



# A human future

The past quarter-century has seen digital technology reshape our day-to-day lives, put more information at our fingertips than ever before and boost our productivity at work. The digital society that has emerged around us, however, has also brought about new disparities. Some people are connected but feel uncomfortable with digital tools. Others are still cut off altogether. And many agree that it's time to put human contact back at the centre, where it belongs.

Orange's answer to digital exclusion is inclusive innovation. Or, as we call it, Human Inside innovation. We follow two principles here: new products, services and solutions will only serve a purpose if everyone can use them (because democratisation isn't a hollow buzzword for us), and if people

are their starting point, find the end result helpful, and guide us along the development path in-between.

That's why...

We believe technology needs to adapt to people, not the opposite.

We believe in the networks of the future because we feel everyone should be more connected.

We know we have a duty to protect your personal data and that you have a right to enjoy its full value.

We're proud to innovate for everyone, not just for a few.

That, in a nutshell, is what this Show Hello 2018 is about.

**Stéphane Richard**  
Chairman and Chief Executive Officer

## A simpler Internet of Things

Connected Home	P. 4
Security scan	P. 6
Connected modules	P. 8
Accessibility and Autonomy	P. 10

## Helpful artificial intelligence

Djingo	P. 14
Virtual Agent	P. 16

## High-performance networks

5G	P. 20
VR Collaboration	P. 22
5G PC key	P. 24
5G Telemedicine	P. 26

## Secure online lives

Orange Cyberdefense	P. 30
Smart patient care	P. 32
Financial coach	P. 34
Vote	P. 36



# Is there a simple and safe way to equip and remote-control my home? **Connected Home**

With our Connected Home solution, you can adjust your heating and lighting, and set the time any electric appliance in your home switches on and off, using one mobile app – or even talking to Djingo.



[Oran.ge/maisonconnect](https://Oran.ge/maisonconnect)

## What you need

Connected Home is bundled into the New Livebox and requires no separate subscriptions or additional hardware. The array of compatible objects available since this solution's launch encompasses Orange-branded and other products from market-leading manufacturers (the list includes Philips Hue, D-Link, Bosch and Netatmo).

## How it works

The New Livebox automatically recognises the connected objects in its network. Then you can use the Connected Home app to effortlessly set up your appliances, remote-control them, automate their settings and analyse their consumption. At home, you can also use your TV interface or voice-command Djingo to manage your objects.



## A few things Connected Home can do for you...

... create lighting atmospheres, optimise your heating to make you more comfortable, and save energy;

... send you advice based on your routine, so you can automate a variety of features and save time.



## Protected Home

Orange is also introducing Protected Home, a remote surveillance service for customers who want to heighten their home's security, for instance to protect it from break-ins. This system connects your home to a remote surveillance service that will respond whenever necessary.



You can control the plug and light bulb directly from the app Connected Home.



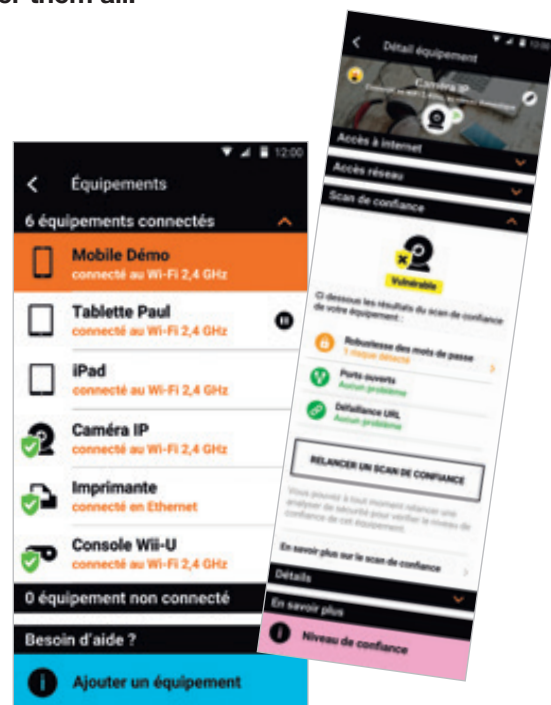
# Can I check exactly how secure my home's connected objects are, any time?

## Security scan

Our Security scan solution detects all the connected objects in your home network and provides real-time updates on each one's vulnerabilities (for example weak passwords or open ports) or on each device's security status, so that you can protect your entire network more effectively.

