As of the date of this document, Christel Heydemann holds 1,000 shares of the Company.

Bernard Ramanantsoa has been a member of the Board of Directors since June 7, 2016 (i.e. for 3 years and 11 months at the close of the 2020 Annual General Meeting).

Following his initial diversified training in the fields of technology, economics, finance and strategy and his professional experience as a teacher, researcher and director of a leading academic institution, Bernard Ramanantsoa is today an expert in business management and strategies at both the national and international levels.

As of the date of this document, Bernard Ramanantsoa holds 1,000 shares of the Company.

Eighth resolution

Appointment of Mrs. Laurence Dalboussière as a director representing shareholder employees

The term of office of Mr. Philippe Charry as a director representing employee shareholders will expire at the close of the Shareholders' Meeting. In consequence, it is necessary to choose his successor.

Pursuant to the adoption of the twentieth resolution of the Shareholders' Meeting of May 4, 2018, Article 13 of the Company's Bylaws has been modified for the purpose of clarifying and simplifying the procedure of appointing the director representing employee shareholders by permitting Orange's different employee stock ownership systems to submit a single candidacy to the Shareholders' Meeting, after a single consultation within these systems.

In application of articles L. 225-23 and L. 225-102 of the French Commercial Code, Article 13.3 of the relevant FCPE (Fonds Communs de Placement d'Entreprise) mutual fund Bylaws and rules, candidates for this function (the statutory appointee and the replacement) were appointed in order to propose a single candidacy to the Shareholder's Meeting.

This candidacy is accompanied by the candidacy of a replacement who may be called to exercise the functions of the director thus appointed in the event of his or her vacancy.

To fulfill this office, we have proposed the candidacy of Mrs. Laurence Dalboussière as a director with Mr. Thierry Chatelier as replacement.

Laurence Dalboussière, born in 1964, is a member of the Supervisory Board of the *Orange Actions* mutual fund. She currently works in internal communications at Orange France. Before joining France Telecom in 1998, she worked in a IT services company specialized in customer relations and software development. She then took part in the launch of the first French bank without any desk. She began her career at France Telecom by setting up a customer relations platform for small and midsized companies, then worked in operational marketing for a corporate agency and then in the customer department. From 2009 to 2012, she was secretary of the French marketing sales committee. She then became director of internal communication for the corporate France department. Since 2016, she has been General Secretary of CFE-CGC Orange. She is a French national.

Ms Laurence Dalboussière holds 1,004 shares in the *Orange Actions* mutual fund and 120 Orange shares in registered form.

Thierry Chatelier, born in 1975, is a member of the Supervisory Board of the *Orange Actions* mutual fund. He has 20 years of experience in the Telecommunications industry. A specialist in hyper frequencies and a graduate of the University of Limoges, he began his professional life internationally, first at Global One then Equant where he participated in the construction of France Telecom's seamless network. He joined the Orange Business Services teams where he held several positions in customer relations and sales. In 2015, he was seconded to Orange Horizons where was in charge of institutional relations, and at the same time lead a trade union commitment. He is secretary of the Orange SCE works council. Since 2017, he has been in charge of co-innovation and business development projects. He is a French national.

Thierry Chatelier holds 3,080 shares in the Orange Actions mutual fund.

The term of the office is four years expiring at the end of the General Meeting called to approve the financial statements for the period ending December 31, 2023.

In the event of a vacancy for any reason whatsoever, the director appointed as replacement will immediately assume his functions for the remaining term of his predecessor.

Ninth to twelfth resolutions

On November 27, 2019, an ordinance governing the compensation of directors and officers of listed companies was published in France (Ordinance No. 2019-1234). For Orange, this completes the ex-post "say-on-pay" mechanism providing for an "ex-post" vote by shareholders now covering the compensation of directors based on their office, and a compensation policy to be submitted to an "ex-ante" vote. In addition, the shareholders' vote now covers amounts paid or awarded during the period, which resulted in a change in the presentation of the compensation of Directors and Officers in the Board's report and in the Universal Registration Document.

Approval of the disclosures mentioned in article L. 225-37-3 I. of the French Commercial Code relating to the compensation of Directors and Officers presented in report on Corporate Governance approved by the Board of Directors, as presented in the Universal Registration Document

In application of article L. 225-100 II. of the French Commercial Code as amended by Ordinance No. 2019-1234 of November 27, 2019, shareholders are asked to vote on selected information included in the report on Corporate Governance approved by the Board of Directors on April 16, 2020 and mentioned in Article L. 225-37-3 I. of the French Commercial Code. The purpose of the ninth resolution is to submit to a vote by the shareholders for approval of information relating to compensation paid or awarded in the period ended December 31, 2019 to all corporate officers as presented in Sections 5.4.1 and 5.4.2 of the Company's 2019 Universal Registration Document.

Approval of the compensation items paid or allocated for the fiscal year ended December 31, 2019 to the Chairman and Chief Executive Officer and the *Delegate* CEOs

Pursuant to Article L. 225-100 III. of the French Commercial Code as amended by Ordinance. 2019-1234 of November 27, 2019, shareholders are asked to express a vote on the compensation paid or awarded to Corporate Officers for the fiscal year ended December 31, 2019 by means of a resolution to be submitted for the approval of the Shareholders' Meeting. The shareholders are therefore asked to vote on a resolution regarding the individual compensation of these three Corporate Officers: Stéphane Richard, Chairman and Chief Executive Officer of Orange (tenth resolution), Ramon Fernandez and Gervais Pellissier, *Delegate* CEOs (respectively the eleventh and twelfth resolutions).

The tables below summarize these compensation items.

Gross amounts (in euros)	Amounts due in respect of fiscal year to Stéphane Richard	Amounts paid during fiscal year to Stéphane Richard	Amounts due in respect of fiscal year to Ramon Fernandez	Amounts paid during fiscal year to Ramon Fernandez	Amounts due in respect of fiscal year to Gervais Pellissier	Amounts paid during fiscal year to Gervais Pellissier
Fixed compensation	950,000	950,000	600,000	600,000	600,000	600,000
Variable compensation	655,120	626,124	278,280	294,235	278,280	294,235
Multi-year variable compensation		300,000		200,000		200,000
Exceptional compensation						
Attendance fees	O ⁽¹⁾	O (1)	NA (2)	NA (2)	NA (2)	NA (2)
Welcome bonuses or payments						
for termination of service	NA	NA	NA	NA	NA	NA
Supplemental retirement plan	NA	NA	NA	NA	NA	NA
Benefits in kind	11,263	11,263	16,994	16,994	12,108	12,108
Total (3)	1,616,383	1,887,387	895,274	1,111,229	890,388	1,106,343

- (1) Stéphane Richard has waived his right to receive attendance fees.
- (2) Not applicable
- (3) For the allocation of stock-options, performance shares or any long-term compensation items, see Section 5.4.1.2.

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A detailed presentation of the compensation of Corporate Officers is shown in Section 5.4.1.2 *Amount of compensation paid or awarded to Corporate Officers in respect of 2019*.

Thirteenth to fifteenth resolutions

Approval of the compensation policy for Directors and Officers

In accordance with article L. 225-37-2 of the French Commercial Code as modified by Ordinance No. 2019-1234 of November 27, 2019, shareholders must approve in a general meeting the compensation policy for all directors and officers.

The thirteenth and fourteenth resolutions thus propose that shareholders vote on the compensation policy of the Chairman and Chief Executive Officer for fiscal year 2020, Stéphane Richard (thirteenth resolution) as well as the *Delegate* CEOs (fourteenth resolution).

The purpose of the fifteenth resolution is to submit to vote by the shareholders the compensation policy of directors (non-executive officers for fiscal year 2020, in addition to the vote on compensation of Corporate Officers).

Details on this policy are shown in the Report on the compensation and benefits of Directors and Officers, produced by your Board and in particular in Section 5.4.2.2 Compensation policy for non-executive directors.

Sixteenth resolution

Authorization to be granted to the Board of Directors to purchase or transfer Orange shares

Your Board of Directors proposes that you authorize the Buyback of Company shares to a maximum number of shares representing 10%

of the capital and at a maximum price of 24 euros per share (this price may be adjusted in the event of transactions on capital). The maximum amount of funds for the Buyback program is therefore set at 6,384,135,837.60 euros.

This authorization will be valid for a period of 18 months from the date of the Shareholders' Meeting and may be implemented at any time except in the event of a public tender offer on the Company's securities.

The purpose of the Buyback program would be to (i) enable the Company to comply with obligations related to securities giving access to capital or to stock option programs or any other type of share allocation or grant to employees (in particular, free share awards or employee shareholding plans), (ii) ensure the liquidity of the *Orange Share* pursuant to a liquidity contract with a financial services provider in compliance with the AMF decision No. 2018-01 dated July 2, 2018, (iii) have shares to deliver in exchange or in payment for external growth transactions, and (iv) reduce the Company's capital.

The Board of Directors would have full powers to implement this delegation and set the terms.

