



Press Release
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Orange prepares for the arrival of 5G with three new tests

Orange is striving to differentiate itself by the quality of its networks and the customer experience it offers. In order to secure the leadership it has already established in 4G, Orange is actively preparing for the arrival of 5G, the breakthrough network technology that will allow the development of radically new uses. To do this, the Group has decided to conduct several important new tests in Europe jointly with its technological and innovation partners.

Orange's 5G strategy is based on three components: improved high-speed mobile broadband, high-speed fixed broadband access and new applications to support the digital transformation of businesses. By 2020, tests related to these three areas will prepare for the arrival of 5G for both consumer and business customers.

Orange, 4G/5G connectivity partner of UTAC CERAM, the French centre for testing and the certification of autonomous vehicles

One of the most emblematic applications of 5G is autonomous cars. Orange has been chosen by **UTAC CERAM**, a world leader in testing and certifying vehicles, including autonomous cars, as its 4G/5G connectivity partner. Orange will provide 4G+ high speed coverage on the entire site of Linas-Monthéry (Ile-de-France). In addition, in collaboration with **Ericsson**, Orange will deploy an experimental mobile infrastructure to test the necessary 5G functionalities for autonomous vehicles. This test network is planned to open in the autumn of 2018.

First technical end-to-end 5G test in France in Lille and Douai

5G promises improved mobile speed up to 10 times faster than 4G. The performance will create new uses for all: augmented reality solutions, the possibility for companies to deploy a local wireless network and the ability to respond to the ever-increasing consumption of multimedia content. With **Ericsson's** 5G equipment, Orange will launch France's first ever end-to-end test in Lille and Douai between mid-2018 and mid-2019 as soon as Arcep has accorded the necessary authorisations.

A test of high-speed broadband internet access in the home under real conditions to enhance the fibre network in Romania

Orange has chosen fibre to provide high-speed broadband to homes in Europe. Where fibre has not yet been deployed to the home, a high-speed broadband access solution using 5G could be an interesting option in suburban areas in certain countries. This solution will also be made available for companies, which will be able to easily access a back-up solution in case of issues with existing networks or to use it for temporary projects such as the management of a construction site. To assess the maturity of this technology and the perception of affected customers, Orange will conduct a test under real conditions in Romania during the second half of 2018 with its partners **Samsung** and **Cisco**.

Orange is also announcing a partnership with **Nokia** and **Kathrein** for the design of a smart antenna that manages 4G/5G connectivity. This type of antenna, which is currently in the prototype stage, will be compact enough to be installed on existing mobile towers.

"5G is truly going to revolutionize usages. It will enable mobile broadband speed up to 10 times faster than 4G, provide very high speed fixed access and will make possible new services that we are now starting to design and test with our partners. This is the beginning of transformation that will affect the whole of our society and lead us towards a genuinely 5G Generation," says Mari-Noëlle Jégo-Laveissière, Executive Director of Innovation, Marketing and Technologies at Orange.

For more information, watch the following videos:

- 5G fixed access: <https://lc.cx/MRP3>
- Orange 5G powering the connected vehicles of the future: <https://lc.cx/MRPw>

About Orange

Orange is one of the world's leading telecommunications operators with sales of 40.9 billion euros in 2016 and 152,000 employees worldwide at 30 September 2017, including 93,000 employees in France. Present in 29 countries, the Group has a total customer base of more than 269 million customers at 30 September 2017, including 208 million mobile customers and 19 million fixed broadband customers worldwide. Orange is also a leading provider of global IT and telecommunication services to multinational companies, under the Orange Business Services brand. In March 2015, the Group presented its new strategic plan Essentials2020, which places customers' experience at the heart of its strategy with the aim of allowing them to benefit fully from the digital universe and the power of its new generation networks.

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

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