### What you need

Connected-object manufacturers don't always rank security at the top of their list of priorities, and users aren't always familiar with the systems they use. That's why Orange is introducing Security scan. It shows you every device connected to your network, tells you exactly how secure each one is and gives you more control over them all.



Security scan manages all your connected devices through one simple mobile interface.

### How it works

Security scan detects and displays connected devices, and you can control the system from your My Livebox application. That's how it helps you keep your private life private. We call that "digital peace of mind".

### A few things Security scan can do for you...

- ... make sure your connected-object passwords are strong enough, identify open ports that may expose your devices and network to unwelcome tampering, and help you take simple, effective measures to troubleshoot those issues;
- ... alert you if a virus infects one of your connected objects, so you can quarantine it and automatically help shield the rest of your network.



# How can I geolocate and connect to objects in real time, using the Orange network's power and its latest upgrades?

## Connected modules

You need fast and reliable networks to geolocate and activate your favourite appliances remotely. And Orange is providing them with a solution using LTE-M connectivity (a 4G network upgrade geared for the IoT) and an array of related solutions for businesses and homes.



[Oran.ge/modulesconnect](https://Oran.ge/modulesconnect)

### Connectivity solutions for integrators and developers:

**Live Booster**, an all-in-one kit (2G or 2G/LTE-M, SIM) including prepaid connections and working in 33 European countries, to link to and remote-control one object or several devices and requiring no installation.

**Live Module**, a tracking solution using Live Booster, especially for integrators. Live Module blends seamlessly into full systems: on bicycle-sharing services, for instance, users can geolocate connected bicycles in real time, open or close their locking devices remotely, check battery levels, authorise users to carry out maintenance work, and help the fleet manager keep the system operating at its optimal level.



Fleet managers can embed the Live Booster kit in their modules (in this example, in a bicycle).

### Two turnkey solutions:

**Live tracker**, a connected geolocation tag. Orange developed this entire system in-house for anyone to locate objects in real time, anywhere in Orange's mobile network. Live tracker tags are also very autonomous. They can send notifications at regular intervals based on pre-recorded routines or, conversely, report unusual movement patterns.

**Smart tracking**, helps businesses manage their vehicles and machinery – even when they aren't powered up (cranes, skips, containers, trailers, etc.). This full solution includes the tags, connections, location systems and interfaces. It supervises objects remotely and feeds the information it gathers to companies that want to lower their fleet operating costs and optimise their efficiency.



The Live tracker tag goes wherever you go.



# How can everyone enjoy the best features telecommunications can provide?

## Accessibility and Autonomy

Our belief that phones should be people-friendly rather than the opposite was what prompted us to develop an inclusive range of services for users who have visual, hearing or mobility impairments, people with reading and writing difficulties, and the elderly, so that everyone can enjoy the best features telecommunications can offer.

**Tactile Facile** is a free app for Orange mobile phones running on Android operating systems (versions 6 and higher). You can use it to adjust your phone's interface intuitively, it has five user profiles today – Facile+, Vision+, Vision++, Moteur+ (mobility) and Microgeste (micromovements) – and we will be adding more soon. Each of these profiles combines advanced adjustments, including bespoke colour settings, a choice of text-to-speech reading speeds and tailored text displays. Over time, the features will include text conversion into image sequences, a range of finger pressure levels, and a voice-command mode.



Tactile Facile provides a wide variety of customisable features for any user.

**Dot Watch** is the first connected watch for blind or otherwise visually-impaired users. Its Braille interface provides the date and time, vibrates, receives the same notifications as the phone and then conveys them, reads messages, saves the most important ones for later in the Dot Watch app, and identifies callers. The mobile app is used to configure the watch and locate it using vibrations.

**Swissvoice C50s** is a smartphone with an intuitive interface for people who feel uncomfortable with touchscreens. They can use it to make calls, receive messages and photos, and take part in videoconferences. Its innovative base has raised push buttons, and temperature and light sensors to reassure carers that users are comfortable and doing well.



Dot Watch and Swissvoice C50s keep everyone in touch, and keep it simple.





# What will voice-command personal assistants be like tomorrow?

## Djingo

Djingo is a virtual assistant that treats you to a seamless, natural and secure experience across Orange's and its partners' services.