The adoption of this resolution would terminate the authorization to buy back shares granted by the Combined Ordinary and Extraordinary Shareholders' Meeting of May 21, 2019. This authorization was used to acquire shares (outside the liquidity contract) in December 2019 (to honor obligations related to the award of shares to employees) and within the framework of the liquidity contract with the independent investment services provider (ISP) (Rothschild) (see Section 6.1.4 Treasury shares – Share Buyback Program). This contract was revised in February 2019 further to changes in regulation regarding liquidity contracts.

The Board of Directors will inform you, in its Annual Report, of share purchases, transfers or cancellations and, as the case may be, of the allocation of shares acquired for the various objectives pursued.

Presentation of resolutions within the competence of the Extraordinary Shareholders' Meeting

Seventeenth resolution

Modification of Article 2 of the Bylaws by inserting a reference to the Company's purpose

At the Shareholders' Meeting of May 21, 2019, the Chairman and Chief Executive Officer announced that Orange would introduce a mission statement referred to as a "purpose". This purpose unveiled in December 2019 is as follows:

"As a trusted partner, Orange gives everyone the keys to a responsible digital world".

Orange's purpose was co-developed with the support of all its employees in order to express the Group's collective vision in France and around the world. Orange also sought out contributions from all its internal and external stakeholders, including Board members and shareholders.

Your Board of Directors proposes that you vote in favor of incorporating Orange's purpose into the Company's Bylaws according to the option granted by the French law No. 2019-489 of May 22, 2019 (the "Action Plan for Business Growth and Transformation" or "PACTE" law)

On that basis, it is proposed that article 2 of the Company's Bylaws entitled "Article 2 – OBJECT":

The title of Article 2 has been modified as follows: "ARTICLE 2 - CORPORATE SCOPE AND PURPOSE":

At the end, of Article 2 of the Company's Bylaws, a new paragraph has been added concerning the Company's "purpose" reading as follows:

The Company's purpose is as follows: "As a trusted partner, Orange gives everyone the keys to a responsible digital world."

The other provisions of Article 2 of the Bylaws remain unchanged.

Eighteenth resolution

Modification of Article 13 of the Bylaws on the election of employee directors by employees

As required by law, three employee directors elected by the personnel of Orange SA and its direct and indirect subsidiaries serve on Orange SA's Board of Directors.

The Bylaws provide that one director is selected from an electoral college of engineers, managers and related workers and two directors from the electoral college of the other employees. The organization of the last election of directors selected by employees in 2017 highlighted the change in the composition of the employee structure and the electoral college notably by the development of new business lines within the Group and changes within the scope of subsidiaries concerned, with the integration of service companies within the Enterprise Division with an employee base consisting largely of management personnel.

Within the framework of ongoing exchanges with labor organizations and in view of the upcoming elections scheduled to be held in December 2021 coinciding with the end of the terms of the directors elected by employees (four years from December 2018), your Board of Directors proposes that you modify the procedures for electing

employee directors in order to better reflect the composition of the personnel structure. This could result in the election in December 2021 of two representatives of the electoral college of managers (compared to one at the present time) and one representative for the electoral college of non-management employees (compared to two at present).

The draft resolution also provides for removing the current restriction under the Bylaws of organizing a second round of voting no later than 15 days before the end of the term of incumbent directors representing employees.

On that basis, by modifying Articles 13.1 and 13.2 of the Bylaws, this resolution would allow for a distribution of seats by the electoral college in line with the structure of personnel as determined at July 1 of the year through a single consultation of employee shareholders while providing the company with the necessary degree of flexibility in organizing the calendar of the voting process.

The other provisions of article 13 of the Bylaws remain unchanged.

Nineteenth resolution

Authorization given to the Board of Directors to allocate Company shares free of charge to Corporate Officers and certain Orange group employees and involving the waiver of shareholders' preferential subscription rights

Shareholders are once again asked this year to authorize the allocation for free of shares in the form of performance shares, to Corporate Officers and certain employees of the Company or companies or groups affiliated with the Company (subsidiaries and holdings). This scheme is intended to offer Orange group senior management comparable schemes to what are offered to managers holding comparable positions in other major groups.

This allocation will be made within the context of the multi-year variable compensation plan (long-term incentive plan or conditioned LTIP) established for Corporate Officers of the Company and members of the Executive Committee who are not Corporate Officers of the Company for the 2019-2021 period. The LTIP is extended to employees named as "Executives" and "Leaders" according to the same terms (excluding the number of shares) and conditions. These terms and conditions are described in the Report on the compensation and benefits of the Corporate Officers produced by your Board (see Section 5.4.1.3 Compensation structure for corporate officers in 2020).

The characteristics of this allocation have been reviewed and approved by your Board on the basis of the GCSER recommendations:

- the number of shares to be allocated is limited to 0.07% of the share capital including the shares awarded to Corporate Officers of the Company, it being stated that the total number of these latter shares shall be limited to 100,000;
- they will either be outstanding shares or newly-issued shares;
- the authorization period is limited to 12 months; the Board of Directors wishes to carry out the share award quickly after the Shareholders' Meeting to enable an assessment of the performance conditions for the period covering 2020, 2021 and 2022.

This authorization is subject to performance conditions relating to:

- the amount of organic cash flow (for 40% of the final vesting);
- the relative change of the Total Shareholder Return (TSR) (for 40% of the final vesting); and
- according to the CSR criteria (representing 20% of the final vesting rights), of which CO₂ emissions per customer use accounts for 50% (with an objective for lowering this indicator) and 50% for the rate of renewable energy used by the Group (with an objective for increasing this indicator).

The achievement of the organic cash flow target will be assessed over the entire 2020-2022 period (including the year in progress of 2020 in which free shares were awarded) and no longer on the basis of three successive years. The achievement of this target will be verified in relation to the organic cash flow target established for this within the Engage 2025 strategic plan. This criteria will be verified by applying a graduated system where achieving or exceeding this organic cash flow target in the period will result in 100% vesting right for this criteria.

The relative change in the Orange Total Shareholder Return (TSR) will be assessed in comparison with the change in the Telecommunication sector's TSR. The change in the Orange TSR will be calculated by comparing the average *Orange Share* price from September 1, 2019 to December 31, 2019 (namely 14.15 euros) to the average *Orange Share* price from September 1, 2022 to December 31, 2022. The change in the telecommunications sector's TSR will be calculated according to the same methodology using the Stoxx Europe 600 Telecommunications index as the benchmark or any other index that would replace it; this criteria will then be verified according to the "Hit or Miss" principle.

Change in CO_2 level by customer use measures the change over time in (Scopes 1 and 2) CO_2 offset from Orange business units in the different countries, in relation to the total number of customers, each customer being weighted by its number of uses. This measure is in line with Orange's objective to reduce its CO_2 offset per customer by 50% by 2020 in relation to 2006. This criteria will then be verified according to the "Hit or Miss" principle.

The criteria for the renewable energy rate will be established, on the one hand, in reference to the share of renewable energy within the mix electricity suppliers in the countries where Orange operates as a carrier and, on the other hand the share of renewable energy specific to Orange whether through Power Purchase Agreements, ESCO-type agreements (Energy Services Companies), solar parks or wind farms or renewable energy sources providing guarantees of origin with respect to total electricity consumption in the relevant countries. This criteria will then be verified according to the "Hit or Miss" principle.

The final vesting of the shares (delivery of these shares to the beneficiaries) may not occur before the vesting date of March 31, 2023, it being stipulated that:

- no lock-up period will be applicable to the beneficiaries;
- the beneficiaries shall still be employed within the Group on the last day of the period for assessing the performance conditions.

As an exception to the foregoing, the Company's beneficiary Corporate Officers shall hold at least 50% of the shares they receive until the end of their duties.

Twentieth resolution

Delegation of authority to the Board of Directors to issue shares or complex securities reserved for members of savings plans without shareholder preferential subscription rights

The purpose of this resolution is to permit the issue of shares or securities giving access to shares of the Company, to be subscribed in cash, in favor of members of the Orange Group savings plan. Where applicable, under such issuance, shares or securities giving access to shares of the Company could be allocated for free, to replace all or part of the discount referred to hereinafter and/or the employer's contributions.

The nominal amount of the immediate or future capital increase of the Company, resulting from all of the issuances carried out under this delegation, would be set to 200 million euros, excluding the nominal value of issuable shares to protect, in compliance with the law, the rights of holders of securities giving access to shares.

The subscription price for new shares would be equal to the average stock market prices during the 20 trading days prior to the decision setting the date of the subscription being opened, reduced by the maximum discount provided for by the law as of the day of the Board

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of Directors' decision, it being specified that the Board of Directors would reduce this discount as they deem fit, including where securities are offered in the international market and/or abroad, notably to meet the applicable local legal requirements.

Shareholders' preferential subscription rights to shares thus issued would be waived in favor of the members of the Orange Group's Company savings plan.

This delegation's term would be 18 months.

