

## **Corporate Social Responsibility**

# 2017 CSR Review



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## Introduction: CSR rooted in Group strategy

An integral part of the Group's strategy, CSR involves all subsidiaries around three enablers of sustainable performance: trusted support of customers, local support for the economic and social development of each country, and a controlled environmental balance.

Based on constructive listening with Group stakeholders, and an internal culture which promotes innovation, our corporate citizenship commitment ensures that all activities have the same focus: making digital technology a catalyst for progress for society and individuals alike:

- Orange, a guide through the digital world: the Orange Group ensures it offers all its
  clients the best experience of new technologies. It supports and protects them in
  their digital lives. Orange is also aware that its performance depends on how it
  treats its employees, how it manages its supply chain and the dialogue it
  maintains with stakeholders.
- Orange, an operator committed to economic and social progress: Orange works to
  overcome digital divisions, whether these are geographical, economic or physical.
  With its products and services, the Group attempts to satisfy the essential needs
  of each individual and places its technology at the service of the development of
  the countries in which it operates. Orange supports digital initiatives and local
  ecosystems to encourage the emergence of more open, collaborative and
  community-oriented business models.
- Orange, playing its part in the environmental transition: rapid growth in usages
  means the Group must be conscious of its environmental impact. Orange actively
  works to reduce its own impact, and that of its clients. The Group is also working
  towards making digital innovation a catalyst for ecological and energy transition in
  our society.

Group CSR policy is managed by a dedicated team: the Group Directorate of CSR, which reports to the Board of Directors and the Executive Council. CSR strategy and the roadmap for coming years are approved by the Committee for Governance and Social and Environmental Responsibility (CGRSE), a Board of Directors's committee.

A network of CSR Managers supports the operational deployment of the CSR policy. It meets at least once a guarter.

For each of its pillars (listed here, as a reminder), Orange has set short, medium and long-term objectives: below, they are reviewed for the year 2017. Happy reading!

## 1 Our action principles

## 1.1 Respecting ethical principles and fighting corruption

Orange is committed to managing its activities in accordance with principles for action and behaviour based on respect and integrity, quality of service and team spirit, in accordance with its code of conduct.

Its transparency and anti-corruption requirements were enhanced when the "Sapin II" law was passed in December 2016.

The **Essentials 2020** plan outlines the group's ambitions for international growth, launching mobile financial services and developing the Internet of Things. These ambitions lend even greater urgency to Orange's requirements in terms of ethics, compliance and the fight against corruption.

It is within this context that Orange has adopted a zero-tolerance policy when it comes to corruption, in all its activities and all regions in which it is active.

Our objectives in this area are to consolidate our Ethics policy and enhance our anticorruption programme.

#### Our achievements in 2017

When the "Sapin II" law was passed in December 2016, we turned this into an opportunity for an in-depth review of our ethics and anti-corruption policies, in order to bring them in line with the requirements of article 17 (i.e. putting in place a code of conduct and an internal reporting or whistle-blowing system, mapping corruption risks, and setting up training courses to raise awareness of these risks and implement assessment and monitoring processes). Actions included:

Stéphane Richard and the Board of Directors renewed their commitment to the zero-tolerance policy for corruption, and the Boards of Directors for our main subsidiaries adopted a resolution to become compliant with the requirements of the "Sapin II" law; ongoing communication and awareness initiatives for the whole Group with, as a highlight, the 5<sup>th</sup> "Ethics & Compliance day" held throughout the Group on 14 November 2017.

updating our "Orange Group anti-corruption policy", which serves as a "code of conduct" as defined by article 17 of the "Sapin II" law and, as such, was submitted to employee representative bodies at Orange SA and its subsidiaries in France for approval. This second version of our anti-corruption policy will progressively be integrated in various company rules and regulations after the employee representative councils have reported back. This version was released internally and externally at the 5th annual Ethics and Compliance Day:

the formal adoption of the "reporting process" as part of the Group whistle-blowing policy, which was communicated to the entire Group;

drafting a document to help analyse corruption risks with a view to supporting relevant countries and entities to better identify risks of corruption and implement plans of action

to better manage these risks;

the continuing implementation of our "fraud and compliance" due diligence procedure in Group countries and divisions;

continuing to distribute and implement the principles of the "practical guide for preventing and managing conflicts of interest";

finalisation and start of deployment of the second version of the managers' tool for declaring and approving any excesses regarding invitation, meal, and gift thresholds. updating our anti-corruption training courses and related materials; updating the auto-assessment exercise and questionnaire to be completed by the

updating the auto-assessment exercise and questionnaire to be completed by the (approximately) 80 entities representing all Group activities, to assess the state of their anti-corruption programme. The launch, in 2017, of the first "compliance reviews" to validate the self-assessments and pursue our related audits programme.

#### Focus France

in 2017, the re-design of the Orange France Ethics & Compliance intranet site provided increased visibility for the "job line ethics guides", as recommended by the Group Ethics Charter (guides for the Consumer and Corporate Customer Relations job lines, technical IT System and Network job lines, managers and delegates); employee information relating to code of conduct rules and whistle-blowing procedures presented at the Group "Ethics & Compliance" day in November 2017 was also presented in France at the October 2017 sales convention.

the application of the Group anti-corruption policy involved the deployment of the guide on conflicts of interest and instructions on how to apply it at Orange France, the adoption of the new code of conduct following consultation with the Employee Representative Councils, mapping job lines which have the greatest exposure to corruption and developing an anti-corruption training programme adapted to this map.

the analysis of ethical violations or breaches is carried out using a new version of the tool used to process requests to authorise benefits received or offered and, from the start of 2018, a new procedure based on the Sarbanes Oxley Act reporting procedure, in accordance with the requirements of the "Sapin II" law.

## 1.2 Respecting the Duty of Care (devoir de vigilance)

The Law of 27 March 2017, "relating to a duty of vigilance", requires companies to implement vigilance plan relating to their activities. This plan must include "reasonable due diligence measures to identify risks and prevent serious infringements of human rights and fundamental freedoms, as well as damages to the health and safety of persons or the environment, as a result of the company's activities or activities under its control, (...) as well as the activities of its sub-contractors or suppliers with whom there is an established business relationship."

This includes mapping risks, implementing procedures for assessing the situation of subsidiaries, sub-contractors and suppliers, and taking appropriate action to reduce risks and prevent serious violations, a whistle-blowing reporting and processing system, and finally procedures for monitoring measures which have been taken.

The Orange vigilance plan was drafted in December 2017: it was submitted to various stakeholders at the start of 2018, to be applied in 2018 (or in 2019, for the monitoring scheme). This enables the Group to complete the measures already taken in these areas and described in the paragraphs below.

## 1.3 Respecting and ensuring human rights are respected

In accordance with United Nations' "Business and Human Rights" guiding principles, Orange is committed to respecting and ensuring human rights are respected. Four areas are relevant to the activities of an international operator such as Orange: employee relations, customer relations, relations with suppliers and sub-contractors and, finally, protecting privacy and freedom of expression.

The areas for improvement identified by Orange for the years to come are:

improving our understanding of our impact in these areas for all countries in which we are active;

helping employees develop a better understanding on the issues related to human rights, in particular by introducing tailored learning resources.

#### Our achievements in 2017

#### promoting human rights in the ICT sector

2016 was the year that brought together the "Telecommunication Industry Dialogue" (TID), a group of eight international telecommunications operators and manufacturers and the "Global Network Initiative" (GNI), an organisation recognised throughout the sector, which includes ISPs, NGOs, academics and socially aware investors. These two organisations merged in March 2017. Orange is on the board of the new entity. As a member of GNI, Orange produces a report every two years on the implementation of directing principles and case studies on a country level:

https://www.orange.com/en/content/download/47112/1371120/version/2/file/180525\_Orange\_Principes%20GNI\_VA.pdf; a self-assessment took place in 2017; the first audited report will assess 2018 data.

Orange actively participates ICT sector working groups examining issues related to extremist content online and more recently on problems related to government requests to shut down networks (internet, landlines, mobile, SMS). A joint declaration was drafted by the TID and the GNI to define the position of operators in response to these requests to shut down networks and services <a href="https://globalnetworkinitiative.org/gni-id-statement-network-shutdowns/">https://globalnetworkinitiative.org/gni-id-statement-network-shutdowns/</a>;

in France, Orange's active participation, as co-rapporteur, in the CSR Platform (overseen by the Prime Minister) to develop a national French action plan to apply the United

Nations' guiding principles on human rights.

#### transparency report

In 2016 and 2017, Orange saw an upsurge in shut down requests which not only led to breaches of freedom of expression and privacy but also to severe financial losses for the country, people and the company. In every instance, Orange made sure that request procedures were respected, in particular, that an official request in writing from the relevant authorities had been received.

Orange published a report reviewing requests made by governments in terms of eavesdropping and requisitions.

https://www.orange.com/en/content/download/43262/1315009/version/2/file/2017%20R APPORT%20DE%20TRANSPARENCE 20.06.2017 final eng.pdf

#### continuing assessment of the Group's human rights impacts

Orange completed the annual update for human rights risks assessments in different geographical locations, using a methodology based on UN and OECD standards, and created by an external agency, Verisk Maplecroft

Orange took part, for the third time, in the specific assessment carried out by the Ranking Digital Rights organisation (https://rankingdigitalrights.org/), on protection of privacy and freedom of expression by the world's 22 biggest ICT companies. Orange was ranked fourth out of ten telecommunications companies assessed. The analysis of these results enables us to improve our procedures and take internal discussions around this topic to the next level.

In 2017, Orange also enhanced its human rights reporting:

first, by publishing its first report on human rights, prepared in accordance with a reporting framework compliant with United Nations Guiding Principles relating to companies and human rights.

(https://www.orange.com/en/content/download/45336/1348812/version/9/file/Report%20 2016%20Orange%20Human%20Rights%20DIGITAL-VA.pdf)

secondly, by publishing its first Declaration on Modern Slavery

(https://www.orange.com/en/content/download/42901/1310481/version/4/file/MSA\_D%C3%A9claration\_10.05.2017\_final\_eng.pdf)

#### **Employee awareness**

Orange took part in developing a specialist e-learning course with EDH (Businesses for Human Rights), an organisation which brings together 17 of the largest French companies. This e-learning course has been deployed on two training platforms used by Orange employees, and available in over 90% of Group countries, in French, English, and soon in Polish versions. In 2017, 128 employees took this training course.

Orange also drew the attention of Group employees to the importance of Human Rights in business, on International Human Rights Day (December 2017) at seminars organised for CSR delegates in subsidiaries (European subsidiaries in February 2017, and all Group CSR delegates in June 2017).

## 1.4 Bolster internal engagement with responsibility challenges

As an integral part of the company dynamic on which the Essentials 2020 plan is based, the idea of responsibility must be integrated in every activity and job line. To achieve this, both general awareness sessions and training courses specific to job lines must be developed further still.

#### Our achievements in 2017

#### Marketing with Meaning Studies

A study on customer appreciation of Orange CSR policy was carried out on a sample group of 900 clients in France, Spain and Poland. It identified both the main concerns of consumers, as well as what is expected of Orange. While Orange CSR actions are not known as well as they should be, once they have been explained, they receive wideranging support and a high level of satisfaction. These actions thus add value to the Orange brand. According to Brand Finance, the brand valuation consultancy, which published its ranking of the most valued brands in the world on 1 February 2018, Orange ranks 51st (52nd in 2017) and 8th amongst telecommunications sector brands in the world.