[Oran.ge/djingopart](https://Oran.ge/djingopart)



[Oran.ge/djingopro](https://Oran.ge/djingopro)

### How it works

You can talk to Djingo using a connected speaker, a remote control with a built-in mic, or your smartphone (which you can also use to send it text messages).

In France, Djingo is connected to an ecosystem of services from Orange and selected partners. So you can use it to voice-control your calls (in hands-free mode), your home entertainment and information services (Deezer, Orange Radio, Orange TV, France Info news flashes, Météo France weather forecasts) and, soon, your home's connected objects (with Connected Home).

### An ecosystem of handpicked partners

Djingo will gradually be integrating a variety of trusted partners selected by Orange to provide new services, for example in the travel sector like OUI.sncf or in the retail market for online shopping.



Djingo will make it easier to access any service available from other partners, using the Bot Party solution to simplify integration.

Djingo's speaker will also link to Alexa, Amazon's virtual assistant, to provide a wide choice of additional services. Orange and Amazon share a vision where multiple AIs complement each other, to bring the richest experience to customers. That is why both companies are working to expand multi-assistant integration in their future products.

### New services

Over time, Djingo will...

... answer even the most elaborate general-knowledge questions using our partner SoundHound's technology;

... distinguish each family member using a speaker-recognition system, tailor its response accordingly, and skip straight to each one's personal content;

... ride with you in your car, to keep you safe and on track (with text-to-speech message reading and embedded navigation capabilities);

... and help people at work: it will for instance take notes, convert them into a variety of formats and e-mail them, as well as manage a company's communication services (forwarding incoming calls, organising conference calls, scheduling appointments, etc.).



# Is there an easy way to build automated systems (bots)?

## Virtual Agent

Orange is using Virtual Agent to develop bots that handle aftersales, customer care and subscriber assistance services for government agencies, banks, insurers and service companies. All Virtual Agent needs is a few sentences to plot out a dialogue flowchart and configure the artificial intelligence engine to create a natural online conversation.

### Who it's for

Companies that want to stay in touch with their customers on every possible channel (their website, a chat room or speakers, for instance), and for professionals who want to save time using a secure interface to schedule appointments, walk customers through simple troubleshooting steps or answer recurring questions.



Virtual Agent provides a set of simple tools you can start using in minutes.

### How it works

You don't need sharp linguistic skills or AI expertise: all you have to do is type in the first few sentences in a dialogue to calibrate the natural language processing engine, and to build an enjoyable conversation experience.

### A few things the Virtual Agent platform can do for you...

... guide your customers through your website to an interface where they can ask a question, schedule an appointment or find practical information (order tracking, FAQs), using a chatbot or voice mode;

... guarantee your data is constantly available, and that your exchanges are secure and confidential, as the information in the bot is stored in Orange's Cloud infrastructure (Flexible Engine).





# What network will we be using tomorrow?

## 5G

Orange is rolling out a more efficient, faster and more responsive network providing pioneering ambient connectivity to open up a wealth of new opportunities.



[Oran.ge/la5g](https://www.orange.fr/la5g)

### What it is

5G is the fifth mobile network generation and will start going live in 2020. It will be up to 10 times faster than 4G and be able to carry huge amounts of data for people at home, at work or on the move. It will be more responsive, too. So businesses will go more digital, telemedicine will go mainstream, and drones will be able to supervise industrial sites more efficiently and effectively, for instance. Billions of objects, serving an enormous variety of purposes, will connect simply and securely over 5G systems.

### How it works

5G networks will overlap with existing 4G sites, but use smart Massive MIMO antenna technology, which will noticeably improve



A 5G antenna at one of the testing centres in Orange Gardens, near Paris.

the quality of the signals reaching users (by targeting the signals instead of scattering them).

### A few things you can enjoy with 5G...

... optimal connections at home or out and about, with 10 times less lag time, on an extremely responsive network. Over time, this network's split-second response times will for example support a variety of interactive services or real-time machine-to-machine communication;

... full virtual reality (VR) immersion: you will be able to travel around the world without leaving your home, watch a game as if you were on the pitch, tour a flat from your settee, and relive your holiday highlights as if you were still there;

... take augmented reality (AR) to new heights, beyond videogames and other entertainment systems, and open up a variety of cultural, educational, medical and industrial applications;

... explore the IoT universe with multidevice connectivity and a smart network that can link to countless objects – connected cars, drones, industrial machines and smartphones, to list a few – and adapt to each one's performance.