As of December 31, 2019, Group employees held, via the mutual funds of the Group savings plan, 5.07% of the capital and 8.36% of the voting rights. As of December 31, 2019, some employee also own Orange shares in registered form from previous transactions (free share award plan), representing 0.35% of the share capital and 0.60% of voting rights.

Twenty-first resolution

Authorization to cancel repurchased shares

The Board of Directors proposes that you authorize, for a period of 18 months from the date of the Shareholders' Meeting, cancellation of all or part of the Orange shares that would have been acquired, whether under the Share Buyback Program authorized by the sixteenth resolution, or under Share Buyback Programs prior or subsequent to the Shareholders' Meeting, and consequently, to reduce the share capital.

By law, total shares canceled per 24-month period may not exceed 10% of the Company's capital.

Twenty-second resolution

Amendment to Article 13 of the Bylaws to take into account registered shares directly held by employees whose free allocation has been allowed by the Extraordinary Shareholders' Meeting of the Company prior to the publication of French Law N° 2015-990 of August 6, 2015 on the growth, activity and equal economic opportunities

Upon proposal of the Supervisory Board of the *Orange Actions* mutual funds, it is proposed to the shareholders at the Shareholders' Meeting to amend Article 13 of the Bylaw, in accordance with the possibility offered by Article 164 of French Law N° 2019-486 of May 22, 2019 on business growth and transformation called "Loi PACTE", in order to take into account, for the determination of the proportion of share capital held by employees pursuant to Article L. 225-102 of the French Commercial Code, the shares freely allocated to employees pursuant to authorizations granted by the extraordinary shareholders' meeting prior to August 6, 2015, which means, with regard to Orange, the 2007 "NExT Reward" plan for this possibility to be implemented, companies must provide for it in their bylaws.

Other term and conditions of Article 13 of the Bylaws would remain unchanged.

Twenty-third resolution

Option for the payment in shares of the interim dividend – Delegation of powers to the Board of Directors whether or not to offer an option between payment of the interim dividend in cash or in shares

Taking into account the prudence required by the exceptional crisis in the context of the COVID-19 epidemic and pursuant to paragraph 3 of Article 26 of Orange's Bylaws, it is proposed, in respect of this 23rd resolution, to authorize the Board of Directors if necessary, in the event of a decision to pay an interim dividend for the fiscal year ending December 31, 2020, to propose to the shareholders an option between payment either in cash or in shares for the entire interim dividend.

In the event of a decision of the Board of Directors to propose an interim dividend in shares, the exercise of their option by the shareholders for the payment of an interim dividend in new Orange shares would apply to the total amount of such interim dividend. Issue shares would be ordinary shares and would bear right to dividends, meaning that they would confer rights to any distribution payable as from subscription.

Pursuant to the law, the issue price of Orange shares delivered in payment shall be equal to the average of the first prices of the *Orange Share* on the Euronext Paris market over the twenty trading sessions prior to the date of the decision of the Board of Directors, less the amount of the interim dividend, difference on which the Board of Directors may decide to apply a discount up to the legal maximum of 10%. The Board of Directors may decide to round up the amount obtained to the next higher euro cent.

The conversion of the dividend into shares on the basis of the issue price thus determined will be made on a net basis, i.e. after reduction, when applicable, of the amount of the advance payment of non-discharging flat-rate withholding tax and/or social security contributions and additional contributions (for shareholders who have their tax residence in France) or withholding tax at a rate determined in accordance with the shareholder's country of tax domicile (for shareholders who do not have their tax residence in France).

If the amount of the interim dividends for which the option is exercised does not correspond to a whole number of shares, the shareholder will receive a directly lower number of shares completed by an equalization payment in cash.

The Board of Directors would be granted full powers, with the right to delegate under conditions provided for by law, to set the period of the exercise of the option, the date of payment of the interim dividend and, more generally, implement the payment of the interim dividend in shares, acknowledge the completion of the capital increase that would result from this resolution and make the corresponding amendments to the Bylaws, and carry out all related formalities.

Twenty-fourth resolution

Powers for formalities

It is proposed, as is customary, that the Shareholders' Meeting confer full powers on the holder of an original, a copy, or an extract of the minutes of the Shareholders' Meeting for the purposes of carrying out all legal or administrative formalities and completing all filings and public disclosures provided for under current law in relation to the Shareholders' Meeting.

If the Board of Directors' proposals meet your approval, we request that you approve them by voting on the resolutions submitted to you, following review of the reports drawn up by the Statutory Auditors in accordance with applicable laws and regulations.

Additional reports in the event delegations are used

Applicable rules

If the Board of Directors uses the delegations that your Shareholders' Meeting has granted, it shall draw up an additional report or, if such an additional report is not required, shall inform you thereof in its Annual Report, in accordance with the laws and regulations in effect when the delegation is used.

In addition, when securities are issued pursuant to said delegations, the Statutory Auditors must draw up a report for the Board of Directors in accordance with the laws and regulations in effect when the delegation is used.

Current use

The table attached to this report shows the use made by the Board of Directors of the delegations granted for capital increases.

Appendix

Summary table of delegations and authorizations granted by the Shareholders' Meeting to the Board of Directors – Fiscal Year 2019

With the exception of the treasury Share Buyback Program specifically mentioned in the Universal Registration Document that contains the Management Report, in accordance with Article L. 225-211, paragraph 2 of the French Commercial Code, the table below summarizes, with

respect to the 2019 fiscal year, all currently valid authorizations granted to the Board of Directors by the Shareholders' Meeting, including the delegations granted regarding capital increase required under Article L. 225-37-4-3 of the French Commercial Code.

Delegations granted at the Shareholders' Meeting	Date of the Shareholders' Meeting having granted the delegation	Term of the delegation and expiration date	Total amount of the delegation (in euros)	Use made of the delegation during the fiscal year (in euros)	Balance (in euros)
Delegation of authority, to the Board of Directors to issue, outside of public tender offer periods, shares in the Company and complex securities, with shareholders' preferential subscription rights. (16th resolution)	May 21, 2019	26 months July 20, 2021	2 billion (1)		2 billion
Delegation of authority to the Board of Directors to issue, outside of public tender offer periods, shares in the Company and complex securities, without shareholder' preferential subscription rights. (18th resolution)	May 21, 2019	26 months July 20, 2021	1 billion ⁽¹⁾	-	1 billion
Delegation of authority to the Board of Directors to issue, outside of public tender offer periods, shares in the Company and complex securities, without shareholders' preferential subscription rights as part of an offer provided for in Section II of Article L. 411-2 of the French Monetary and Financial Code. (20th resolution)		26 months July 20, 2021	1 billion ⁽¹⁾	-	1 billion
Delegation of authority to the Board of Directors to issue, outside of public tender offer periods, shares in the Company and complex securities, without shareholders' preferential subscription rights, in the event of a public exchange offer initiated by the Company. (23rd resolution	May 21, 2019	26 months July 20, 2021	1 billion ⁽¹⁾	-	1 billion

⁽¹⁾ Within the overall limit of 3 billion euros of the maximum nominal amount of the capital increase that may be carried out pursuant to the delegations conferred by the 16th to 26th resolutions of the Shareholders' Meeting of June 1, 2017.

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Report of the Board of Directors of February 12 and April 16, 2020 on the resolutions submitted to the Combined Ordinary and Extraordinary Shareholders' Meeting of May 19, 2020

Delegations granted at the Shareholders' Meeting	Date of the Shareholders' Meeting having granted the delegation	Term of the delegation and expiration date	Total amount of the delegation (in euros)	Use made of the delegation during the fiscal year (in euros)	Balance (in euros)
Delegation of authority to the Board of Directors to issue, outside of public tender offer periods, shares in the Company and complex securities, without shareholders' preferential subscription rights, as consideration for contributions in kind granted to the Company and comprised of equity securities or securities giving access to the Company's capital. (25th resolution)		26 months July 20, 2021	1 billion up to 10% of the capital (1)		1 billion up to 10% of the capital ⁽¹⁾ 1,064,022,639
Authorization given to the Board of Directors to allocate the Company's shares free of charge to Corporate Officers and certain employees. (28th resolution)	May 21, 2019	12 months May 20, 2020	0.07% of the capital	0.063% of the capital	0.007% of the capital
Delegation of authority to the Board of Directors to proceed with capital increases reserved for members of savings plans without shareholder preferential subscription rights. (29th resolution)	May 21, 2019	18 months November 20, 2020	200 million	-	200 million
Delegation of authority to the Board of Directors to increase the share capital of the Company by incorporation of reserves, profits or premiums. (30th resolution)	May 21, 2019	26 months July 20, 2021	2 billion	-	2 billion
Authorization granted to the Board of Directors to reduce the capital through the cancellation of shares. (31th resolution)	May 21, 2019	18 months November 20, 2020	10% of capital per 24-month period	-	10% of capital per 24-month period

⁽¹⁾ Within the overall limit of 3 billion euros of the maximum nominal amount of the capital increase that may be carried out pursuant to the delegations conferred by the 16th to 26th resolutions of the Shareholders' Meeting of June 1, 2017.