Clients want Orange to better communicate its actions in all areas - environmental protection, privacy, charitable work, or support of entrepreneurship - and then, to not hesitate to engage employees in more visible ways, and involve clients in its actions so as to influence society in a positive way.

#### Marketing with Meaning Webinars

In September 2017, the Group launched a series of webinars around five themes relating to responsibility in order to inspire the Orange marketing community to respond to the challenge of responsibility and to start a conversation around how to apply best practices to the Orange universe.

The five themes are as follow:

- "a positive choice": when brands leave their customers no other option than to consume responsibly;
- "transparency": valued brands accept or even assert what they are and what they do;
- "the circular economy": a new vision of the product, more optimistic and more effective. An opportunity for brands to increase their positive impact on the world around them:
- "supporting best practices in digital technologies": a way for brands to become lifestyle partners. A new way for them to embed themselves in their customer's daily lives
- "bringing meaning to the brand": increasingly, brands are being called on by their different audiences to step up, and are asking themselves fundamental questions that often lead them to redefine their value(s), their contribution to society.

These Webinars are available via an online platform. They are each a quarter of an hour long and are aimed at all Orange Group marketing staff. Each webinar brings together a dozen participants so as to encourage discussion. They are structured in three parts: (1) quantified market observations and presentation of the concept in question, (2)

illustration of the concept through a few corporate best practices and (3) discussion among participants.

By the end of 2017, around 200 employees had been involved in 20 webinars.

#### Plenary presentations

Presentations in the shape of plenary conferences have been organised for the Group marketing community, to raise awareness of the challenges of responsible marketing, including the presentation of the Change / BVA study on responsible brands in France, the presentation of the main learnings from the Orange Vision study of how clients in France, Spain and Poland perceive Orange CSR actions, and blockchain, and its impact on digital technologies.

#### The path to innovation

The challenges of responsibility are addressed in the Orange TechnoCentre (TTM) path to innovation. At several key moments in the innovation process, product managers must respond to a number of questions regarding the nature of their project. Questions come with recommendations, and aim to address the following challenges:

- the complexity of products and offers, the level of digital skills required of clients;
- digital inclusion, taking into account geographical, cultural and economic factors, as well as disabilities;
- the protection of personal data;
- safe and responsible uses for products and services, in particular by vulnerable people, including minors;
- health risks, exposure to radio waves, time spent in front of screens. Special meetings are organised as and when needed between CSR experts and product managers responsible for innovation projects to improve how their product responds to responsibility requirements. Validation reviews for products take into account, throughout the entire innovation process, an assessment of how critical these responsibility challenges are.

## 1.5 Adjusting our CSR policies to meet stakeholder expectations

Orange bases its CSR policy on an ongoing, structured conversation with all of its stakeholders. Based on the principles of the AA1000 standard (inclusion - materiality - reactivity), this active listening approach:

- ensures that the Group's CSR projects are consistent with the priorities of the stakeholders:
- helps identify and prioritise the risks related to the social and environmental issues of the countries within Orange's footprint, with particular emphasis on detecting "weak signals";
- identifies opportunities for innovation opening up new prospects of growth for Orange whilst supporting the social and economic development of the countries concerned.

While almost all countries have already completed 'dialogues', some countries, especially those in which Orange invested recently, still need to organise their first sessions. Holding sessions at regular intervals helps adjust the policies to newly identified risks or opportunities.

Discussions around selected themes have already taken place (women and ITC, children and technology), but these need to continue being investigated, alongside new major challenges for Orange which will also be identified and examined with the same process. Certain cross-cutting challenges in which the Group is particularly interested are dealt with in a global and multi-local approach.

## Our achievements in 2017

At the CSR Awards in December 2017, Orange was awarded a prize for the quality of its discussions with stakeholders.

Orange wants to give everyone the means to better understand the changes that digital technologies bring, and to make them a catalyst for positive transformation. Within this framework, Orange is actively monitoring all these changes, through think tanks, collaborative workshops and taking part in running the open, collaborative platform, <a href="Digital Society Forum">Digital Society Forum</a> (DSF), with other civil society stakeholders. (<a href="https://digital-society-forum.orange.com/en/">https://digital-society-forum.orange.com/en/</a>).

#### Dialogues by country

the Morocco dialogue has already been planned. The new Sierra Leone, Burkina Faso and Liberia subsidiaries are due to kick off their CSR programme with a first dialogue **Dialogues by theme** 

- a 3rd "Women and ICT" m-women dialogue has been initiated in Guinea;
- the "e-Health" dialogue carried out in urban and rural areas of Senegal (December 2016 / early 2017), with health professionals from the public and private sectors, authorities and patients, revealed strong expectations in terms of diagnostic services, remote medical follow-up, and training for medical staff.

#### **Group Dialogue**

- in June 2017, Poland adapted the "Diversity and equality at work" Group dialogue to its local context.
- the dialogue on the circular economy launched in 2016 was completed in 2017, with a focus on four countries: France, Poland, Egypt and Spain. The results of the dialogue were analysed and then fed back to a number of stakeholders. Stakeholder expectations were sorted into responses to the three following challenges: transforming the products and services provided to our clients, adapting our processes and networks internally, and developing ITC innovations to promote the circular economy within society. The dialogue showed that the strongest expectations relate to eco-design for the products listed by Orange, and extending the life cycle of products. In France, 23 inperson interviews took place.
- a "Digital Cafe" on the circular economy was launched in France during the 2016 COP22, in the shape of an interactive video chat with a representative of the Board of Directors and The Ellen McArthur Foundation (over 600 online participants, from 26 countries 70% of stakeholders were external, 30% employees). Feedback from civil society initiatives, in-person interviews with internal and external strategic stakeholders,

and workshops between employees and experts took place in May 2017.

- a new dialogue was launched in October 2017 with the theme "Precarity and Digital Technologies", in the shape of a digital cafe and a series of interviews, to cross-pollinate conversations between 150 stakeholders. A creative workshop with stakeholders (charitable organisations, Orange staff) started to sketch out potential solutions, or identify current needs; a discussion between a group of experts made up of Emmaüs Connect (Wetechcare), ANSA, and CSR representatives from Orange and Renault served as the first proper trial of the dialogue. A first group of beneficiaries (young people in work schemes) was brought together in December 2017. Learnings from the "Precarity and Digital Technologies" dialogue has been fed back in June 2018.

## Continuation of work by the **Digital Society Forum**

- The new theme proposed in 2017 was health. A round table discussion on "Health in the Digital Era" was held on 19 December 2017, at the Natural History Museum;
- to further investigate the theme of migrations, a conference / debate on the theme of "Digital Technologies and Diasporas" was organised at the Institut du Monde Arabe on 27 June 2017, within the framework of a France-Africa partnership. A report was published on this conference in September 2017;
- workshops and meetings around new forms of learning, digital technologies and civic engagement, and the place of digital technologies at work were organised in France; contributions from these workshops were uploaded to the 'Up for the Planet' platform. The DSF was the subject of sessions at partner events, such as the "LH Positive Forum", "Africa is calling you", "Forum des Interconnectés", "Festival d'Avignon", "Drome Digital Day", "Diaspora Day", "Vivatech". To manage the regional network, training days for DSF ambassadors took place in September 2017.

  The online DSF community counts 4,494 followers on Facebook and 6,021 on Twitter; there were 6,465 unique visitors to the web site at the end of November 2017.

#### Developing the Digital Society Forum and its international profile

The second Digital Society Forum took place in Senegal; it opened with a big event to launch the theme "Digital Technologies at the Service of Health" on 25 October 2017 in Dakar.

#### Focus France

#### A system for listening to and holding conversations with stakeholders

Following the last biannual consultation with our stakeholders, at the end of 2016, a CSR committee (in January 2017), and then the Orange France Executive Committee (in February 2017) validated the 2017 plans of action, which were developed in response to the challenges of supporting Orange audiences to use digital technologies, contributions to the socio-economic development of territories, the fight against digital divides, and promoting the role of Orange as a responsible employer.

#### Relations with organisations

Orange France maintains an ongoing conversation with consumer organisations, on both a national and a regional level, and has assigned a dedicated point of contact to listen to them. Biannual meetings are held between members of the Board of Directors and national representatives of consumer organisations and organisations specialising in digital technologies and the protection of children. With a view to keep on improving the quality of this conversation, Orange France has set up a dedicated digital interface for these partners.

#### Customer relations, local organisations, public authorities

Orange France regularly organises open hackathons on topics related to innovation and CSR. In 2017, hackathons with the following themes were organised: climate change, women and sustainable development, women in Africa, entrepreneurship, optimism, ctrl+alt+desk: reprogramme your desk to think about the workplace environments of tomorrow. These hackathons gathered around 100 people per session, company clients, start-ups, independent developers, job-seekers, students, etc.

They generate innovative solutions in "open innovation" mode, using start-up strategies, to solve issues related to CSR themes. They are open to anyone via a sign-up page on the Orange Business Services site.

#### Relationships with corporate clients around CSR topics

CSR coaches, spread throughout 13 of the corporate branches in France, are available to answer any CSR-related questions which Orange clients might have. Over 30, local, face to face meetings took place in 2017, as well as local events (to raise awareness about radio waves, disabilities, recycling mobile devices, and more).

Orange business services has developed special CSR training for corporate sales teams to explain the certifications, voluntary or mandatory procedures, market regulations and best practices to implement. This training was tested by 60 sales representatives from two business customers entities in 2017.

#### Responsible communication

In 2017, Orange France renewed its commitment to the French Union of Advertisers' Advertising Commitments Charter for Responsible Communications, by signing up to the FAIRe programme - a set of fifteen commitments for responsible communication.

## 1.6 Calculating Orange's Social footprint

This involves measuring and communicating the added value and jobs created by Orange in given territories, Orange's involvement on a local level (through purchases and impact on local economic development), and how the company differentiates itself from competitors

This societal value was calculated in 2017 in France and Niger, with the support of economic consultants Goodwill and Utopie. Three types of societal value creation were defined:

- local economic footprint (also known as corporate footprint), using input / output matrices (financial flows which have an impact upon the territories in which an organisation is active);
- territorial footprint, including the value creation generated by Orange infrastructure, products and services;
- wider socio-economic footprint, including extended social value (positive externalities of CSR and Orange Foundation actions).

## Our achievements in 2017

The results of this study show that Orange activities generate a **surplus of wealth**. This happens, for example, in the number of additional jobs supported by company activities, which ranges from 4 times the number of company employees for France to 40 times for Niger, in 2017. The territorial footprint (creation of value linked to the use of Orange infrastructure) and wider socio-economic footprint (SROI for societal projects) (at least) double the direct local economic footprint (purchases, wages, etc.).

## 2 Orange, a trusted operator

Orange aims to be a trusted partner for a positive, easy-to-use, safe, and stress-free digital world for all.

## 2.1 Supporting our customers in their digital lives

Orange relies on the quality of its products and services, and supports its clients in their uses to offer them all the benefits of digital innovation, while remaining easy-to-use and stress-free.

## 2.1.1 Providing an unrivalled customer experience

Orange is implementing a structured internal programme around adding value to the **network and services**, **digitisation** which helps to streamline and personalise customer

relationships, and **simplification**, to offer customers peace of mind and improved internal efficiency.