# What is Orange doing to take business meetings into the future?

## VR Collaboration

VR Collaboration enables employees to hold full-immersion meetings in virtual workspaces.

### What it is

VR Collaboration is a virtual reality environment where people can see each other, talk to each other and make progress together, in real time, using interactive tools. They can write on whiteboards or sticky notes, share documents on screens, draw or import 3D objects, and use Agile method tools. VR Collaboration helps any team that needs to get a job done together, saves travel time and costs, and fosters engagement. And the sectors where it is opening up new possibilities include manufacturing, healthcare, construction, architecture, training and HR management.



VR Collaboration users can create and fine-tune complex 3D models in real time.

### What you need

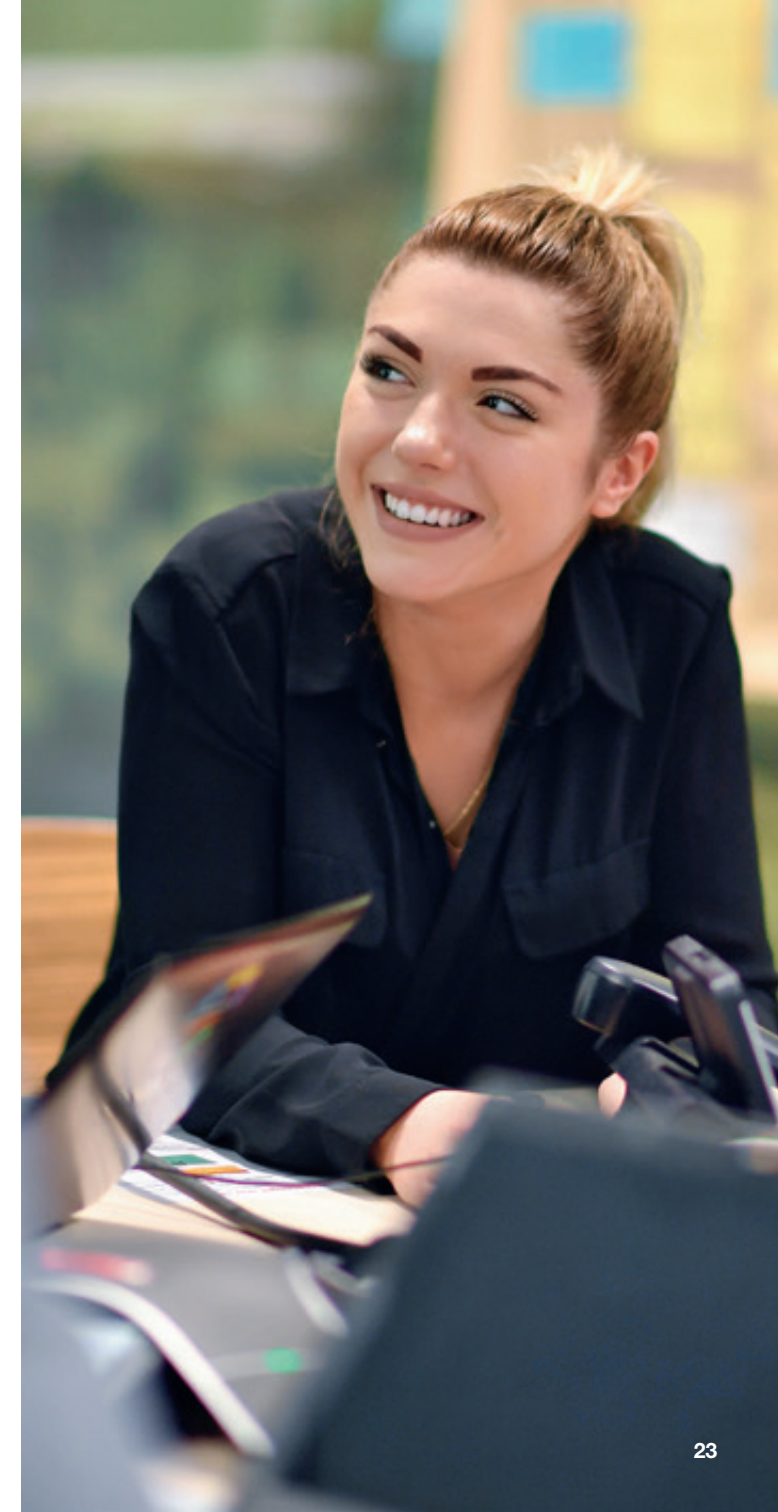
An Internet connection, a computer and a VR headset (Oculus Rift, HTC Vive). And, soon, you will also be able to use mixed reality headsets (for example Magic Leap) on fibre and 5G networks. Then you can create a life-like environment for your meeting, integrate digital content and objects, and work on them while interacting with other people.