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6.7 Statutory Auditors' Reports on resolutions and related party agreements

Statutory Auditors' Report on related party agreements

Annual General Meeting held to approve the financial statements for the year ended December 31, 2019

To the Annual General Meeting of Orange,

In our capacity as statutory auditors of your Company, we hereby present to you our report on related party agreements.

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements indicated to us, or that we may have identified in the performance of our engagement, as well as the reasons justifying why they benefit the Company. We are not required to give our opinion as to whether they are beneficial or appropriate or to ascertain the existence of other agreements. It is your responsibility, in accordance with Article R. 225-31 of the French Commercial Code (Code de commerce), to assess the relevance of these agreements prior to their approval.

We are also required, where applicable, to inform you in accordance with Article R. 225-31 of the French Commercial Code (Code de commerce) of the continuation of the implementation, during the year ended December 31, 2019, of the agreements previously approved by the Annual General Meeting.

We performed those procedures which we deemed necessary in compliance with professional guidance issued by the French Institute of Statutory Auditors (Compagnie nationale des commissaires aux comptes) relating to this type of engagement. These procedures consisted in verifying the consistency of the information provided to us with the relevant source documents.

Agreements submitted for approval to the Annual General Meeting

We hereby inform you that we have been notified of the following agreements entered into during the year ended December 31, 2019 and subject to the prior approval of the Board of Directors in accordance with Article 225-40 of the French Commercial Code (Code de commerce).

Agreement for the organization of the G7 summit in Biarritz from 24 August to 26 August 2019 with the Ministry of Europe and Foreign Affairs

Persons concerned

Your Company's directors: Mss Hélène Dantoine, Anne Lange, directors representing the French State and Mr Nicolas Dufourcq representing *Bpifrance Participations*.

Nature and purpose

Agreement conclued with the Ministry of Europe and Foreign Affairs on behalf of the French State, as part of the organization of the G7 summit in Biarritz (France) under their terms of which your Company commits to providing technical services in the form of investments and infrastructure related expenses (mobile coverage, network, etc.) as well as for the services delivered (voice and data services, WiFi, LAN, etc.) and "Program Management Office" services for a total amount of approximately M€ 10.

Conditions

The conclusion of this agreement was authorized by your Board of Directors of June 26, 2019, Mss Hélène Dantoine, Anne Lange representing the French State and Mr Nicolas Dufourcq representing Bpifrance Participations did not take part in the debate nor in the

deliberation vote of the Board of Directors. The agreement was entered on August 9, 2019 and the end date is on December 31, 2019.

Reasons justifying why the Company benefits from this agreement

Your Board of Directors motivate this agreement with the participation in the organization of the French presidency of the G7 allowing to contribute to the attractiveness of France.

Agreement for the requirements of the universal exhibition Dubaï 2020 with Compagnie Française des Expositions (COFREX), company completely owned by the French State

Persons concerned

Your Company's directors: Mss Hélène Dantoine, Anne Lange, directors representing the French State and Mr Nicolas Dufourcq representing *Bpifrance Participations*.

Nature and purpose

Agreement entered into with the COFREX as part of the preparation and organization of the French participation to the Dubaï 2020 universal exhibition under the terms of which your Company commits notably to providing a mobile phones fleet, to achieve the equipment of the network coverage and connectivity of all "Pavillon France", and other services such as supplying and installing dedicated equipment as well as their cabling and their interconnection.

The services to be provided by your Company are valuated at around M€ 1,8 for Pavillon France of the universal exhibition Dubaï 2020. Your Company will receive the Ambassadeur du Pavillon France status as a partner company.

Conditions

The conclusion of this agreement was authorized by your Board of Directors of June 26, 2019, Mss Hélène Dantoine, Anne Lange representing the French State and Mr Nicolas Dufourcq representing *Bpifrance Participations* did not take part in the debate nor in the Board of Directors' deliberation vote. The agreement was entered into on December 20, 2019 with a retroactive effect on May 15, 2019.

Reasons justifying why the Company benefits from this agreement

Your Board of Directors motivate this agreement with the participation at the material organization of the Pavillon France of the universal exhibition Dubaï 2020 allowing to benefit from the international attractiveness of this event.

Agreements previously approved by the annual General Meeting

In accordance with Article R. 225-30 of the French Commercial Code (Code de commerce), we have been notified that the implementation of the following agreement, which was approved by the Annual General Meeting in prior years, continued during the year ended December 31, 2019.

With Novalis

Persons concerned

Corporate officers (Stéphane Richard, Chairman and Chief Executive Officer., Ramon Fernandez and Gervais Pellissier, *Delegate* Chief Executive).

Nature and purpose

On January 11, 2010, two amendments were made to current contracts with Novalis. These amendments extend health, death and disability insurance benefits coverage under Orange group's contracts to corporate officers.

Both amendments were authorized by the Board of Directors on March 24, 2010 and approved by the Shareholders' General Meeting on June 9, 2010.

Paris-La Défense, April 16, 2020

The Statutory Auditors

KPMG Audit

AuditDivision of KPMG SA

Ernst & Young Audit

Marie Guillemot

Yvon Salaiin

Statutory Auditors' report on the free allocation of existing shares or shares to be issued

Annual General Meeting dated May 19, 2020 - Nineteenth resolution

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with. French law and professional standards applicable in France.

To the Shareholders,

In our capacity as statutory auditors of your Company and in compliance with Article L. 225-197-1 of the French Commercial Code (Code de commerce), we hereby report on the proposed free allocation of existing shares or shares to be issued, reserved for Corporate Officers (within the meaning of Article L. 225-197-1 Part II of the French Commercial Code) and some employees of your Company or companies or groups affiliated with the Company within the meaning of Article L. 225-197-2 of the French Commercial Code, an operation upon which you are called to vote.

The total number of shares awarded as free shares pursuant to this resolution shall not represent more than 0.07% of the capital of the Company at the date of this Shareholders' Meeting, it being stated that the total number of shares awarded as free shares to Corporate Officers of your Company under this resolution shall not exceed 100,000 shares.

Your Board of Directors proposes that, on the basis of its report, it be authorized for a period of twelve months as of the date of this Annual General Meeting to allocate, for free, existing shares or shares to be issued.

It is the responsibility of the Board of Directors to prepare a report on the proposed operation. Our role is to report on any matters relating to the information regarding the proposed operation.

We have performed those procedures which we considered necessary to comply with the professional guidance issued by the French Institute of Statutory Auditors (Compagnie nationale des commissaires aux comptes) for this type of engagement. These procedures consisted mainly in verifying that the proposed methods described in the Board of Directors' report comply with the legal provisions governing such operations.

We have no matters to report as to the information provided in the Board of Directors' report relating to the proposed free allocation of shares.

Paris-La Défense, April 16, 2020

The Statutory Auditors
French original signed by

KPMG Audit
A division of KPMG S.A.

Ernst & Young Audit

Marie Guillemot

Yvon Salaün

Statutory Auditors' report on the issue of shares or marketable securities reserved for members of Company savings scheme

Annual General Meeting dated May 19, 2020 - Twentieth resolution

This is a translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Shareholders,

In our capacity as statutory auditors of your Company and in compliance with Articles L. 228-92 and L. 225-135 et seq. of the French Commercial Code (Code de commerce), we hereby report on the proposal to authorize your Board of Directors to decide whether to proceed with an issue in one or several stages of (i) your Company's shares or (ii) securities that are equity securities giving access to existing shares of your Company or to the allocation of debt securities

of the Company or (iii) securities giving access to shares to be issued of your Company, with cancellation of preferential subscription rights, reserved for members of Company savings scheme (and/or members of any other plan for which Article L. 3332-18 of the French Labor Code (Code du travail) allows a reserved capital increase under similar conditions) set up within your Company or the within the Group, an operation upon which you are called to vote. The nominal amount is set at M€ 200.

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For the purpose of this authorization, Group shall mean your Company and French or foreign entities falling within the consolidation scope of your Company's financial statements in accordance with Articles L. 3344-1 and L. 3344-2 of the French Labor Code (Code du travail).

This issue is submitted for your approval in accordance with Articles L. 225-129-6 of the French Commercial Code (Code de commerce) and L. 3332-18 et seq. of the French Labor Code (Code du travail).

Your Board of Directors proposes that, on the basis of its report, it be authorized for a period of eighteen months to decide an issue and to waive your preferential subscription rights to the marketable securities to be issued. If necessary, it will be responsible for determining the final issue conditions for this transaction.

It is the responsibility of the Board of Directors to prepare a report in accordance with Articles R. 225-113 et seq. of the French Commercial Code (Code de commerce). Our role is to report on the fairness of the financial information taken from the accounts, on the proposed cancellation of preferential subscription rights and on other information relating to the issue provided in the report.