Orange relies on its technological know-how for an individualised understanding of its customers, to personalise its relationship with them, as well as its product and service offers. But it also relies on a deep understanding of human and cultural elements to implement a culture of continuous improvement based on listening to employees and customers.

Group indicator: become and remain n°1 in NPS for 3 out of 4 customers by 2018. Percentage of Orange customers who would rate Orange n°1 as a recommendation:

2015: 47% 2016: 55% 2017: 68%

#### Our achievements in 2017

In France thanks to "Etalement mobile" (staggered payments for mobile devices), clients "on a budget" can obtain a mobile with an initial payment, followed by a monthly payment between €2 and €8 over the course of 24 months

(http://assistance.orange.fr/assistance-commerciale/la-facture-le-suivi-conso/payer-la-facture/regler-la-facture/etalement-mobile-paiement-et-mensualites 71893-72750)

The Fonds de Solidarité Logement (Housing Support Fund) aims to use our commitment to local economic partnerships with charitable organizations to fight digital precarity. Agreements have been signed with 56 regional authorities in 2017, and 35 partnerships are currently being put in place. Orange has signed its first agreement with a *métropole* (a French inter-communal structure), the Métropole Européenne de Lille (MEL), in July 2017, and an experiment was launched within the framework of the Digital Republic law, across three counties (départements).

The 'social internet' offer, previously only available for ADSL connections, was extended to Fibre clients in the mainland France.

In Poland, **Orange Studios** has set up and is overseeing multimedia centres in small towns and villages. This initiative aims to facilitate access to technology, enabling residents to develop their digital skills and offering them a space for communal activities. There are 100 Orange Studios in Poland. Each of them is equipped with computers, free internet access, a games console, an LCD television and all the required furniture. 900,000 Polish people now enjoy access to the services provided by Orange Studios.

The Orange Foundation helps workshop managers to run the community centres, diversify their offer and support the development of local communities. We organise training courses, webinars and tutoring programmes for these managers, and provide funding to implement social and educational programmes (e.g. programming

workshops).

In Romania, Orange 'Smart Shops' throughout the entire country offer learning experiences and interactive exhibitions in-store for all levels and all ages.

## 2.1.2 Earning the trust to manage customer data and helping our customers protect their data

In 2017, the Group enhanced its governance policies around personal data, as well as promoting the policy for responsible and legitimate use of client data, which has always been upheld within Group.

A European reform of the rules for protecting personal data came into effect on 25 May 2018; it aims to harmonise the management and protection of personal data in Europe, across all sectors, and to strengthen consumer rights, especially in terms of transparency.

The Data Strategy Governance Board, which reports to the Group Executive committee, is responsible for upholding the fundamental principle of the legitimate and responsible use of the personal data which clients entrust to Orange. Beyond compliance with the regulatory framework, in particular the new General Data Protection Regulation, Orange intends to maintain a close relationship of trust with its clients, whose concerns about the use of personal data by companies are increasing.

#### Our achievements in 2017

**Data Protection Officers** have been appointed in all Group European subsidiaries (including Moldova and Orange Business Services) and Personal Data Protection representatives have been identified in MEA zone countries, guaranteeing that the Orange policy of protection by default is respected throughout all our job lines.

In 2017, Orange enhanced its **impact analysis methodology** for protection, in particular in relation to processes related to innovation, and designing and launching offers, so as to provide a guarantee to clients that their data is secure and ensure transparency at every stage of the customer relationship. This new methodology hands over control to clients, via easy-to-use applications, to manage the data they share with Orange (like, for example, the "Trusted Badge").

Transparency and an understanding of what is at stake in the protection of personal data has been improved thanks to the "My Data My Identity" section of the Orange France **BienVivreLeDigital** site (<a href="https://bienvivreledigital.orange.fr/mes-donnees-mon-identite">https://bienvivreledigital.orange.fr/mes-donnees-mon-identite</a>). This site is organised around four sections: making the most of the internet while staying secure, protecting your privacy, better controlling advertising and peace of mind for online purchases. The "My Data My Identity" section was re-designed in July 2017: over 1,400,000 pages were consulted in 2017.

#### 2.1.3 Helping families use digital technologies safely, responsibly and creatively

Orange has set itself an objective of developing services which respond to the concerns of families, through initiatives to support parents and children in using digital technologies safely, and through the development of practices which encourage creativity, entrepreneurship and learning with, in particular, the launch of coding workshops throughout all Group countries.

Orange's ambitions are supported by the "Better Internet for Kids" programme, which aims to empower parents to provide the best of digital technology for their children.

More generally, Orange is working on defining and implementing a responsible marketing framework for offers likely to be used by children, including those related to the Internet of Things.

#### Our achievements in 2017

#### Orange international commitments

Orange is implementing its commitments through a number of international organisations working in the sector

#### - ICT Coalition

Orange has been an active member of the Coalition since it was set up in 2012 and is also a member of its Internal Co-ordination Group. It published a report on the implementation of Coalition Commitments in March 2017, on <a href="http://ictcoalition.eu/commitments">http://ictcoalition.eu/commitments</a>. The ICT has commissioned the London School of Economics to carry out research into ICT and the family.

#### - Alliance to Better Protect Minors Online

Orange is one of the founding members of the European Commission Alliance, launched in February 2017 (https://ec.europa.eu/digital-single-market/en/alliance-better-protect-minors-online), and has publicly committed to developing initiatives to support children's and their families' online activities: https://ec.europa.eu/digital-single-market/en/news/individual-company-statements-alliance-better-protect-minors-online,

- UNICEF Toolkit for Industry on Children's Online Privacy and Freedom of Expression
Orange took part in the UNICEF initiative to put together a list / verification tool for
companies in the sector to assess their own internal privacy policies, from children's rights
to privacy and information to their freedom of expression. The tools are currently being
finalised and will be released by UNICEF over the coming months.

#### - Forum to empower children in the digital age

Alongside UNICEF, GSMA and Microsoft, Orange took part in the forum to share ideas and experiences about empowering children in the digital age which took place in Washington in November 2017. The aim was to define children's rights in the digital age. (https://www.youtube.com/watch?v=JGjAp8hHIVc).

#### Orange family offers

Orange has launched its family offers (LOVE) in Europe; LOVE connects homes using landline, mobile and telephone solutions, all in a single offer, in Spain since December 2016, Belgium and Poland in February 2017, Luxembourg in March 2017, Slovakia and Romania in September 2017 and Moldova in October 2017.

Advantages for families in the Love Orange package offers are mainly as follow:

- unlimited voice (either included in offers because it is a market standard or a specific advantage between family members)
- double the amount of data for the main line and additional lines (multi-line advantage)
- shared family data package (e.g.: "50 Gb if you take a second mobile line")
- a children's line (special offer for the first device, from the second or third line)
- a discount Smart TV or Playstation

Orange may also offer additional content for children (games, television content)

In France, the OPEN package offer is specially designed for families:

- up to four additional mobile subscriptions for family members,
- family subscriptions are managed from the Family Space in Orange&Moi

The offer includes exclusive services for families (Cinéday, special offers), a secure, private family network (Family place), solutions to go off-line as a family (setting time slots or cutting off Wi-Fi), and solutions to protect younger children (parental controls on TV, PC, mobile and tablet) as well as targeted information and advice to support families in their use of digital technologies (https://bienvivreledigital.orange.fr/espacedesparents).

#### Parental control solutions

In France, Orange has extended its parental control system (PC, mobile, TV) with more extensive and more flexible tools, such as the parental Games TV Pass from mid-July 2017 and the Xooloo Digital Coach option from mid-November 2017, a simple solution to teach children about how to start using digital technologies responsibly;

In Poland, Protect Your Kids on the Web, our parental control application, offers full protection for children using smartphones or tablets, or accessing the internet through a Wi-Fi connection outside the house. It shows parents how much time their children are spending online, controls the applications they use, and filters inappropriate content on websites;

In Slovakia, Family Security Pack (https://www.orange.sk/rodinny-bezpecnostny-balik) and Prima Kids were launched in September 2017. These offers provide parents with an unlimited mobile connection to their children, as well as allowing them to manage time spent online and on devices. The offer also includes ESET parental controls for Android devices.

#### #SuperCoders

In 2017, the #SuperCodeurs robot-coding introductory course (http://supercoders.orange.com/en/home) was offered in 17 countries: France, Spain, Italy, Poland, Romania, Moldova, Slovakia, Ireland, Egypt, Tunisia, Ivory Coast, Morocco, Mali, Senegal, Guinea, Madagascar and India. 20,000 children have taken part in these workshops, since they were introduced in 2014, including 9,000 children in 2017, thanks to 1,200 Orange coaches.

Scratch is the coding platform used for #SuperCodeurs workshops. It is both a language and an open source community which counts over 12 million users. Every year, an international conference is organised, either at MIT in Boston (where Scratch was created) or in Europe. The Scratch community, which includes education specialists, researchers, and

academics, met in Bordeaux from 18 to 21 July 2017, with Orange as sponsor and official partner of the conference. http://orange-france.com.francetelecom.fr/spip.php?article64373

In France, the company has introduced work experience opportunities for Year 10 students to discover jobs at Orange. These placements last a week, half of which involves discovering the company and its job lines, and the other half, coding lessons and an introduction to robotics. For Codeweek, in October 2017, Orange France organised 53 #SuperCodeurs workshops for children aged 9 to 13. In this way, Orange France reached 5,000 children in 108 sessions.

In Poland, every school taking part in the Orange #SuperKoders programme receives funding to purchase IT equipment and the learning tools needed for classes in accordance with the plan they've signed up to. The Orange Foundation also offers teacher training to prepare them to deliver classes and supports experienced teachers. 135 schools (3,000 children and 270 teachers) are taking part in the current 2017/2018 edition of #SuperKoders. This programme is supplemented by "Code the Future", a project part-financed with EU funding. Thanks to this programme, over 1,200 teachers and 19,000 primary school children have learnt the fundamentals of programming and how to put into practice their digital skills. Teachers and schools have received tablets, robots, mechatronic kits and learning mats which are used to teach programming. The Code the Future programme is run in partnership with "Masters of Coding" association.

In Moldova, "Code Week 2017" was held in several municipal libraries throughout the country in October 2017; 37 events were organised around coding workshops for groups of up to 20 children in each room, and secure browsing workshops for their parents. A total of 1,285 children and parents took part in this initiative.

In Slovakia, the first Super Coders event attracted 20 children per day (over two days) to teach them the basics of Scratch. Together, they created a 'SuperGame'.

For COP23, the Climate Conference organised in November 2017, children aged 6 to 16 were invited to the COP23 Code Challenge to create games, quizzes or activities to raise public awareness of environmental challenges: biodiversity / mobility / transport / energy / green habits / responsible consumption. The top seven projects from Tunisia, France, Cameroon and Romania received an award and won a Thymio learning robot (http://supercoders.orange.com/fr/Media/supercoders-Media/2017/COP23/Code-for-COP23).

#### Code for the Planet

The Code for the Planet challenge is an initiative within the #SuperCodeurs project and the Better Internet for Kids programme. The project was launched in July 2017, during a pilot phase in France and Tunisia, as a way of offering children a pathway into stimulating and fulfilling opportunities. The children are invited to choose a mission related to the United Nations Sustainable Development Goals (SDGs). Each mission must address a real part of the child's daily life. For example: preventing food waste at the school cafeteria or finding ways to reduce pollution in the streets of their town.

