



Press Release

Paris, 18 October 2022

The 10th edition of the Orange Research and Innovation Exhibition opens on 18 October.

An opportunity to discover some forty demonstrations, including a first in Europe, the Reconfigurable Intelligent Surface aiming to improve network speeds and coverage

Orange invites its business customers, partners and Group employees to discover its most emblematic research and innovation projects at the 10th edition of its Research and Innovation Exhibition. The event, from 18 -20 October, 2022 in Châtillon, focuses on three key topics for Orange's future: the networks of the future, artificial intelligence, and data and digital to benefit society and the environment.

The exhibition resonates with Orange's innovation mission, which is to "build the present and prepare the future," by striving to have a positive impact for people, society, and the planet. Orange aims to address major social and environmental issues by developing useful, responsible digital uses that improve everyone's daily life. This also involves identifying breakthrough technologies that are competitive assets and create value for the Group.

This year, alongside research projects, the event also encompasses innovative solutions, foreshadowing services that could be deployed in the short-to medium-term.

Among the **demonstrations** presented this year, three particularly highlight the way in which Orange relies on breakthrough technologies to design the digital services and networks of the future:

- **Quantum computing for cybersecurity**
For the first time in France, Orange will present encrypted video streaming over its fiber network using quantum key distribution. This system uses cryptographic techniques to ensure the confidentiality of communications and to make any intrusion by a hacker immediately detectable during the key exchange process. This trial, carried out as part of the 'ParisRegionQCI' project funded by the Ile-de-France region and led by Orange, relies on the QKD solution by ID Quantique, IPsec Mistral encryption gateways by Thales, and collaboration with Sorbonne University.
- **Reconfigurable Intelligence Surface**
Orange presents its latest Reconfigurable Intelligent Surface (RIS) prototype aiming at improving network speed and coverage without generating additional waves. It was designed in Orange's laboratories in Sophia-Antipolis, with its partners, in the framework of the European Union-funded project RISE-6G. Orange is the first

operator in Europe to demonstrate this low power consumption technology, which is very promising for sustainable 6G.

- **Computer vision for retail**

This demonstration, in collaboration with 66degrees and Google Cloud, uses real-time analysis of HD video images to automatically detect missing products on shop shelves, making it easier to restock. The combination of edge computing and 5G offers significant computing power for Artificial Intelligence, high bandwidth, and provides a high level of data confidentiality, allowing the development of Computer vision-based use cases, in the retail, smart city or industry sectors.

Twelve mini-conferences will be organized on a wide range of topics from the Metaverse to ethical AI, network resilience, cybersecurity, quantum communication, and satellite networks.

"I am very pleased to present this 10th edition of the show. It highlights the major contributions of our research and innovation teams as well as our industry and academic ecosystem to the construction of a digital future that is useful to all, respecting the individual, society and the planet," declared Michaël Trabbia, Chief Technology and Innovation Officer at Orange.

The exhibition will also host the final of a science competition **'My thesis in three minutes,'** through 'verbal jousting.' Ten, second and third year PhD students at Orange pitch their research projects to an audience of technical and non-technical people. Three jury awards and an audience award will be handed out. You can find the ten finalists and details of the competition [here](#).

You can find all the mini-conferences and a selection of demonstrations and interviews with experts on the [Hello Future website](#).

About Orange

Orange is one of the world's leading telecommunications operators with sales of 42.5 billion euros in 2021 and 137,000 employees worldwide at 30 June 2022, including 76,000 employees in France. The Group has a total customer base of 282 million customers worldwide at 30 June 2022, including 236 million mobile customers and 24 million fixed broadband customers. The Group is present in 26 countries. Orange is also a leading provider of global IT and telecommunication services to multinational companies under the brand Orange Business Services. In December 2019, the Group presented its "Engage 2025" strategic plan, which, guided by social and environmental accountability, aims to reinvent its operator model. While accelerating in growth areas and placing data and AI at the heart of its innovation model, the Group will be an attractive and responsible employer, adapted to emerging professions.

Orange is listed on Euronext Paris (symbol ORA) and on the New York Stock Exchange (symbol ORAN).

For more information on the internet and on your mobile: www.orange.com, www.orange-business.com and the Orange News app or to follow us on Twitter: [@orangegrouppr](https://twitter.com/orangegrouppr).

Orange and any other Orange product or service names included in this material are trademarks of Orange or Orange Brand Services Limited.

Press contact:

Nicole Clarke: nicole.clarke@orange.com; +44 7811128457