We have performed those procedures which we considered necessary to comply with the professional guidance issued by the French Institute

of Statutory Auditors (Compagnie nationale des commissaires aux comptes) for this type of engagement. These procedures consisted in verifying the information provided in the Board of Directors' report relating to this operation and the methods used to determine the issue price of the capital securities to be issued.

Subject to a subsequent examination of the conditions for the issue that would be decided, we have no matters to report as to the methods used to determine the issue price of the capital securities to be issued provided in the Board of Directors' report.

As the final conditions for the issue have not yet been determined, we cannot report on these conditions and, consequently, on the proposed cancellation of preferential subscription rights.

In accordance with Article R. 225-116 of the French Commercial Code (Code de commerce), we will issue a supplementary report, if necessary, when your Board of Directors has exercised this authorization in case of the issue of shares or securities that are equity securities giving access to other capital securities and in case of the issue of equity securities giving access to capital securities to be issued.

Paris-La Défense, April 16, 2020

The Statutory Auditors French original signed by

KPMG Audit
A division of KPMG S.A.

Marie Guillemot

Yvon Salaün

Ernst & Young Audit

Statutory Auditors' report on the reduction in capital

Annual General Meeting dated May 19, 2020 - Twenty-first resolution

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Shareholders.

In our capacity as statutory auditors of your Company and in compliance with Article L. 225-209 of the French Commercial Code (Code de commerce) in respect of the reduction in capital by the cancellation of repurchased shares, we hereby report on our assessment of the terms and conditions for the proposed reduction in capital.

Your Board of Directors requests that it be authorized, for a period of eighteen months, to proceed with the cancellation of shares the Company was authorized to repurchase, representing an amount not exceeding 10% of its total share capital, by periods of twenty-four months in compliance with the article mentioned above.

We have performed those procedures which we considered necessary in accordance with professional guidance issued by the French Institute of Statutory Auditors (Compagnie nationale des commissaires aux comptes) for this type of engagement. These procedures consisted in verifying that the terms and conditions for the proposed reduction in capital, which should not compromise equality among the shareholders, are fair.

We have no matters to report as to the terms and conditions of the proposed reduction in capital.

Paris-La Défense, April 16, 2020

The Statutory Auditors French original signed by

KPMG Audit
A division of KPMG S.A.

Marie Guillemot

Ernst & Young Audit

Yvon Salaün

Annual General meeting held to approve the financial statements for the year ended December 31, 2019

Statutory auditors' attestation on the information communicated in accordance with the requirements of Article L. 225-115 4° of the French Commercial Code relating to the total amount of compensation paid to the highest-paid employees for the year ended December 31, 2019

To the Annual General Meeting of Orange,

In our capacity as statutory auditors of your Company and in compliance with the requirements of of Article L. 225-115 4° of the French Commercial Code (Code de commerce), we have prepared this attestation on the information relating to the total amount of remuneration paid to the highest-paid employees for the year ended December 31, 2019, contained in the attached document.

This information was prepared under the Board of Directors' responsibility. Our role is to attest this information.

In the context of our role as statutory auditors (Commissaires aux comptes), we have audited the annual financial statements of your company for the year ended December 31, 2019. Our audit was conducted in accordance with professional standards applicable in France, and was planned and performed for the purpose of forming an opinion on the annual financial statements taken as a whole and not on any individual component of the accounts used to determine the total amount of compensation paid to the highest-paid employees. Accordingly, our audit tests and samples were not carried out with this objective and we do not express any opinion on any components of the accounts taken individually.

We performed those procedures which we considered necessary to comply with the professional guidance issued by the French Institute Statutory Auditors (Compagnie nationale des commissaires aux comptes) for this type of engagement. These procedures, which constitute neither an audit nor a review, consisted in performing the necessary reconciliations between the total amount of remuneration paid to the highest-paid employees and the accounting records, and verifying that it is consistent with the data used to prepare the annual financial statements for the year ended December 31, 2019.

On the basis of our work, we have no matters to report on the reconciliation of the total amount of remuneration paid to the highest-paid employees contained in the attached document and amounting to €10,689,610, with the accounting records used to prepare the annual financial statements for the year ended December 31, 2019.

This attestation shall constitute certification as accurate of the total amount of remuneration paid to the highest-paid employees within the meaning of Article L. $225-115\ 4^{\circ}$ of the French Commercial Code.

This attestation has been prepared solely for your attention within the context described in the first paragraph and should not be used, distributed or referred to for any other purpose.

Paris-La Défense, April 16, 2020 The Statutory Auditors

French original signed by

KPMG Audit Division of KPMG SA Ernst & Young Audit

Marie Guillemot

Yvon Salaün

Total amount of remuneration paid to the highest paid employees

The total amount of salaries, allowances and various indemnities, fees or benefits in kind, paid to the ten highest paid employees during the year 2019 amounts to €10,689,610 (ten million six hundred and eighty-nine thousand six hundred and ten euros).

Paris, February 12, 2020
The Chief Executive Officer
Stéphane Richard

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7.1 Correspondence tables

7.1.1 Universal Registration Document (URD)

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Regula	ation (EU) 2019/980 of March 14, 2019	Section	Pages
1.	Dorgona roon anaible		
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1.3	Expert statement or report	NA	
1.4	Information from third parties	NA	
1.5	Declaration without prior approval of the competent authority	I W-A	1
2.	Statutory Auditors		
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2.2	Changes	NA	
3.	Risk factors	2.1	52-57
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4.2	Place, registration number and legal entity identifier (LEI)	1.1.1	4
4.3	Date of incorporation and length of life	1.1.1	4
4.4	Registered office, legal form, website and applicable legislation	1.1.1	4
5.	Business overview		
5.1	Principal activities	1.4	
5.2	Principal markets	1.2.1, 1.4	
5.3	Important events in the development of the issuer's business	1.1.4, 1.3	
5.4	Issuer's strategy and objectives	1.2.2, 3.2.2	9-11, 131
5.5	Dependence on patents or licenses, industrial, commercial or financial contracts	100010	04.54
5 0	or new manufacturing processes	1.6.2, 2.1.2	
5.6	Competitive position	1.4	19-30
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5.7.3	Significant joint ventures and equity investments	3.3 notes 11, 12.7, 19 3.4.1 note 3.2	
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	or its property, plant and equipment	2.1.1, 2.1.4, 4.4	34, 30-37, 320-329
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7.	Operating and financial review	0.4	70.400
7.1	Financial condition	3.1	79-130
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7.2 7.2.1	Operating results Significant factors materially affecting the incurar's income from exerctions	3.1.2.1-3.1.2.2 1.3, 3.1.2.1-3.1.2.2	
7.2.1	Significant factors materially affecting the issuer's income from operations Discussion of the reasons for material changes in net sales or revenues	3.1.1.2, 3.1.2.1.1	81-83
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8.3	Borrowing requirements and funding structure	3.1.4.2	
8.4	Restrictions on the use of capital resources	NA	
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9.	Regulatory environment	1.7	34-50
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	financial position and profits and losses		
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19.1.3	Shares held by the issuer or its subsidiaries	6.1.4	376-377
19.1.4	Convertible or exchangeable securities or securities with warrants	6.1.2	376
	Acquisition rights and/or obligations over authorized but unissued capital	NA	
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	is under option or agreed to be put under option	NA	
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19.2.3	Provisions of the issuer's articles of association, statutes, charter or Bylaws that would have an effect of delaying, deferring or preventing a change in control of the issue	er NA	
20 140	terial contracts 3	3 notes 3.2 and 13.3	166-168, 226

NA: not applicable.

21. Documents available

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7.1.2 Annual Financial Report

The Annual Financial Report required by Article L. 451-1-2 of the French Monetary and Financial Code and Article 222-3 of the AMF General Regulation, and reporting on the items mentioned below, is included in this Universal Registration Document.

Items required by Articles L. 451-1-2 of the French Monetary and Financial Code	h Monetary and Financial Code	
and 222-3 of the AMF General Regulation	Section	Pages
Consolidated financial statements (IFRS)	3.3	132-253
Annual financial statements (French GAAP)	3.4.1	255-285
Management Report	See correspondence	ce table 7.1.3
Declaration by the person responsible		1
Report of the Statutory Auditors on the consolidated financial statements	3.5.2.1	288-293
Report of the Statutory Auditors on the annual financial statements	3.5.2.2	293-297

7.1.3 Management Report of the Board of Directors to the Shareholders' Meeting

The Management Report of the Board of Directors to the Shareholders' Meeting, required by Article L. 225-100 of the French Commercial Code and reporting on the items mentioned below is included in this Universal Registration Document. It was approved by the Board of Directors of Orange SA on April 16, 2020.