#### Supporting the understanding of new technologies

In 2017, Orange set up a "blockchain and big data" MOOC, currently available to Orange employees and soon all our external stakeholders, through the Orange Solerni platform. This freely-accessible online training course explains the basic principles underlying techniques which are used in most digital tools today. The course thus supports learners to get the most out of technology, while respecting freedom of choice.

## Focus on Europe

In France, Orange has re-designed its website, <a href="www.bienvivreledigital.orange.fr">www.bienvivreledigital.orange.fr</a> and, since July 2016, has offered parents access to the Parent Space, to help them better guide their children through the digital world. The site offers access to a forum, advice, and practical guides in response to current parental concerns such as, for example, a child's first device, addiction to screens, how young people behave with video games and social networks, new technologies and young people's health, etc. The site and its resources are regularly updated.

Furthermore, Orange has regularly organised information campaigns aimed at families through a range of channels, such as social networks, online media, or popular events in which Orange is taking part (e.g.: Paris Games Week, Student Fair, etc.) or through its employees, particularly its sales teams.

Finally, at the Safer Internet Day in February 2017, Orange France came together with its partners in the Safer Internet programme to advocate for a safer and more responsible internet, as well as more varied and creative digital uses. As part of the event, from 7 to 28 February 2017, Orange France rolled out a large-scale communication campaign around the "What kind of 3.0 parent are you?" interactive quiz. The quiz was specially designed for the event, and was promoted through all internal and external Orange France and Orange Group channels (2 intranet sites, 4 web sites, 3 social networks). The game, which was available in several languages, was promoted in other countries too. It was played 63,000 times, and raised awareness of the espacedesparents.fr site, whose traffic increased fivefold. To close the event, a conference on cyber-bullying was organised by e-Enfance (one of the partners of Safer Internet France), attended by 204 employees.

This meeting was an opportunity for Orange to highlight its actions related to raising awareness and protecting children in the digital world. (the event reached over 80,000 Orange employees and 1.3 million clients). In this way, Orange recommends not using Virtual Reality (VR) under the age of 15 and, more generally, describes best uses.

In Poland, the Orange Foundation teaches children, parents and teachers, how to make the internet a safer and more welcoming space. Through the Safety Here and There programme, the Orange Foundation organises online classes (www.fundacja.orange.pl/kurs). To date, over 78,000 adults have taken this class (20,720 users in 2017). In 2017, over 390,000 children took part in these educational activities. The Orange Foundation also supports a number of learning or educational sites and applications aimed at children and young people (www.necio.pl, www.sieciaki.pl, www.digitalyouth.pl).

In Spain, in October 2017, Orange launched Gigas Solidarios (<a href="http://gigassolidarios.orange.es/">http://gigassolidarios.orange.es/</a>) an initiative to provide socio-economically deprived

families with a free internet connection for a year. Initially, Orange offered support to 500 families and, with the help of clients donating the gigabytes of data that they weren't using in their contract, this number had doubled by March 2018.

In Slovakia, 4,600 children, almost 300 parents and 66 teachers took part in Orange workshops to raise awareness of risks to children using communication technologies.

## 2.1.4 Answering questions about radio waves, uses and health

Wireless technology provides numerous benefits to society but the speed of development and early adoption, particularly among young people, is raising concerns about usage and health because we don't have enough perspective to assess the long-term effects.

Exposure to radio waves via antennae and mobile devices has long been a point of concern for Orange. As of yet, no effects on health have been observed below limits recommended by the OMS. Whilst waiting for confirmation from ongoing additional studies, particularly regarding children and long-term usage, some health authorities have issued warnings about usage in order to reduce exposure to radio waves from mobile telephones which Orange broadcasts to its clients.

Orange continues to provide information and support to stakeholders in a proactive manner. Since 2017, Orange has also been providing a platform for the opinions of experts on other questions linked to the use of new technologies. Thus, time spent staring at screens for young people is the leading health-related topic alongside radio waves

#### Our achievements in 2017

## Continuing to deploy health and safety information and training on radio waves for employees working near antennae:

In Spain, the Orange Group policy relating to signage and security perimeters for antennae has been deployed to Health and Safety HR teams. This involved the presentation of the tool developed by Orange Labs to calculate security perimeters and recommendations for wearing dosimeters for staff working around antennae. In France, Orange has reported to the CNHSCT (National Committees for Health and Safety and Working Conditions) about the installation of Wi-Fi on Orange premises, and the CHSCT (Committees for Health and Safety and Working Conditions) on the implementation of workers' decree 2016-1074 of 3 August 2016. This decree defines the limits within which staff must operate at work.

#### Raising awareness about best practice and other health-related topics

After the European Directive on placing radio equipment on the market came into effect in June 2017 (European directive 2014/53/UE, known as 'RED'), awareness-raising actions within the relevant job lines (purchases and marketing mainly) were

implemented on a European level. These actions focus, in particular, on Specific Absorption Rates. The Radio Waves Charter is available on the France CSR site www.bienvivreledigital.orange.fr.

In 2017, Orange France invested €1M in Health and Safety programmes and, since 2010, has contributed to financing research carried out by ANSES (French National Agency for Food, Environmental and Occupational Health & Safety) so as to support independent research, in accordance with Article 158 of the 2011 French Finance Act. Orange Poland, alongside three other Polish mobile network operators, has set up fund for initiatives to provide information about radio waves and the future deployment of 5G. Orange Egypt is continuing its programme to raise awareness and consult with communities, which started over 15 years ago and has reached a wide audience throughout the entire country. The principle underlying the programme is to provide correct, honest, exact and impartial information about mobile technologies, and the impact of radio waves on humans and related topics.

## Integration of 5G into the radio waves and health CSR policy

Orange has published a document about 5G entitled "Impact of 5G technology on human exposure", detailing the possible impacts of 5G technology on the human body. In October 2017, the company presented an experiment on MIMO antennae (focusing antennae) at the European GSMA Forum. In January 2017, Orange Labs received the "Economic Impact" prize at the *Rencontres du Numérique* (Digital Encounters), awarded by the National Agency for Research, for the collaborative, industrial-academic research project TRIMARAN, which is researching MIMO antennae.

Furthermore, Orange took part in drafting the ITU-T SG5 "5G technology and human exposure to RF EMF" paper and the GSMA "5G, the internet of Things (IOT) and wearable Devices".

## 2.2 Building a digital and human employer model

Creating a digital and caring employer model is one of the five pillars of the Essentials 2020 plan. For Orange, this is about:

- guaranteeing key skills for tomorrow: identifying key skills for the future, recognising and developing in-house skills, recruiting candidates with these skills.
- **Developing collective agility**: becoming more agile as a collective, and developing interdisciplinary ways of organising and operating, focusing on digitisation and simplification and promoting innovation, initiative, and experimentation.
- **encouraging employee engagement**: strengthening managerial culture and fostering employee commitment by empowering employees and encouraging them to take initiative

#### **Group indicators**

- percentage of employees who recommend Orange as an employer: 2016: 81% / 2017: 83%<sup>1</sup>

<sup>1</sup> the way the indicator was calculated changed in 2017

- percentage of employees who feel that Orange is a digital and human employer :

2016: 73.7% /2017 : 77.5%

- 35 % women in our management networks by 2020

2016: 27.3% / 2017: 28.5%

Our achievements in 2017

#### Prizes and Certifications in 2017

For the second time in a row, Orange was awarded "Top Employer Global 2017" certification. This certification recognises the best human resources policies and programmes. 30 Orange countries and territories on 5 continents, including Orange Business Services, were involved in the process and made it a success.

The Top Employer approach is based on an extremely detailed questionnaire (policies, practices, tools, measurements), backed up with a packet of evidence. The elements submitted are audited and graded, based on best practices in the country. This method generates a report on strengths and areas for progress; it covers all HR policies, including talent management, planning, integration, training and skill development, performance management, leadership, careers and successions, pay and benefits, and culture.

Orange was awarded the "Tell us - Best in class 2017" label, with the best overall rating from young people. Within the framework of this study, over 3,000 young people listed the companies they dream of working for. Orange was rated the most attractive organisation!

Orange came second for the "Choosemycompany / Trainees 2017-2018" label (formerly Happy Trainees): more than 2,000 young people from teams in France responded to the Happy Trainees survey and more than 93% would recommend the Group for an internship or work/study placement. This is the first participatory employer "label" to recognise excellence in management and staff motivation.

Orange was also awarded the "Happy At Work" and "Happy Candidates" labels in 2017. Orange came: First in the #HappyCandidates survey, scoring 4.25/5 and first in the #HappyAtWork survey, scoring 4.18/5. Candidates and employees gave a mark to express how they felt about the recruitment process, as well as from the perspective of a company employee. In this way, thanks to its results, Orange is able to stand out from over 3,300 companies which were assessed within the framework of the 2017 HappyCandidates and HappyatWork operation.

#### Guaranteeing useful skills for tomorrow

So as to guarantee the right skills for tomorrow, Orange has a Provisional Management of Jobs and Skills policy, closely connected to Essentials 2020, and focusing on the development of skills. For 2016-2018, Orange has set 4 objectives:

- developing a client experience of the network from beginning to end;
- developing a long-term relationship of trust;
- supporting and developing offers such as Orange Bank, connected objects, insurance and entertainment;
- anticipating the impacts of digital technologies and generational divides and supporting managers.

The Group launched a major Skills initiative in order to make employees actors in their own development, while guaranteeing the skills needed by the group, and to move forward in their own careers. Within this context, in February 2017, Orange signed an

Agreement to Recognise Skills and Qualifications.

## Employment and integration

Over the 2016-2018 period, the Group will host in France around 5,000 employees on work-study contract every year, and take in at least 2,500 interns, over all job lines and across the entire territory.

Over this same period, almost 7,500 employees are recruited, mainly in customer relations jobs, network development (particular the deployment of the fibre optic network) and new job lines (developers, specialists in Cloud solutions, cyber security, virtualisation, IoT, artificial intelligence, etc.).

## **Orange Learning**

The deployment of the Orange Learning LMS (Learning Management System) tool continued in 2017. This tool puts employees at the heart of training processes, making them an active player in the development of their skills. To date, Orange Learning has been deployed in six countries.

## Becoming more collectively agile

Orange is setting up and promoting new tools for its employees:

Plazza, the new Orange social network (the world's first ISO 27001 certified secure social network), is at the heart of Group digitization. In 2017, it passed the 62,000 active user mark, cementing its place as the leading company social network in France and in Europe. In 2017, Plazza was deployed to five new Countries, making it 21 connected Orange Countries out of 29.

Orange has a new "Occasional teleworking" application, which streamlines the process for submitting and validating occasional teleworking requests. This application came out of the Employee Experience focus group, which identified the expectations of employees around telework (work-life balance, long commutes, etc.). This application makes teleworking easier, particularly on an occasional basis, when it is made necessary by disturbances linked to transport, weather conditions, or excedingpollution threshold, etc.