### A few things you can do with VR Collaboration...

- ... hold brainstorming workshops to pool ideas, create prototypes, illustrate concepts, etc.;
- ... organise meetings using digital task management tools;
- ... tour a life-size 3D model of a building, with a group of specialists scattered around the planet, to inspect the design and green-light construction.



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# What if I need my computer when I don't have it with me?

## 5G PC key

The PC key is a fast and secure PC that fits in your pocket. When you plug it into any screen, it will connect to the Internet and display your virtual cloud-based PC, along with all the data in it, in seconds. And it's completely secure.



[Oran.ge/clepc5g](https://Oran.ge/clepc5g)

### What you need

A screen with HDMI and USB ports, a Bluetooth mouse and keyboard, a Wi-Fi Internet connection (and, soon, only a 5G network connection), your ID and your password. That's it. And, besides all the advantages of mobility, 5G will soon provide the same power and ultrafast response as fibre.

### How it works

The PC key establishes a secure Wi-Fi connection (or, in the near future, a 5G connection) and plugs into a TV set or other screen (using the USB outlet as its power supply). Your PC has unlimited storage capacity because it runs on and stores all your data in the cloud.



The PC key retrieves all your computer's content and settings anywhere, anytime.

### A few things you can do with the PC key...

... retrieve your saved personal documents and records from their secure cloud-based storage;

... work anywhere, even without taking a computer with you: you can retrieve your working environment, applications (which will be constantly up to date), configuration and work-related documents from the cloud with one click;

... play without a PC: cloud technology provides videogame enthusiasts with the same power as a gaming PC, without a hard disk drive or extra cards.



# Can I see a doctor halfway across the country?

## 5G Telemedicine

Today, French social security covers in-person medical appointments as much as online consultations. Orange will be connecting H4D's telemedicine booth to take that to the next level, enabling doctors to perform medical procedures too.

### What you need

This booth is a certified medical device that connects patients and doctors using videoconferencing technology. It also includes an array of instruments to help the doctor reach an accurate diagnosis. And 5G technology will enable seamless interaction.

### How it works

The patient sits in the booth, uses his or her social security card as ID, and tells the doctor about the problem. The doctor then walks the patient through the motions to use any of the available instruments.