Items required by the French Commercial Code, Monetary and Financial Code, Universal		URD
Registration Document, the General Tax Code, and by the General Regulations of the AMF	Section	Pages
I. Activity		
Analysis of the business performance, results and financial position of the Company during		
the past fiscal year (L. 225-100-1 and L. 232-1 of the French Commercial Code)	3.4.1, 3.4.2	256-285, 286-287
Analysis of the business performance, results and financial position of the Group during		
the past fiscal year (L. 225-100-1 II and L. 233-26 of the French Commercial Code)	3.1	78-130
Results of subsidiaries and controlled companies by business segment	0.4.0	
(L. 233-6 of the French Commercial Code)	3.1.3	91-113
Research and development activities (L. 232-1 and L. 233-26 of the French Commercial Code)	1.6	33-35
Description of the principal risks and uncertainties (L. 225-100-1 of the French Commercial Code)	2.1	52-57
Information on financial risks related to the effects of climate change and measures taken		
by the company to reduce them (L. 225-100-1 of the French Commercial Code)	2.1.1, 2.1.4	52-54, 56-57
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Group's policy concerning financial risk management and exposure to price, credit, liquidity	0.4.00	
and cash risks (L. 225-100-1 of the French Commercial Code)	3.1.4.2.3	119
Add-back of operating expenses and extravagant expenses (Art. 39.4 and 223 quater,		
Art. 39.5 and 223 quinquies of the General Tax Code)	3.4.2.2	286
Information on supplier payment terms (L. 441-14 of the French Commercial Code)	3.4.2.4	287
Five-year summary of results (R. 225-102 of the French Commercial Code)	3.4.2.5	287
Information on trends (L. 232-1 and L. 233-26 of the French Commercial Code) Material events subsequent to the balance sheet date (L. 232-1 and L. 233-26	3.2.2	131
of the French Commercial Code)	3.3.1 note 18	251
Main characteristics of the internal control and risk management procedures	0.0.1 11010 10	201
pertaining to the preparation and processing of accounting and financial information		
(L. 225-100-1 of the French Commercial Code)	2.2.3.1	61-63
(E. 220 Too Totalo Honor Commordia Code)	2.2.0.1	01 00
II. Consolidated Non-Financial Statement (L. 225-102-1 and R. 225-105 of the French Commercial Statement (L. 225-102-1)	ial Code)	
Business model .	1.2	.3 12-15
Main risks relating to the employment-related and environmental consequences of Orange's activities,		
including the risks arising from climate change and those related to the impacts of our business on response	pect	
for human rights, anti-corruption measures and tax avoidance		56-57, 330-333
Policies to prevent, identify and mitigate risks	2.2.2, 2.2.4, 4.6	61, 64-75, 330-333
Effectiveness of our policies and key		
- employment-related performance indicators	4.2	305-316
- environmental performance indicators	4.4	320-329
- and community and sustainable development performance indicators	4.1, 4.3	302-304, 316-319
	4.5	329-330

III. Vigilance plan (L. 225-102-4 of the French Commercial Code)		
Risk mapping	2.1.4, 4.6	56-57, 330-333
Procedures for evaluating the position of subsidiaries, subcontractors and suppliers	2.2.4.5,	74-75,
	4.5, 4.6	329-330, 330-333
Actions taken to mitigate risks and prevent abuses	2.2.4, 4.1.3,	64-75, 304,
	4.2.5, 4.3.4,	311-312, 318-319,
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Alert mechanism	2.2.4.1.2	66-67
Monitoring mechanism and assessment of measures taken	4.6	330-333
IV. Legal information and information related to shareholding		
Employee shareholdings at the year-end (L. 225-102 of the French Commercial Code)	6.2.1	377-378
Identity of shareholders holding more than 5%; treasury shares (L. 233-13 of the French Commercial Code)	6.2.1	377-378
Information on share buybacks (L. 225-211 of the French Commercial Code)	6.1.4	376-377
Dividends distributed for the last three fiscal years (243 bis of the General Tax Code)	6.6	387
Equity investment in or takeover of companies having their registered office in France		
(L. 233-6 of the French Commercial Code)	3.4.2.3	286
Summary of transactions by Corporate Officers on company securities		
(L. 621-18-2 and R. 621-43-1 of the French Monetary and Financial Code,		
and 223-22 A and 223-26 of the AMF General Regulation)	5.1.4.2	349
V. Miscellaneous		
Information on loans granted to other companies (L. 511-6 and R. 511-2 1-3		
of the French Monetary and Financial Code)	NA	-
Existing company branches (L. 232-1 of the French Commercial Code)	NA	-

7.1.4 Report of the Board of Directors on Corporate Governance

The report of the Board of Directors required by Article L. 225-37 of the French Commercial Code and reporting on the items indicated below, is included in this Universal Registration Document. It was approved by the Board of Directors of Orange SA on April 16, 2020.

The Statutory Auditors' Report on the Board of Directors' report on Corporate Governance is included in their report on the separate annual financial statements.

Information required by Article L. 225-37 et seq. of the French Commercial Code		URD
	Section	Pages
Composition of the Board of Directors	5.1.1	338-341
Directorships and offices held in any company by each of the corporate officers during the year	5.1.4.1	345-348
Application of the principle of balanced representation between women and men on the Board of Directors	5.2.1.3	352
Information on gender balance in the 10% most senior positions	4.2.7	313-316
Conditions of preparation and organization of the work of the Board of Directors	5.2.1.4-5.2.1.9	352-359
Description of the procedure for evaluating current agreements implemented		
(Article L. 225-39 of the French Commercial Code para. 2)	5.2.1.10	359
Limits on the powers of the Chief Executive Officer	5.2.2.2	359-360
Reference to a Code of Corporate Governance	5.3	361
Special procedures regarding shareholder participation at Shareholders' Meetings	6.4.3	379-380
Items relating to the compensation policy for corporate officers	5.4.1.3	368-371
Total compensation and benefits of any kind paid to each corporate officer	5.4.1.2	363-368
Difference in the compensation of corporate officers and employees	5.4.1.1	366-367
Factors that may have an impact in the event of a public tender or exchange offer	5.2.1.1	350
	6.2	377-378
Related party agreements and commitments	6.7	395-398
Summary table of delegations and authorizations granted by the Shareholders' Meeting		
to the Board of Directors to increase the Company's capital and use made of these delegations		
during the fiscal year (L. 225-37-4 of the French Commercial Code)	6.6	386-392

7.1.5 Documents sent to shareholders upon request

The documents required by Article R. 225-88 of the French Commercial Code (documents sent to shareholders who request them prior to the Annual Shareholders' Meeting) included in this Universal Registration Document are listed below. Other documents required by this article are included in the notice of meeting sent to shareholders and are, together with the Group's Social Audit Report, available on the www.orange.com website, under the heading Individual shareholders/Shareholders' Meeting.

Elements required by Article R. 225-88 of the French Commercial Code		URD
	Section	Pages
List of directors and Chief Executive Officers and offices held	5.1.1-5.1.2	338-342
	5.1.4.1	345-348
Text of draft resolutions	6.5	380-386
Report of the Board of Directors to the Shareholder's Meeting	6.6 (also see Correspondence	387-392
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Statutory Auditors' Special Report on regulated agreements	6.7	395-398
Statutory Auditors' Report on the resolutions proposed to the General Meeting	6.7	395-398
Annual financial statements	3.4	255-287
Allocation of income	6.6	387-392
Statutory Auditors' General Report on the annual financial statements	3.5.2.2	293-297
Consolidated financial statements	3.3	132-253
Group Management Report	3.1	78-130
Report of the Board of Directors on Corporate Governance	See Correspondence	
	Table 7.1.4	
Statutory Auditors' Report on items that could have an effect in case of public tender or excl	nange offer 3.5.2.2	293-297
Summary table of delegations of authority and powers concerning capital increases	6.6	387-392

7.2 Glossaries

7.2.1 Financial glossary

Adjusted EBITDA (until December 31, 2018): reported EBITDA (see definition of this term) adjusted for the effects of significant litigations, specific labor expenses, review of the investments and business portfolio, restructuring and integration costs and, where appropriate, other specific items that are systematically specified in relation to income and/or expenses (see Note 1 to the consolidated financial statements). Adjusted EBITDA is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 Financial indicators not defined by IFRS). From January 1, 2019, adjusted EBITDA is no longer used by the Group and has been replaced by EBITDAaL (see that definition).

Adjusted EBITDA – CAPEX (until December 31, 2018): adjusted EBITDA (see definition of this term) minus CAPEX (see definition of this term). "Adjusted EBITDA – CAPEX" indicator is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 Financial indicators not defined by IFRS). From January 1, 2019, "Adjusted EBITDA – CAPEX" is no longer used by the Group and has been replaced by the indicator EBITDAAL – eCAPEX (see that definition).

Average number of employees (full-time equivalents): average number of active employees over the reporting period, prorated for their work time, including both permanent contracts and fixed-term contracts.

CAPEX (until December 31, 2018): investments in property, plant and equipment and intangible assets excluding telecommunications licenses and excluding investments financed through finance leases (see Note 1.4 to the consolidated financial statements). CAPEX is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 *Financial indicators not defined by IFRS*). From January 1, 2019, CAPEX is no longer used by the Group and has been replaced by eCAPEX (see that definition).