#### Encouraging employee engagement

In 2017, to encourage and develop entrepreneurship, Orange launched the Oz programme in France, Cote d'Ivoire, Slovakia and Orange Business Services. The aim of the programme was, first off, to promote innovation among employees: sharing ideas and suggestions through continuous improvement collective workshops (250 participants in 2017), on an ideas wall, or taking part in cross-company challenges between entities or job-lines (eight challenges were set in 2017) in order to work on an "innovation project" with and for Orange.

### **Employee Survey**

In 2017, Orange launched "Your Employee Barometer", a new 100% digital survey to measure and implement the Orange promise to be a digital and human employer. 71,735 employees (51.4% of the workforce) took part.

In parallel, the Composite Social Performance Indicator was reviewed to better reflect the priorities of our Orange Promise. While the previous barometer focused on the measuring quality of life at work, this new barometer measures the perception of how the company

is changing in response to priorities such as skills, agility and commitment. It is still used as a factor in Group leaders' and executives' performance-related pay.

The results of the barometer show the overall score increasing by more than 3 points for the three areas of skills, agility and commitment.

#### Health and Safety Policy

The deployment of the new Health and Safety Management System (HSMS) continued throughout 2017 with training across the France perimeter and the definition of training needs internationally. HSMS audits started up again at the end of 2017 after a change of supplier.

Training was provided for Health and Safety Training committees in ten countries in the MEA zone. In Europe, a three-part study (social relations, health and safety, and trade unions) was launched to identify best practices to share. Two countries were involved in 2017 - Spain and Poland.

## Workplace Equality Policy

The Workplace Equality Policy is part of the Essentials 2020 strategic plan and the Group HR promise. It is implemented throughout the Group by the Workplace Equality Committee, in accordance with four principles:

- equal pay for men and women
- work-life balance
- a balanced representation of men and women in all job lines, particularly technical ones
- access for women to leadership roles and at every level of management, with an objective of 35% of women in senior management by 2020.

The Group Workplace Equality Policy is subject to continuous improvement with an assessment as part of the Gender Equality European and International Standard (GEEIS). Since 2011, the Group and all its European subsidiaries, as well as Orange Egypt, Orange, Tunisia, OBS Egypt, Brazil and Mauritius have been audited, labelled and certified for workplace equality every four years. In 2017, this certification was extended to other types of diversity.

In 2017, Orange was awarded the CSR Challenges trophy for its stakeholder dialogue initiatives on a Group level. This trophy rewards eight organisations for CSR best practices; Orange was ranked 49th in the worldwide EQUILEAP rankings (amongst the top five telecommunications companies in the world) and in France, 8th at the Ethics&Board 2017 rankings for women in leadership, organised by the French Secretary of State for Gender Equality (first in the telecommunications sector in the SBF120). In France, Orange renewed its three-year "agreement on the employment and integration of disabled people and the fight against discrimination" on 28 June 2017, which was signed unanimously. The signatories undertake, amongst other actions, to implement a recruitment policy aimed at recruiting 570 people with disabilities, including at least 150 on permanent contracts.

The agreement, which now includes a new chapter on fighting "all forms of discrimination", also plans to maintain and set up professionalisation courses. It also advocates an expanded commitment to the professional status of people with disabilities through career paths implemented within the company. This will include a policy of active purchasing from the protected sector and partnerships with charitable and training organizations.

## 2.3 Setting the example with our suppliers

Orange wants to be both a responsible contractor itself and to promote CSR standards throughout its sub-contractor chain.

As a responsible contractor, Orange aims to continue to support the implementation of CSR objectives in sales and logistics processes, for sales stakeholders to adopt CSR principles and commitments, and to contribute to regional development and local employment by opening up access to Orange calls for tender to innovative SMEs and to companies from the protected and adapted sector.

As a promoter of CSR standards in its sub-contractor chain, Orange wants to enhance the importance of environmental, societal and social criteria in calls for bids, and ensure that Orange CSR requirements are being implemented by suppliers, as well as contributing to the implementation of these standards, in particular through the expansion of the Joint Audit Cooperation (JAC) and its directing principles.

Group indicator: by 2020, extend the JAC supplier audits to the widest possible Tier										
% audits / level	Tier 1	Tier 2	Tier 3	Tier 4						
2020 objective	10	35	50	5						
2015 figures:	21	48	31							
2016 figures:	16	55	29							
2017 figures:	31	45	24							

Number of audits per tier in 2017 tier 1: 28 (13 are new suppliers)

tier 2: 40 tier 3: 21

## Our achievements in 2017

#### Orange, a responsible contractor

Orange is one of 39 companies (out of the 1,800 signatories of the charter) to have received the "Responsible Supplier Relations" for the France perimeter over the 2016/2018 period.

In 2017, Orange implemented measures to make the company compliant with the law on Duty of Care (*Devoir de vigilance*).

To do so, the supplier code of conduct was revised, with enhanced obligations, and included as an appendix to contracts. Since the end of 2017, this new Code of Conduct has been in place at BUyin (a joint venture set up for making purchases with Deutsche Telekom in 2011). It is due to be distributed among other Group buyers in the first quarter of 2018. This document specifies what Orange expects of its suppliers and their sub-contractors, from an environmental, societal, social and ethical perspective. Raising awareness of CSR challenges and providing training in the use of CSR tools continues in 2017, with training for 195 buyers or employees from the Directorate of Purchases (raising awareness and training in the use of CSR tools).

Orange has expanded its actions to support sourcing from the circular economy and integrating waste management objectives: in this way, a collective department to manage internal workplace Waste Electrical and Electronic Equipment (network and IT) has been put in place since January 2017 in France, with a contract with Ecologic, a French environmental organisation. Furthermore all suppliers of IT and network workplace equipment have been asked by Orange to assess their regulatory compliance and informed of Orange France's management of workplace WEEE.

Orange contributes to territorial development and local employment by encouraging access to its calls for bids to companies in the protected and adapted sector, with 15 million Euros of purchases per year, more than our target amount; Orange is also conducting an experiment in this field in the IT environment.

Orange has also developed a collaborative reverse factoring system, offering to over 300 contracted SMEs payment facilities, via a dedicated platform in 2017.

Within the framework of its purchases, Orange supports start-ups in open-innovation, through four different schemes, offering them access to Asian markets and helping

them to accelerate the industrialisation of their solutions to become more competitive on a world stage (Start-up China Tour, Ch'InnoSphere, Hardware Acceleration Programm, Start-up FastTrack to simplify the purchasing process). Finally, in 2017, Orange signed a partnership with the Fairphone 2 smartphone supplier, an ethical and modular, eco-designed smartphone, to sell it in France.

#### promoting CSR standards in the subcontractor chain

Orange is continuing to talk to suppliers through, for example the third Suppliers Forum in June 2017 on "The Circular Economy: an Opportunity for the Future" (130 participants). Another highlight of the year was the JAC Forum (Joint Audit Cooperation), which was held in China in January 2017 on the topic of sharing best practice, tools and challenges in the search for a responsible subcontractor chain (133 participants including telecoms operators and equipment manufacturers, academics and NGOs; broadcast live for the first time, with nearly 1,400 connections)

Orange is contributing to the deployment of standards, in particular through the Joint Audit Cooperation (JAC) and its guiding principles, with 89 audits in 2017, which covered 96,000 employees.

Since 2010, 366 audits have been completed across 292 sites, covering 816,000 employees, leading to over 2,000 corrective action plans; 88% of the non-compliance issues identified have been processed. In 2017, an unannounced audit was used to check corrective measures had been implemented by a tier 2 supplier. In 2017, 69% of audits involved tier 2 and tier 3 suppliers (up +14% on 2016). Orange is continuing to expand the system for monitoring suppliers and assessing supplier risks, through the Ecovadis assessment of CSR maturity for our main suppliers in the highest risk domains (IT, Network, etc.) and the launch of a campaign at the end of the year to improve the reliability of the current supplier base. CSR visibility was increased thanks to the way the Ecovadis assessments carried out by Buyln were shared.

In 2017, Orange also launched the first MEA zone CSR audits: 3 suppliers were selected in Senegal, Ivory Coast and Morocco. These "pilot" audits will continue into 2018.

The regular assessment of supplier performance is also carried out using the QREDIC® tool, particularly for environmental, ethical, and social elements.

## 3 Orange in support of social and economic development

ICTs offer solutions in many social and economic domains. They play a crucial part in sectors of activity which are particularly strategic for the growth of a country. With privileged access to 268 million customers, and working from a territorial position in Europe, Africa and the Middle-East, Orange has set itself the objective of making digital technology a catalyst for progress for everyone.

Providing access to the largest number of people, deploying essential digital services adapted to each person's needs, and supporting entrepreneurship as well as social innovation are Orange's three areas of action to promote local development.

## 3.1 Contributing to reducing all forms of digital divide

Orange is committed to fighting the causes exclusion through its innovative solutions and investments. Orange therefore works to ensure that everyone can access services which have become essential in good conditions.

- to fight geographical digital divides, Orange has invested heavily in extending landline and mobile networks, as well as accelerating the deployment of fibre and 4G in Europe, Africa, and the Middle East, and reducing "dead zones".
- Orange has deployed a "design for all" strategy to fight the digital divide related to disability and age; the objective is to adapt our products and services to the needs of these populations, and to design specific products combining innovation, simplicity and ergonomics.
- to combat the economic divide, Orange is seeking to address the economic problems of specific populations by creating supportive programmes or adapted offers, often with partners, to help improve general local or sectoral vitality using digital technology.

To fight against factors for exclusion linked to education or cultural or social issues, Orange offers awareness and equipment programmes, particularly through the Orange Foundation.

#### 3.1.1 Geographical digital divides

Orange is continuing to improve high speed broadband service:

- deploying the 4G/4G+ networks in Europe to increase coverage and speeds. Rates of coverage at the end of 2017: 99.9% in Belgium; 97.5% in Moldova; 96.0% in France; 96% in Spain, 93.2% in Romania, 99.8% in Poland.
- deployment of Fibre: 9 million connectable homes (+32% compared with the end of 2016), 12 million connectable homes in Spain (or +2.4 million in one year), 2.5 million connectable homes in Poland (+68% compared with the end of 2016).

Orange has also committed to providing access to energy in Africa through a partnership with ENGIE, signed at the end of 2015, to develop rural electrification in Africa and optimise electrical supply for Orange infrastructure over this territory.

Group indicator: multiply the average data speed for customers by 3 on our landline and mobile networks between 2014 and 2018

2015: x 1.8 (landlines) and x 1.4 (mobile networks)
2016: x 2.5 (landlines) and x 1.9 (mobile networks)
2017: x 3.2 (landlines) and x 2.5 (mobile networks)

#### 3.1.2 Digital divide linked to disability or age

A "disability" agreement was signed in France at the end of June 2017. This agreement is highly ambitious, especially in terms of recruitment. It should be noted that the rate of disabled people employed by the Group is over 7% (6% is the legal threshold).

Orange has continued to develop offers and products that meet the needs of disabled and elderly people, either directly or in partnership with start-ups with an open innovation view:

for example, a mobile application to help hearing impaired or deaf people to communicate (Roger Voice), a browser solution to make websites accessible, home support solutions which enable family members to care for elderly relatives remotely, the distribution of the "autonomy" catalogue of adapted products in France.

Orange has also developed apprenticeship programmes for people with autism: educational applications developed with funding from the Orange Foundation, tablets provided to autism facilities to help people with autism progress, and improve their living conditions with their friends and family, and their social integration.