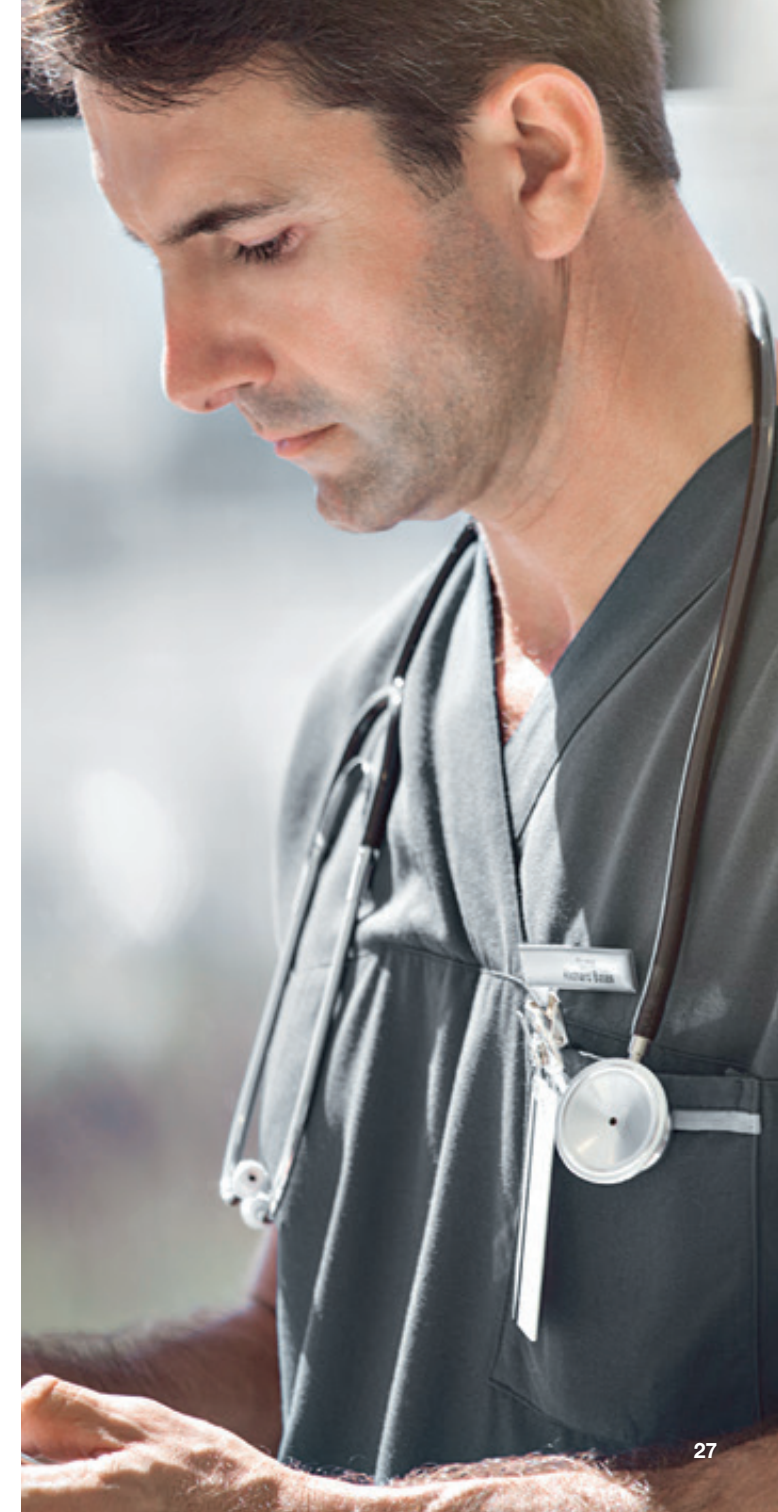
5G is opening up new possibilities for telemedicine services.

The doctor's screen displays test results instantly, so he or she can diagnose the patient's condition and write a prescription (which prints out automatically in the booth). The data from the various instruments, the documents and the prescriptions will travel over secure mobile connections, so you don't need a landline (all you need is a power supply). And, with 5G technology, patients and doctors will be able to chat as effortlessly as if they were sitting face to face. Orange will supply these telemedicine booths, and store and transfer health-related data in accordance with regulatory requirements.

### A few things you can do with 5G Telemedicine...

- ... consult doctors just about anywhere, almost as if you were in their practice;
- ... get mandatory check-ups from company doctors;
- ... rapidly set up healthcare facilities wherever they are needed.

Telemedicine systems in secluded dispensaries and other facilities will also help to bring care to medical deserts.





# How is Orange dealing with new threats and keeping data secure?

## Orange Cyberdefense

Orange Cyberdefense is Orange's cybersecurity division catering to businesses and central and local governments. Its 1,300 experts design, operate and supervise defence systems that protect their customers' critical assets.

### Its services

Orange Cyberdefense advises customers on issues ranging from audits and vulnerability scans to crisis management, and provides an array of third party information system security monitoring services.

### The challenges it tackles

Digital transformation is reshaping data management and uses in more ways than one. In days gone by, security started and ended at an organisation's front door. Nowadays, employees are travelling much more, companies are automating more operations and processes, international trade is thriving, and data is shifting en masse into public and private clouds.

All these trends are naturally creating business opportunities – but at the same time spawning new weak links, which hackers are trying to tap into with increasingly elaborate and powerful attacks. Orange Cyberdefense deals with every phase in a threat's cycle (identifying, protecting, detecting, responding and anticipating the threat) and helps its customers structure their defence strategy step by step.

### Orange Cyberdefense provides...

... expertise certified by France's ANSSI (central cybersecurity agency), combined with a network of regional branches that are in touch with their area's specific requirements and tailoring their solutions to their local environments;

... 24/7/365 services from an international network of risk surveillance and analysis centres;

... a one-stop shop to a wider cybersecurity ecosystem encompassing partner technology specialists, government agencies, regulators and innovators.