Capital expenditure on property, plant and equipment and intangible assets: see eCAPEX (from January 1, 2019) and CAPEX (until December 31, 2018).

Wholesale (Carrier services): see Revenue.

Change in working capital requirement: change in working capital requirement is made up of:

- the Change in working capital requirement for operations, which
 is made up of (i) the changes in gross inventories, (ii) the change in
 gross trade receivables, (iii) the change in trade payables for other
 goods and services, and (iv) the change in customer contract assets
 and liabilities; and
- Change in working capital requirements excluding operations which includes the change in other assets and liabilities (excluding receivables and payables related to operating taxes and levies).

Commercial expenses and content costs: see External purchases.

Convergent ARPO: average revenue per customer from convergent offers (Average Revenue Per Offer, ARPO) for the period are calculated by dividing (i) the revenue from retail convergent offers invoiced to customers (excluding the effect of spreading the equipment subsidy pursuant to IFRS 15) over the period in question, by (ii) the weighted average number of customers of retail convergent offers over the same period. The weighted average number of customers is the average of monthly averages over the period in question. The monthly average is the arithmetic average of the number of customers at the beginning and end of the month. Convergent ARPO is expressed in monthly revenue per convergent offer customer.

Convergent services: see Revenue.

Data on a comparable basis: data with comparable methods, scope of consolidation and exchange rates are presented for the preceding period (see Section 3.1.5.1 Data on a comparable basis). The transition from data on a historical basis to data on a comparable basis consists of keeping the results for the year ended and restating the previous year in order to present financial data with comparable methods, scope of consolidation and exchange rates over comparable periods. The method used is to apply to the data of the corresponding period of the preceding year the methods and the scope of consolidation for the period ended, as well as the average exchange rates used for the Consolidated income statement for the period ended. Changes in data on a comparable basis reflect organic business changes. Data on a comparable basis is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 Financial indicators not defined by IFRS).

Data on a historical basis: data for past periods as reported in the consolidated financial statements of the current financial period.

EBITDAaL or "*EBITDA after Leases*" (from January 1, 2019): operating income (i) before depreciation and amortization of fixed assets, effects resulting from business combinations, reclassification of translation adjustment from liquidated entities, impairment of goodwill and fixed assets, share of profits (losses) of associates and joint ventures, (ii) after interest on lease liabilities and interest on debts related to financed assets, and (iii) adjusted for significant litigation, specific labor expenses, fixed assets, investments and businesses portfolio review, restructuring programs costs, acquisition and integration costs and, where appropriate, other specific items that are systematically specified in relation to income and/or expenses (see Note 1 to the consolidated financial statements). EBITDAAL is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 *Financial indicators not defined by IFRS*).

EBITDAAL - eCAPEX (from January 1, 2019): EBITDAAL (see definition of this term) minus eCAPEX (see definition of this term). The "EBITDAAL - eCAPEX" indicator is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 *Financial indicators not defined by IFRS*).

eCAPEX or "economic CAPEX" (from January 1, 2019): acquisitions of property, plant and equipment and intangible assets excluding telecommunications licenses and financed assets, less the price of disposal of property, plant and equipment and intangible assets (see Note 1.4 to the consolidated financial statements).e-CAPEX is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 Financial indicators not defined by IFRS).

Economic CAPEX: see eCAPEX. **Equipment sales**: see *Revenue*.

External data: data after elimination of internal flows between the consolidation scopes taken into consideration.

External purchases: external purchases include the following operating expenses, excluding, from January 1, 2019, lease contracts falling within the scope of application of IFRS 16 (see Notes 2.3 and 5.1 to the consolidated financial statements):

 Commercial and equipments expenses and content rights: cost of handsets and other equipments sold, retail fees and commissions, advertising, promotional, sponsoring and rebranding expenses, and content costs;

- Service fees and inter-operator costs: network expenses and interconnection costs:
- Other network expenses and IT expenses: outsourcing expenses for operations and technical maintenance, IT expenses;
- and Other external purchases: overheads, real estate fees, purchases of other services and service fees, purchases of equipment and other supplies held in inventory, call center outsourcing expenses and other external services, net of capitalized goods and services produced.

Financial investments: acquisitions of investment securities (net of cash acquired) and changes in ownership interests with no gain of control in subsidiaries.

Fixed only broadband ARPO: average revenue per customer of fixed only offers (Average Revenue Per Offer, ARPO) for the period are calculated by dividing (i) the revenue from fixed only broadband services invoiced to customers (excluding the effect of the spreading of the equipment subsidy pursuant to IFRS 15) over the period in question, by (ii) the weighted average number of customers of fixed only broadband offers over the same period. The weighted average number of customers is the average of monthly averages over the period in question. The monthly average is the arithmetic average of the number of customers at the beginning and end of the month. Fixed only broadband ARPO is expressed in monthly revenue per fixed only customer.

Fixed only services: see Revenue.

IT & integration services: see Revenue.

Labor expenses: wages and employee benefit expenses (net of capitalized costs), employee profit-sharing expenses, and expenses relating to share- based compensation (see Note 6.1 to the consolidated financial statements).

Mobile only ARPO: average revenue per customer of mobile only offers (Average Revenue Per Offer, ARPO) for the period are calculated by dividing (i) the revenue from mobile only services invoiced to customers (excluding Machine to Machine and excluding the effect of spreading the equipment subsidy pursuant to IFRS 15) over the period in question, by (ii) the weighted average number of customers of mobile only offers (excluding Machine to Machine) over the same period. The weighted average number of customers is the average of monthly averages over the period in question. The monthly average is the arithmetic average of the number of customers at the beginning and end of the month. Mobile only ARPO is expressed in monthly revenue per mobile only customer.

Mobile only services: see Revenue.

Net financial debt: net financial debt as defined and used by Orange does not incorporate the Orange Bank activities for which this concept is not relevant. It consists of (i) financial liabilities excluding operating payables (translated into euros at the year-end closing rate) including derivative instruments (assets and liabilities), (ii) less cash collateral paid, cash, cash equivalents and financial assets at fair value. Furthermore, financial instruments designated as cash flow hedges included in net financial debt are set up to hedge in particular items that are not included therein, such as future cash flows. Effects of these hedges are carried in other comprehensive income. As a consequence, the portion of these components related to unmatured hedging instruments is added to gross financial debt to offset this temporary difference (see Note 12.3 to the consolidated financial statements). Compared with December 31, 2018, net financial debt at December 31, 2019 excludes lease liabilities falling within the scope of application of IFRS 16 (see Note 2.3 to the consolidated financial statements) and includes debts on financed assets. Net financial debt

is not a financial indicator defined by IFRS and may not be comparable to similarly-titled indicators used by other companies (see Section 3.1.5 *Financial indicators not defined by IFRS*).

Number of employees (active employees at end of period): number of employees working on the last day of the reporting period, including both permanent contracts and fixed-term contracts.

Operating taxes and levies: taxes and levies including the Territorial Economic Contribution (CET) and the Flat-rate Tax on Network Enterprises (*IFER*) in France, fees for the use of frequencies and levies on telecommunication services (see Note 10.1 to the consolidated financial statements).

Organic cash-flow (telecoms activities): within the scope of the telecoms activities, net cash generated by the operating activities, minus (i) lease liabilities repayments and debts related to financed assets repayments, and (ii) purchases and sales of property, plant and equipment and intangible assets, net of change in the fixed assets payables, (iii) excluding effect of telecommunication licenses paid and significant principal litigations paid or received (see Note 1.7 to the consolidated financial statements). Operating Cash Flow from telecom activities is not a financial aggregate defined by IFRS and may not be comparable to similarly-named indicators used by other companies (see Section 3.1.5 Financial indicators not defined by IFRS).

Other external purchases: see External purchases.

Other network expenses and IT expenses: see External purchases.

Other operating expenses: see Other operating income and expenses.

Other operating income and expenses: other operating income net of other operating expenses. Other operating income and expenses include:

- Other operating income: primarily net banking income (NBI, net balance of income and expenses from banking operations), tax credits and subsidies, income from universal service, brand royalties and management fees invoiced to certain unconsolidated entities, income on impaired trade receivables, rebilling of network sharing costs, income relating to line damage (see Note 4.2 to the consolidated financial statements); and
- Other operating expenses: mainly impairments and losses on trade receivables of telecoms activities, universal service charges, disputes, operating foreign exchange gains/losses, the cost of bank credit risk, and from January 1, 2019, acquisition costs (see Note 5.2 to the consolidated financial statements).

Other revenue: see Revenue.

Reported EBITDA (until December 31, 2018): operating income before depreciation and amortization, before effects resulting from business combinations, before reclassification of translation adjustment from liquidated entities, before impairment of goodwill and fixed assets, and before share of profits (losses) of associates and joint ventures (see Note 1 to the consolidated financial statements). Reported EBITDA is not a financial indicator defined by IFRS and may not be comparable to similarly titled indicators used by other companies (see Section 3.1.5 *Financial indicators not defined by IFRS*).