Orange has launched the Ellomi application to raise awareness of different types of invisible disability, particularly through augmented reality, to better understand the perspective of certain disabled co-workers and discover potential ways of compensating, in particular in terms of what Orange offers in its "autonomy" range - either through open-source or partner solutions.

Finally, Orange is continuing to deploy an accessible distribution network, with 272 shops with an "Autonomy" label in France as of 31/12/2017, and a training policy aimed at serving disabled and older people on PCs, mobiles and tablets, with a complementary strand for serving older people over the phone.

Through the French Telecommunications Federation, Orange has contributed to the 5th review of the charter of voluntary commitments to provide access to electronic communications to disabled people;

#### 3.1.3 Exclusion linked to educational and cultural factors

Through its Foundation, which has a budget of €23M (including €8.5M in France), 8,000 employees are taking part in voluntary activities in 16 local entities, and 30 countries.

Orange supports a number of digital education initiatives:

- 73 Solidarity FabLabs in 11 countries (including 48 in France): FabLabs are open workshops, which offer opportunities to experiment, learn, make, and share skills. Young people from disadvantaged backgrounds, or who are having difficulties at school come to the FabLabs to develop new skills and, subsequently, increase their chances of finding a job;
- "working together to help young people integrate": a digital education and training programme in partnership with Missions Locales (public support for local community projects in France) throughout France. In 2017, 14,200 young people received digital skills training;
- Digital Homes: providing training for women with no qualifications or jobs in Europe and Africa. This programme now counts 200 Digital Homes in 18 countries, or 11,000 women who have received training;
- Digital schools: providing access to education for over 13,000 children. School children are able to access quality educational content through a server and tablet kit. Since 2014, the programme has been implemented in 532 schools and 12 countries. Since the start of the 2016-2017 school year, the kit has also been used by educational charities in France.

Orange's actions centre around providing mother and child health services in Africa, projects for major hospitals in France, fighting for the social and societal inclusion of people with autism, and financing research into autism. 70 "Orange Villages" in 11 countries have received a water point, a healthcare centre and a school (with 350,000 beneficiaries).

## 3.2 Developing essential and innovative services

**Group indicator:** diversify into new services with a turnover of at least 1 billion Euros by 2021

The Group is acting to put digital technologies at the service of society. Indeed, ICTs can provide solutions in many areas, as long as users are provided with offers that take into account their circumstances. As part of its global "Orange for Development" approach, the Group most often works with partners to design products and services which, for every domain, represent the best catalyst for progress, especially in Africa and the Middle-East. Several possible areas of transformation have been identified:

- **agriculture**, in view of improving revenue for farmers, increasing farm yields and developing the global value chain;

- financial services to provide access to banking services via mobiles devices, freeing customers from the constraints of traditional banking networks with limited access to branches.
- energy in rural areas as an alternative solution to provide electricity for people in Africa who do not have access to the electricity grid (70% of the population);
- **e-education** to provide access to quality educational content even far from major urban centres:
- healthcare, to offer simple, reliable and effective solutions for medical services, and provide patients with the means to better manage their health and medical conditions;

Orange has also launched several programmes:

- 1/ m-Women is an initiative to promote greater autonomy and improved employment prospects for women through the use of digital technologies, in the MEA zone, with essential services adapted to the needs of women. The digital inclusion of women enhances their contribution to sustainable socio-economic development; Some of the 2017 projects include:
- in the DRC, the development of Cycle M, a mobile phone menstrual cycle planner application contributing to family planning sponsored by the Ministry of Public Health;
- in Cameroon, the launch of Gifted Mom, a text and voice messaging service which provides personalised information to pregnant women and young mothers, as well as internet access to find a hospital near them;
- in Egypt, the launch of Private Recharge and in Morocco, Smart Recharge, a system for topping up your prepaid account without needing to enter your number and name;
- the launch of project Wali in the Central African Republic, a project responding to requests from women from disadvantaged backgrounds, victims of several recurring conflicts, to increase autonomy for women through Revenue Generating Activities (RGAs) such as the sale of Orange products;
- in Burkina Faso, mass text messaging to inform women about medical consultations and screenings.
- 2/ mAgri is a set of initiatives to generate added value and specialist solutions and services aimed at millions of farmers equipped with mobile phone. These initiatives are developed in partnership with agricultural sector suppliers offering services in information (currently companies such as IGNITIA, HNI, or RONGEAD), Market-places (such as m-Louma in Senegal or agribusiness in Guinea), finance (like BIMA in the micro-insurance sector) or M2M/IOT solutions (such as DACOM or Medria Technologie)
- **3/ e-health**, providing health services, particularly through mobile devices. For example, this includes:
- the development of tele-consultation services in rural zones for primary care in partnership with hospitals,
- a mobile information service, a hotline to answer health questions (sexuality /

contraception, AIDS, STIs, malaria, etc.), reminders for vaccinations (USSD service launched within the context of the Expanded Vaccination Programme (EVP) as recommended by the WHO), text message and USSD family planning service, in partnership with the Cycle M start-up;

- identifying counterfeit medication: the client inputs the bar code and sends it off using a short number. They automatically receive a response confirming whether or not the medication is authentic
- collecting health / epidemiological / follow-up data for patients

**4/ e-education**, for the widest possible reach; in 2017, for example, Orange actions included:

- the Sankofa programme aimed at Orange subsidiaries in Africa to put in place an environment which enables them to launch offers to access educational content;
- in Madagascar, finalisation of the FADEP.MG programme (remote training for primary school teachers in Madagascar) launched in 2016 with the Madagascar Ministry of National Education. The project develops the teaching skills of 1,000 primary school teachers in Madagascar using a hybrid remote training system.
- in Morocco, the launch of Kezakoo, a free Arab-language educational platform, offering video classes and exercises as well as documents for maths, physics, French language and tutorials. Co-branding partnership with Orange Morocco; finally, the first digital school was opened in the Central African Republic.

5/ energy: recent technical advances in solar panel and battery technologies offer simple, cost-effective solutions for populations without access to electricity. A solar panel fitted to the roof of a house recharges a battery during the day time, and this battery then supplies power for basic electrical devices: lamps, phone charger, radio, even television. Thus, on 14 December, Orange DRC officially launched Orange Energie, an innovative subscription service to solar energy aimed at Congolese customers, developed in partnership with BBoxx. The service, which can only be purchased using Orange money, is a first step in the Orange MEA strategy to expand into energy and the electrification of rural areas. Three pilot programmes have been launched in Cote d'Ivoire, Senegal and Cameroon.

## 3.3 Supporting entrepreneurship

The increasing acceleration of digital transformations has led to a global paradigm shift in terms of regional socio-economic development. The Orange Group is supporting this transition at the heart of regions. Strongly committed to this open approach, it deploys a wide range of programmes to promote sustainable synergies with start-ups, in the digital and social sectors alike. A dynamic which is spreading in all territories, with consistent and complementary initiatives to locate, support and promote new talents.

Entrepreneurs are supported through the following initiatives:

- the La Ruche network (five incubators in France)
- the four African incubators (Senegal, Niger, Guinea and Mali)

- the Orange FabLabs, start-up accelerators by Orange
- the Orange Prize for Social Entrepreneurship in Africa and the Middle East

#### Group indicator: to have supported at least 500 start-ups by 2018

2015: 150 entrepreneurs supported

2016: 239 entrepreneurs supported, or a 58% increase on 2015 2017: 435 entrepreneurs supported, or an 82% increase on 2016

#### Our achievements in 2017

#### - discovering

Orange Tunisia, in partnership with Technovation International and the United States Embassy, organised the international **#girlswhocode** challenge for girls aged 10 to 18, aiming to provide solutions for their communities using mobile technologies in areas such as health or education... Between 2016 and 2017, over 600 girls took part throughout Tunisia. Seven Tunisian teams were chosen for the world-wide semi-finals, and one team takes part in the World Pitch Summit in Silicon Valley every year.

Orange Fabs saw the launch of season 3 in Jordan, in January 2017, season 3 in Ivory Coast in June 2017, season 2 in Senegal in April 2017 and season 1 in Cameroon.

#### - supporting

Orange is continuing to develop the Entrepreneur Club website: a new information space in French and English dedicated to business creators in Africa and the Middle East. The site provides information for entrepreneurs and puts them in contact with Orange's various entrepreneurship support schemes. Entrepreneur Club also offers practical information and the tools needed to start a business. Similarly, Orange is part of the Africa Innovation incubator network, which brings incubators together across the African continent.

Orange launched the **Sonatel Academy**: on 22/11/17, at the CTIC Dakar, the Sonatel Group launched its new free coding school, known as the "Sonatel Academy". By setting up this school, the first of its kind, the Sonatel Group, with the support of the Orange Group, is reaffirming its commitment to the digital eco-systems of the countries in which it is active. Sonatel is thus continuing to support the Senegalese state in implementing the Senegal 2025 Digital Strategy.

In Tunisia, Orange has set up the **Orange Developer Center**, a technological incubator which offers training, coaching and leadership for the community through challenges, and hackathons, such as the Orange Summer Challenge (a highlight of the year for geeks).

**Orange Guinea** launched the Hackathon in 2017 in collaboration with the Saboutech incubator. This project is part of the Orange Guinea #ProgrammeCitoyen, feeding into one of its key pillars: "supporting entrepreneurship", encouraging digital creativity among young people, whether they are entrepreneurs, developers, or members of a start-up.

#### - promoting

In 2017, Orange hosted the 7th yearly Orange Prize for Social Entrepreneurship in Africa and the Middle East: this Prize rewards innovative Information and Communication Technologies (ICT) projects which help improve the living conditions of local people through digital solutions, in fields such as education, healthcare, farming, mobile payments or sustainable development. A new feature in this year's 7th edition was a national phase during which each of Orange's 17 subsidiaries in Africa and the Middle East taking part in the contest studied the projects submitted in their country and appointed local winners. The call for applications received nearly 1,200 innovative project entries, which was 60% more than 2016. Amongst the 49 local winners, 11 projects were selected and submitted to an international jury made up of industry representatives, investors, external organisations and Orange organisations. The finalists of the Orange Social Entrepreneur Prize enjoy priority support for six months from the NGO Grow Movement and Orange experts. Furthermore, this year a Special Content Prize was added, which was awarded by Orange Content. Within the framework of the Orange Prize for Social Entrepreneurship in Africa, several subsidiaries organised local prizes. In this way, Cameroon organised the Prize for Female Entrepreneurs and Senegal the Prize for Cultural Content.

## 4 Orange, playing its part in the environmental transition

Orange is deploying ambitious solutions and action plans to support the environmental and energy transition connected to climate change, resource and waste management, and the protection of biodiversity. This is why various company business lines are working to reduce energy consumption and CO2 emissions, to improve the disposal of our equipment and promote recycling schemes, and to research more eco-responsible solutions for our customers.

At COP21, held in Paris at the end of 2015, Orange reaffirmed its commitment to protecting the environment by setting itself 2 new priorities:

- reducing CO<sub>2</sub> emissions by half for customer uses by 2020 (in relation to 2006),
- working towards the inclusion of circular economy principles in its organisation and processes.