# How can hospitals provide fully integrated, seamless and secure paths for their patients?

## Smart patient care

Orange and Enovacom provide a full set of integration and security services tailored to healthcare organisations' information systems, covering a patient's full experience from the first appointment to post-operative hospital stays and subsequent check-ups. This solution, Smart patient care, includes secure access to patients' files, ensures everything goes smoothly on their path, and encompasses health-related information hosting and transmission.

### What it is

Medical staff use a variety of devices, which are linked to IT systems, which in turn connect to telecommunications networks, data storage capabilities and data exchanging solutions. If you want them all to work in sync, simply, seamlessly and securely, starting when a patient walks into your hospital, you need all your systems, objects and people to speak the same language. Enovacom is providing this interoperability on Orange Healthcare projects.



Smart patient care simplifies and secures treatment.

### How it works

The patient file is created and instantly forwarded to everyone on the team handling the case. The various specialists and biomedical devices feed the file with their comments and test results (because the system is fully interoperable). The patient's medical history can also be added to the system. The team can then retrieve all the information it needs, throughout the process, using a secure solution.

### A few things Smart patient care can do for you...

- ... simplify and streamline patients' paths, while easing medical teams' admin workloads;
- ... provide secure messaging systems to communicate within and outside the organisation;
- ... provide secure access to the information system, in keeping with all French regulatory requirements, and help to optimise a healthcare organisation's overall management.



[Oran.ge/parcourspatient](https://Oran.ge/parcourspatient)



# What if I want more control over my financial information?

## Financial coach

The General Data Protection Regulation (GDPR) has given us more control over the way our personal data is used. The question, however, is how to exercise that control in practice. Orange Bank is involved in this initiative and will be testing a digital financial assistant with Orange customers starting in 2019. This assistant will include the latest updates in regulation pertaining to personal data protection and security.

### What it is

Financial coach gives you an overview of all your accounts with your various banks, in a single application you can use to monitor your payments and repayments more closely, for example by linking your utility bills to the transactions on your statements. This service then suggests ways in which you might optimise your budget and finances.



Financial coach gives you more control over your online life.

### How it works

Financial coach is an Orange application available from Orange Bank. You can use it to combine several bank accounts securely (you don't need to share your ID and password), in a single interface, and in keeping with the European Union's second Payment Service Directive, which banks will be required to comply with starting in September 2019. You can use this assistant to monitor your income and outgo, classify your expenditure by category, and generally manage your money more smartly. It can also import bills automatically from your accounts on other websites (for example your water company, electricity company, online supermarket, health insurance, etc.) so you can pair them with the matching payments and reimbursements.

### Financial coach will make it easier to...

- ... balance your income and outgo;
- ... check payments against the associated bills;
- ... check your healthcare bills have been reimbursed.



[Oran.ge/moncoachfi](https://Oran.ge/moncoachfi)



# Can I vote on my smartphone? And is it simple, secure and secret? **Vote**

**Vote is a digital tool you can use to vote on consultations today, and for candidates to elective office soon. It is encouraging people to get more involved in their communities, non-profits, schools and professional circles, on local, regional and national levels.**



[Oran.ge/levote](https://Oran.ge/levote)

## What it is

Vote is a free mobile voting app, combined with a website for the people organising consultations. This solution uses blockchain, a decentralised technology that secures the organisation process, the voting process and the results. It is a transparent and anonymous ballot box, which keeps your vote secret because none of your personal data reaches the organiser's database.



Vote's simple interface, to cast your ballot in seconds.

## How it works

If you're a registered voter in your community, all you have to do is download the Vote app and scan an official document. The system makes sure you only vote once, protects your vote's integrity and keeps it confidential. When your council holds a consultation – to decide what to call your town's new library, say – you receive a notification and can vote for your favourite name on the mobile app. It's simple and 100% secure, and the app will tell you about the outcome when the polling is over.

## A few things you can do with Vote...

... check (and, if necessary, retrieve proof) that your vote has not been altered and has been properly tallied;

... vote wherever you are, knowing your vote is 100% secret (all the personal information you supply to create an account is deleted once you are issued a voter number).

Vote gives you a say in your company, town and region, and the mobile app is easy to use and perfectly secure.



**“I expect our innovation to be inclusive, and our approach to data to be as open and all-embracing as it can be, so that they provide the bond for a new kind of digital society. A new model, based on responsibility and respect for human values. A free and enlightened society making progress together.”**

**Stéphane Richard**  
Chairman and Chief Executive Officer