Retail services: aggregation of Convergent services, Mobile only services, Fixed only services and IT & integration services.

Revenue: revenue (see Notes 1.1 and 4.1 to the consolidated financial statements) includes:

 Convergent Services: revenue of convergent services includes revenue invoiced to retail customers of convergent offers (excluding equipment sales, see the definition of this term) defined as the combination of at least a fixed broadband access (xDSL, FTTx, cable, 4G fixed) and a mobile contract;

- Mobile only services: revenue of mobile only services includes revenue invoiced to customers of mobile offers (incoming and outgoing calls: voice, SMS and data), excluding convergent services and equipment sales (see the definitions of these terms);
- Fixed only services: revenue of fixed only services includes revenue invoiced to customers of fixed services excluding convergent services and equipment sales (see the definitions of these terms). It includes conventional fixed telephony, fixed broadband services, business solutions and networks; (with the exception of France, for which essential business solutions and networks are supported by the Enterprise operating segment);
- IT & integration services: revenue of IT & integration services include the unified communication and collaboration services (Local Area Network and telephony, consultancy, integration, project management, video-conference offers), hosting and infrastructure services (including Cloud Computing), applications services (customer relations management and other applications services), security services, services related to Machine to Machine activities (excluding connectivity), as well as sales of equipment related to the above products and services;
- Wholesale (Carrier services): revenue from other carrier include (i) mobile services to carriers, which groups together in particular incoming mobile traffic, visitor roaming, network sharing, national roaming and virtual mobile network operators (MVNO), and (ii) fixed services to other carriers, which include in particular national interconnection, services to international carriers, high-speed and very high-speed broadband access services (fiber access, unbundling of telephone lines, xDSL access sales), and sales of telephone lines on the wholesale market;
- Equipment sales: fixed and mobile equipment sales, excluding (i) equipment sales associated to the supply of IT and integration services, and (ii) equipment sales to dealers and brokers;
- and Other revenue: other revenue includes equipment sales to dealers and brokers, revenue from portals, on-line advertising revenue and corporate transversal business line activities of the Group, and other miscellaneous revenue.

Service fees and inter-operator costs: see External purchases.

Statutory data: data before elimination of internal flows between the consolidation scopes taken into consideration.

Wages and employee benefit expenses: see Labor expenses.

7.2.2 Glossary of technical terms

API (Application Programming Interface): computer programming interface that enables programs to interact with one another, in a similar manner to a human-machine interface.

Bitstream: wholesale offer enabling alternative operators to rent broadband access which has been activated by the incumbent operator. In this way they can offer retail broadband services in areas where they do not offer unbundled access.

Call termination (interconnection or termination rate): amount per minute paid by one telephone operator to another to transmit a telephone conversation over the network of the second operator to its destination. These rates are regulated.

Cloud Computing: concept that involves using remote servers for the storage and processing of electronic data, traditionally located on local servers or the user's workstation.

DSL (Digital Subscriber Line): technologies enabling the use of copper cables connecting subscribers of "Switched Telephone Networks" (STN) to enable broadband transfers of digital packets.

DWDM (Dense Wavelength Division Multiplexing): digital transmission technology based on multiplexing wavelengths over fiber optic, enabling very high-speed broadband (up to 10 Gigabits per second) information transfers over long distance networks.

Efficient operator: concept used in relation to the regulation of prices for wholesale and retail services sold by an operator when the regulatory authority requires the operator to orient its prices towards the costs borne. If the actual costs of this operator turn out to be higher than they should be because of its inefficiency, the corresponding excess cost is excluded from the price base used to determine prices.

FTTH (Fiber To The Home): connection by fiber optic directly to the subscriber's home ensuring very high-speed transmissions compatible with *triple play* packages.

FTTx: (Fiber To The X): generic name for different forms of optical connections.

Full MVNO: MVNO (virtual mobile operator) that operates its own core network components and its own applications platforms, while renting radio capacities to host operators. See *MVNO*.

Gbit/s or Gigabit per second: one billion bits (10^9) transferred per second on a transmission network. See Bit.

Go or Gigaoctet: a unit of measurement used in computing to indicate memory capacity. Each unit corresponds to a billion octets (octet is a computer coding unit consisting of 8 bits).

GPON (Gigabit Passive Optical Network): passive FTTH optical network architecture, not to be confused with the competing point to point FTTH architecture; it is used for on-demand broadcasting such as video over IP (IPTV).

GSMA (GSM Association): association representing nearly 800 mobile telephony operators and manufacturers in 220 countries of the world. The GSMA takes part in the definition and publication of mobile telephony standards.

ICT (Information and Communication Technologies): techniques used to process and transmit information, mainly computing, audiovisual, multimedia, Internet and telecommunications.

Integrated Service Digital Network (ISDN): digital network for the transmission of integrated information: data, voice and video. Orange trade name: Numéris.

IMS (IP Multimedia Subsystem): standardized IP-based network architecture and technology providing fixed and mobile voice and multimedia services, including VoIP, VoLTE and VoWifi.

IPVPN: see Virtual Private Network.

Glossaries

IPX: interconnection service ensuring interoperability between the different technologies and thus allowing the secure exchange of IP-based traffic between customers of the different mobile, fixed-line telephony and Internet operators.

ISDN: see Integrated Service Digital Network.

LoRaWAN (Long Range Wide-Area Network): telecommunication protocol that allows connected devices to exchange small amounts of data in narrowband, reducing the energy used by the objects.

LAN (Local Area Network): network enabling workstations or PCs of the same entity on the same site to be interconnected with other local networks on other sites and be linked to the public network.

LTE (Long Term Evolution): standard developed within 3GPP which produced technical specifications for the fourth-generation mobile network standard (4G). By extension, LTE also refers to so-called fourth generation mobile systems.

LTE-M (LTE for Machines): technology which enables Internet of Things equipment to connect to the 4G network without a gateway.

M2M or Machine to Machine: exchanges of information between machines that are established between the central control system (server) and any type of equipment, through one or several communication networks.

MPLS (Multi-Protocol Label Switching): routing technique which improves network speed and efficiency, allowing routers to transfer information along pre-defined paths depending on the level of quality required.

Multiplexing: technique to simultaneously transfer several communications on a single transmission channel.

NFC (Near Field Communication): technology for short-range and 7 high-frequency wireless communications, allowing the exchange of information between devices up to a distance of about 10 cm.

NGN (New Generation Network or Next Generation Network): generic concept referring to IP-based voice and data networks, making it possible to switch from a simple connectivity approach to a new approach to developing services for customers.

OTT (Over-The-Top): refers to a broadcaster that provides services, for example on-demand video services on the Internet, using the infrastructures of a telecoms network operator, when the network operator does not offer this service itself.

Seamless network: a telecommunications service provided by a network operator or a service provider which uses the resources of one or more other operators or suppliers to give users the impression that they are accessing the same network without interruption regardless of where they are.

Signaling System 7 (SS7): information exchanges required for the management of a telephone communication (establishment and termination, maintenance and supervision, invoicing) and transferred in digital form by a network separate from that used for the communication itself.

SS7: see Signaling System 7.

Streaming: technology enabling the broadcasting of video images on the Internet and continuous viewing in real time.

Switched Telephone Network (STN): voice transport network comprised of terminals, subscriber lines, circuits and exchanges/switches. It is also used to access certain data services.

Triple play: broadband contract package including Internet access, telephony and a package of television channels.

UMTS (Universal Mobile Telecommunications System): third-generation (3G) mobile telephony standard allowing broadband communication (up to 2 Mbits/s at theoretical symmetrical speed) over the 1.9 to 2.2 GHz frequency band.

vDSL (Very high bit-rate DSL): technique based on the same technique as xDSL. vDSL signals are sent over a pair of copper wires, simultaneously and without interfering with voice telephony. This allows for very high speeds.

Virtual Private Network (VPN): a set of resources on a public network made exclusively available to a business customer.

Voice over Internet Protocol – VoIP: transport of voice services using IP technologies.

VPN: see Virtual Private Network.

VSAT (Very Small Aperture Terminal): satellite communications technology that uses two-way satellite dishes with a diameter of less than 3 m and requires few ground resources. VSAT is used to connect a small site to communication networks, either for telephony or Internet access.

WiFi (Wireless-Fidelity): technology enabling the connection of wireless equipment using radio waves in the 2.4 GHz wavelength, at speeds of 11 Mbits/s (802.11b standard) or 54 Mbits/s (802.11g standard). By extending the Ethernet protocol to cover radio services, WiFi offers businesses and individuals the ability to wirelessly connect several computers or shared devices in a network over distances that may reach several dozen meters.

xDSL: see DSL.



Orange 78 rue Olivier de Serres 75015 Paris

\$\square\$ +33 (0)1 44 44 22 22

orange.com