## 4.1 Adopting a systemic approach

#### 4.1.1 ISO 14001

Orange's certification policy aims to obtain and maintain ISO14001 certification for the activities of our main subsidiaries in Europe and Africa. For two years, we have been developing the Environmental Management System so that it takes into account new requirements which appeared with the publication of the 2015 version of the ISO 14001 standard; to achieve this, Group tools have been developed to support this transition; they have focussed on the Stakeholder Dialogue and taking into account impacts throughout the entire life cycle of a product. In 2017, these tools made it possible to develop and pursue plans of action to complete the transition to the 2015 version of the standard.

#### Our achievements in 2017

All of our organizations that were ISO 14001 certified have successfully passed their 2015 migration or their follow up audit.

Orange France was awarded ISO 14001 certification for its entire perimeter with a transitional audit period to adapt the environmental management system to the 2015 version of the standard and to the organisational changes in the Directorates of Customer Relations. Orange Slovakia, Orange Senegal, Orange Mali and Orange Business Services have all made the transition to the 2015 version of the ISO 14001 standard.

Our ISO 14001-certified perimeter represents 66.6% of our activities worldwide.

#### 4.1.2 Circular economy

Orange's commitment to progressively integrating circular economy principles by 2020 involves a progressive shift in its economic models and processes connected to the company's wider ecosystem. This transition covers several areas: eco-design, limiting our consumption of critical resources, optimizing waste management, and the possibility of giving a second life to electronic and electrical resources.

This approach also contributes to our objective of reducing our CO<sub>2</sub> emissions.

#### Our achievements in 2017

The collaborative project with members of the **Ellen MacArthur Foundation** to study the potential benefits of introducing modularity in technical and network equipment was completed. The conclusions were presented at the Reykjavik forum.

The Group has put in place a **Committee for the Strategic Management of the Circular Economy** to define, together, actions to implement in different job lines, appointing project leads and setting up a 2017-2020 roadmap in accordance with its commitment to deploy circular economy principles throughout all its processes by 2020. This plan of action will be regularly reviewed and adjusted; 6 people took the training course offered by the Ellen McArthur Foundation in 2017.

## 4.2 Reducing our carbon footprint

Digital technologies are now a part of all sectors of human activity. They are part of the solution for reducing the environmental impacts of these activities. At the heart of this revolution, telecoms operators, data producers, and indeed all of the world's socioeconomic actors are multiplying the uses of digital technology.

During the COP21, held in Paris in December 2015, Orange set an ambitious new objective: to reduce its CO2 emissions by 50% per customer usage by 2020 (compared to a 2006 base). Orange is continuing its efforts, with the optimisation of its plan of action, by taking part in COP and by presenting regular updates on its progress between COP 21 and COP 26.

Group indicator: reducing our CO2 emissions by 50 % per customer usage between 2006 and 2020.

2006-2017: reduction of 50.03%

#### Our achievements in 2017

Orange has renewed its commitment to fighting climate change, by signing the French Business Climate Pledge, at the **One Planet Summit** launched in December 2017 to put in place solutions and innovations to become a low-carbon company by 2020. In 2017, alongside the UIT and Carbone 4, the Group designed a methodology for the ICT sector to assess their contribution to achieving the Paris Treaty objective of keeping global warming to "well below 2°C from pre-industrial levels". Work started on drafting the methodological document at ITU in 2017.

Orange France reduced its carbon footprint by 5,220 tons of CO<sub>2</sub> in 2017 (to 259,958 tonnes) compared with 2016 levels (265,178 tonnes) thanks to reductions in travel by plane and by car, reduced consumption of fuel and electricity, and the 2020 ITN plan. After several years of increases, Orange France was able to stabilise and then reduce its energy consumption in 2016. In July 2017, with the support of GSSC, Orange France obtained ISO 50001 certification for its energy management system for network and IT system development and operations. Orange is one of the first French companies to obtain this certification on a very large scale. Indeed, the certification covers 30,000 technical sites and a fleet of 15,000 vehicles.

ISO 50001 certification - a few figures:

- a 6% reduction in electricity consumption over the most important sites (between the end of 2015 and the end of 2017)
- improving energy consumption per customer usage by 36% (between the end of 2016 and mid 2017)
- reducing fuel consumption by 26% (between 2006 and 2016)

#### 4.2.1 Networks and IT systems

Energy consumption for Orange networks and IT systems in 2017 accounted for 82.25% of total consumption, and their CO<sub>2</sub> emissions accounted for 81.04% of total emissions.

Energy consumption is now included as a criterion for assessing responses to calls for offers to supply Orange IT or network equipment. For example, the MOSAIC programme launched in 2017 introduces the latest generation of NOKIA equipment to the mobile network (to replace old ALU equipment). This equipment is not only more environmentally efficient, it also features counters to measure electricity consumption in real time. Consumption savings are estimated at around 30% at iso-configuration. Major progress has been made in modelling energy consumed by services, which is needed to implement energy-efficiency plans; the results of this work were presented in January 2017, within the framework of SooGREEN (European CELTIC project, coordinated by Orange), which included the Celtic Office, the French DGE and Swedish public body Vinnova. New energy-saving strategies focus on data transfers over the mobile network, Device to Device (D2D), and closing the RF channel. 5G connectivity "as a service", an energy-intelligent cRAN and the Evolved Packet Core (EPC) were presented. A technical-economic study on the needs of smart grid and mobile networks and new lithium energy storage systems was also presented.

In June 2017, the three-day annual seminar of the Orange Expert Energy and Environment Community was held. This seminar was an opportunity to meet external experts, such as members of Negawatt, who came to present their plan for 100% renewable energy in France by 2050. Valérie Peugeot, a sociologist at Orange, delivered a presentation on "sustainable behaviours and the role of technologies". Several position papers were also published in 2017, on the environmental impact of the Virtual Box, the functionalities of Green RAN (Radio Access Network), energy efficiency in the RAN, etc.

In 2017, Orange worked on issues related to batteries. A call for bids was put out at the start of 2017 to encourage market innovations in lead batteries and access new technologies (Lithium-ion). Over a period of five years (products and delivery), savings of 9% to 25% (depending on the supplier) will be made on investment costs, thanks to this call for bids, which represents savings of 9 to 25 million Euros on a Group level. Because batteries are very sensitive to changes in temperature, the temperature of access sites will be kept close to 27°C indoors, to help preserve batteries. Telco equipment, however, can withstand much greater variations in conditions, and temperatures up to 40°C. Using an air-conditioned cabinet for batteries could help to

save energy (and reduce related operating costs), corresponding to the impact of temperature on the energy consumption of air-conditioning systems. Laboratory and on-site trials have yielded satisfactory results.

The switch to 400V DC is one of the main pillars of the energy transformation programme to reduce operating and investment expenses linked to energy. ITN equipment eco-systems are increasingly changing to 400V DC.

In France, trials on remote supply have been conclusive: the first pilot site, which opened at the end of 2015, is still working without any problems. The first request for information (RFI) for hybrid distribution (cable and boxes) was completed in September 2017.

Renewable energy is now part of ESCO (Energy Services COmpany) contracts. Over summer 2017, Orange DRC (Democratic Republic of Congo) and Greenwish/Sagemcom entered into a partnership to outsource investments linked to technical environmental structure, passive maintenance, security and re-supply services. Orange retains ownership of the sites and the ESCOs own the energy components in which they invested. In November 2017 Orange Niger & Aktivco/Camusat signed a ten-year partnership based on the ESCO model. The contract covers 536 sites and should save the company 6 million Euros in operating costs and 28% on the total cost of ownership, over the entire contract. Up to 10 countries in Africa and the Middle East are taking part in calls for offers based on the ESCO model.

Within the framework of Explore 2020, several solar farm projects were also studied in 2017, in several countries (Egypt, Mali, Morocco, Niger, and Senegal) on the basis of the Jordan model. In Africa and the Middle East, 2,800 sites were operational in 2017.

#### 4.2.2 Tertiary buildings

Buildings represent nearly 11.75% of the Group's CO<sub>2</sub> emissions, and 11.60% of our overall consumption.

Orange has implemented tools for measuring and managing energy consumption for tertiary buildings across all its subsidiaries in Europe. Analysis and actions based on data help speed up transformation of uses and processes, as well as reducing consumption

In 2017, in France, Orange continued to implement efficient management systems for its buildings, with:

- 140 sites equipped with measurement systems, and regular monitoring by "Energy Managers" (versus 120 sites at the end of 2016)
- the implementation of the energy-efficiency catalogue
- taking part in the CUBE2020 energy-efficiency competition organized by the IFPEB: Three of our sites made the podium, and we came first for "greatest overall improvement for entire building stock", with savings of 6.5% for all our buildings in the competition.
- obtaining ISO 50 001 certification for the Orange Village site
- HQE, BREEAM environmental certifications, with an energy-efficiency label for all new leases in 2017.

#### 4.2.3 Travel

Travel represents nearly 7.21% of the Group's CO<sub>2</sub> emissions, and 6.16% of its overall consumption.

Orange has put in place actions to optimize its fleet of vehicles, and has introduced a "green" fleet.

The size of the Orange fleet is continuously being reduced (-4% per year over the past three years) and has dipped below 19,000 vehicles.

In 2017, the company continued to deploy Orange Car Share, with 1,700 vehicles at the end of the year (versus 650 at the end of 2016). More than ever, Orange leads the way for corporate car share schemes in France, and even in Europe.

In 2017, Orange used over 305 electric vehicles and over 325 hybrid vehicles (including 50 rechargeable vehicles). 900 charging stations were also installed (including in car parks which only receive visiting electric vehicles...). The introduction of electric vehicles continued in France in 2017, with almost 300 vehicles orders, across all regions. These vehicles are assigned to "pools" or for specific functions. This introduction of electric vehicles will continue over the coming years.

Since 2016 an effort has been made to choose petrol engine vehicles, both for company cars (40% of the catalogue offer is petrol engines) and other company vehicles. In 2017, we achieved the objective of replacing over 700 diesel vehicles with petrol models, with 825 C3 petrol manual and automatic vehicles ordered, or almost 45% of these types of vehicle. This will significantly reduce emissions of fine particulates and nitrous oxide in cities.

Several entities have taken measures to limit the use of individual cars (Company Transport Plans, carpooling, car sharing, eco-driving training, alternative mobility (e.g. electric bicycles), etc.). Thus, throughout 2017, an initiative was set up in partnership with the Rayon Vert "back to work" scheme to encourage the use of bicycles and bicycle maintenance at headquarters sites. In 2017, 2,000 Orange France employees took eco-driving training.

Orange France automatically forwards high pollution levels alert emails to employees with vehicles, to encourage them to use other modes of transport or to work from home. First concrete results (still partial) in 2017: 50,062 days of travel without cars, 7,758 employees involved, 1,923,623 km of car travel saved, contributing to savings of almost 400 tons of CO<sub>2</sub>.

Orange is reducing the need for travel through the use of video-conferencing. Orange has around 260 video conference rooms in France and almost 100 in the rest of the world. Overall, usage rates for these rooms are around 15%, with variations from room to room. Some of them experience high levels of traffic in the context of managing international projects, or certain job lines, while others are not used as much. This raises the question of whether other, lighter, more agile solutions (360° cameras, light collaborative tools) should be preferred as they are less costly in terms of investment and maintenance.

## 4.3 Limiting our impact on natural resources

In an effort to improve collection and sorting so as to be able to re-use equipment, as well as recycle, track, and re-purpose waste, Orange has chosen to enhance and optimize its waste management systems and to promote schemes to collect used customer mobile devices.

As well as reducing its direct impact, Orange aims to reduce the environmental impact of the products and services it sells throughout their entire life cycle. All this involves, amongst other things, the development of eco-design processes for products and services.

#### 4.3.1 Managing electrical and electronic equipment

Orange is taking actions to enhance and optimise systems for managing used equipment, to encourage re-use, recycling and traceability. In 2017, 55,298 tons of waste were re-purposed (i.e. waste was re-used, the materials re-cycled, or power generated). The response rate was 88.9%.

#### Our achievements in 2017

A "stock market exchange" type shared platform was set up and introduced, to re-use old network equipment across all Group operations. This initiative is monitored regularly on a country by country basis.

In France, in 2017, Orange continued to work on improving tertiary waste job lines with, for example, paper sorting implemented in every site with over 50 people and the inclusion of measurements for waste recycling and re-use rates in all its sub-contractor contracts; since 1 January 2017, Orange France has put in place a collective job line for Workplace WEEEs, which are passed on to Ecologic and Recyclum, two companies certified by public authorities; paper consumption has reduced by 60% in 10 years and 20% in 2017. Furthermore, over 70% of all printing is done on FSC or Blaue Engel label recycled paper, and significant efforts have been made to use recycled ream paper, which increased by 13% in 2017. The use of paper with these labels has reduced CO2 emissions by 168 tons. Finally, in 2017, wage slips were digitised for all Orange France employees, none of whom opposed the move.

In other European countries, efforts are ongoing too: in Slovakia, the electronic billing programme has been implemented with rates of 71.4% in 2017. The programme for the electronic signing of contracts on tablets has also been deployed, growing from 7% in the second half of 2016 to 16% on average in 2017. In this way, over half a million pages of A4 were saved in 2017. In Poland, 218,000 pieces of broadband equipment were renovated in 2017 (+20% on the previous year in terms of volume, for decoders and modems together); in partnership with retailers, Orange Poland guarantees a 'renovation' option, including necessary accessories, testing procedures and after-sales activities, which extends the product's life span and reduces our operating costs.

In Africa and the Middle East, actions to collect and process waste continue to be implemented, with several calls for bids to choose a contractor to collect and process

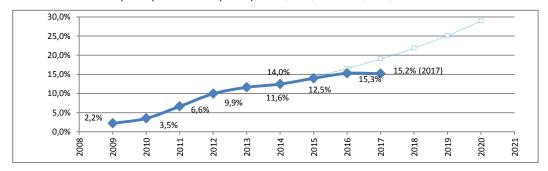
WEEE. There are plans to choose a contractor in the first half of 2018 in Mali and Madagascar. A consultation has been launched in Guinea.

#### 4.3.2 Collecting mobile devices

Group indicator: Collect 30% of our customers' used mobile devices in Europe by 2020. 2017: 15.2%

#### Our achievements in 2017

Collection rates for 2017 are 15.2% (vs an objective of 18.3% to reach 30% in 2020). Collections went from 15.3% (2016) to 15.2% (2017), or 1,800,000 to 1,660,000 mobile devices collected.



France continues to improve, with a collection rate of 22.2% for 2017 (vs 19.3% in 2016), collecting more than a million used mobile devices for the first time (1,009,211 devices collected vs 913,000 in 2016). This good performance is the result of the buy back policy available in shops and for online sales, and the 2,000 partner collection points, in schools and universities, companies and local authorities. Furthermore, for every device traded in, we donate €2 to the Emmaüs international charity. All devices collected by Orange are sent to the Ateliers du Bocage, a work integration social enterprise, where they are sorted. Broken devices are recycled, while others which are still working are refurbished to be sold on second-hand markets. The profits generated by the sales of second-hand devices are returned to Emmaüs International. These funds are then used to finance mobile waste recovery workshops in different African countries. Recovered mobiles are then sent to France to be recycled too.

In Spain, a change in service provider led to the termination of the T4 buyback collection scheme.

In Romania too, the dip collection rates, which went from 34.1% in 2016 to 29.4% in 2017, is due to a change in service provider.

In Slovakia, collections represent around 15% of mobile devices, through environmental civic schemes and "lottery" systems alone. Every month, clients can try to win a new telephone. For each phone which is returned, the income generated by Orange through recycling is given to an NGO involved in community projects.

The lack of collection initiatives in Poland (which represents 20% of Group sales) is bringing down overall collection rates. In 2017, around 8,000 smartphones were refurbished by our partner SBE.

In Africa, Orange took part in setting up five collection workshops at the end of 2017. Since the first workshop opened in Burkina Faso, over 2 million devices have been collected and over twenty containers of mobile waste have been collected in Africa and

brought back to France to be recycled. This activity is contributing to the creation of inclusive jobs, in France and in Africa. Furthermore, all mobile waste from the African workshops is handed over to Morphosis, an SME from Le Havre specialising in recycling metals from electronic waste.

#### 4.3.3 Eco-design

#### Our achievements in 2017

Eco-design criteria continue to be integrated in calls for offers for new boxes (energy, materials, end of life)

Following on from the work on the Livebox 4 packaging (less ink, vegetable-based ink, reduction in weight and volume, etc.), packaging for products sold by Orange is progressively being eco-designed, like the recent Airbox 2, through requirements included in the specifications. Also, generation 4 boxes have been designed so as to optimise disassembly during the end of life phase or for repairs<sup>2</sup>.

Different software eco-design tools were tested in 2017, using both static code and dynamic code analyses.

In September 2017, Orange France started selling the Fairphone 2, a more ethical and sustainable phone. With its modular design, it makes it possible for clients to repair it easily if required.

#### 4.3.4 Environmental performance of products

Launched in 2015, the **Open Eco-rating environmental labelling system** (co-developed by Orange, Telefonica and Huawei) is based on life cycle analyses carried out on different sub-systems (electronic cards, cameras, etc.) by Orange experts.

In 2017, the Orange Group co-financed the implementation of an online interface, alongside Forum For The Future. In an article published in Challenges/MDPI in August 2017 ("Precision of a Streamlined Life Cycle Assessment Approach Used in Eco-Rating of Mobile Phones"), we compared results with those of manufacturers (Apple, Ericsson and Fairphone). In 2018, this project will be open to other operators who express an interest and a version with more functionalities will be prepared.

In parallel to these actions, the Group is actively taking part in research, particularly within the EcoSD network, into models for alternative economies, the modularity of products and end of life for electronic components. This work will feed into projects to design the Orange products of tomorrow.

Furthermore, Group eco-design experts have presented their work in scientific conferences such as avniR, or at engineering schools such as Arts & Métiers ParisTech, UTT or ENSSAT.

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<sup>&</sup>lt;sup>2</sup> internal information

## 4.4 Using digital technologies for environmental transformation

In a world with limited natural resources and faced with climate change, Orange believes that digital technology is part of the solution and can positively contribute to the ecological and energy transition. This is why we offer our clients services and solutions for sustainable alternatives for smart cities, Machine to Machine (M2M), energy optimisation, reduction of their carbon footprint, eco-friendly transport...

#### 4.4.1 Taking part in new ideas

Digital technologies can contribute to reducing the carbon footprint by encouraging more efficient usages. A wide range of solutions already exists for corporate clients, which improve their operational performance as well as their environmental balance.

Orange is also working to develop solutions adapted to the challenges of smart cities through its *Smart Cities & Territories* activities. Amongst other projects, Orange aims to use Big Data to support public and local authorities with powerful tools to better manage rapid urban growth. For example, real-time mobility modelling tools help display, assess, anticipate and plan requirements in terms of infrastructure and urban services.

#### Our achievements in 2017

The C-Life Innovation collective was set up following COP21. In a spirit of collaboration, the innovative idea to collectively generate digital solutions to issues connected to climate change was suggested. These solutions would target the everyday lives of people in different contexts - at home, at work, travelling... Alongside Orange, the original founders were EDF, Météo France, BRGM, IGN and ENEDIS. In 2017, this collective first organised an initial barcamp, and then brainstorming sessions which led to the emergence of four new types of digital service:

- an early warning system on a national level, in the shape of the C-Life GUARD project to support local authorities and local populations. This project to plan for future risks is contributing to the development of a national platform for environmental risks and warnings for local populations.
- assessing the potential of local resources and putting them to use, as illustrated by the C-Life HOME project, the objective is which to provide individuals with a means of assessing and using the natural resources to which they have access in their environment / habitat:
- The circular economy, starting with the C-Cycle project, which will encourage large companies to recycle equipment when they move premises;
- quantifying risks and uncertainties in economic terms.

The development of the first three projects has already started in 2017 and will continue in 2018. In addition to these, the VALORISK project will be launched. This will involve helping companies and local authorities to better assess and quantify impacts related to climate risks and to define appropriate measures. Finally, the C-Life collective will

become an Association in the first half of 2018, to provide an official structure for its activities.

#### 4.4.2 Flagship Initiatives

The partnership with the CREA continued in 2017.

Committed to understanding climate change and its impact on biodiversity for over 20 years, CREA Mont Blanc (Research Centre for Alpine Ecosystems) has now been recognised with Orange by the United Nations at COP 23. Winners of the 2017 *Momentum for Change* prize, CREA Mont Blanc and Orangeattended an event in Bonn to receive the prize and present the CLIMB initiative, a unique approach to monitor mountain climate change, combining technology and dialogue between science and society.

CLIMB (Climate Change Impacts on Mountain Biodiversity) is a pioneering partnership approach to better understand the impact of climate change. CLIMB collects data on the ground (measurements, photos, videos), on climate, species and landscapes. This data is vital for scientific analysis of environmental changes in progress, which is then brought to the attention of the public and decision makers. From the automatic collection of data through to its feedback to the region and public, CLIMB required a robust and innovative technological architecture which Orange provided.

60 automatic temperature measuring stations have been installed across the Alpine region. This unique network allows researchers to monitor local climate change (temperature and snowfall) with a high degree of accuracy and to compare this climate data with flora and fauna observation data. Orange installed the station maintenance system, stores the data and scientific content which has been collected, and has developed visualisation and consultation interfaces accessible to both researchers and the general public. In this way, anyone can access the data and contribute by sharing their observations on <a href="https://www.atlasmontblanc.org">www.atlasmontblanc.org</a>.

The region, notably the Auvergne Rhône-Alpes Region and the Pays du Mont-Blanc and Vallée de Chamonix Mont-Blanc Regional Partnerships, are closely involved in this research which offers a forward-looking perspective and direct dialogue with scientists.

#### Marine Biodiversity with Orange Marine

Within the framework of its environmental work, in 2017, Orange Marine entered into a partnership with ARGO, an international climate change research consortium. In Practice, this involves Orange Marine making its technical resources available to take part in the deployment of autonomous marine transmitters. These floats collect data on the temperature and salt levels of ocean waters from the surface to depths of up to 2,000 m.

The data from the floats is then sent in real-time via satellite through an open platform (<a href="http://www.euro-argo.eu/">http://www.euro-argo.eu/</a>) to researchers from around the world, enabling them to study the state of the world's oceans and better understand their influence on climate change and vice-versa. The network is currently growing little by little, with almost 4,000 active floats. Thanks to the boat "Pierre de Fermat", the next floats will soon be deployed to the Azores zone.