

Orange pursues its Internet of Things strategy

- The LoRa network is being deployed in 17 French urban areas and gradually rolled out nationally
- Datavenue now features Big Data and Internet of Things (IoT) services aimed at businesses
- A kit for connected object designers to prototype LoRa technology-based services

Orange is deploying a LoRa network in 17 French urban areas and is continuing work to standardise 2G/4G networks

Announced in September 2015, the <u>network for the Internet of Things using LoRa technology</u> (Long Range), will be rolled out gradually across France, beginning in the following 17 urban areas in the first quarter of 2016: Angers, Avignon, Bordeaux, Douai and Lens, Grenoble, Lille, Lyon, Marseille, Montpellier, Nantes, Nice, Paris, Rennes, Rouen, Toulon, Toulouse and Strasbourg.

At the same time, Orange is continuing standardisation work on future cellular networks $(2G/4G)^2$, optimised for the Internet of Things, which will be operational in 2017. Indeed, by the end of the year Orange and Ericsson will perform the first usage trial of 2G/4G networks. The technical tests will focus primarily on coverage in difficult areas such as basements and on sensor life.

Datavenue now features Big Data and Internet of Things services aimed at businesses

Announced at the hello 2014 show and previously open to start-ups, Datavenue is now targeting companies across all sectors, from industry, services and smart cities to insurance, healthcare, distribution and transport. The widespread use of digital technology, leading to the production of lots of data, and the huge rise in connected objects are creating new opportunities to boost their business performance, reinvent the customer experience and create new services.

To meet these challenges, Orange Business Services has enriched Datavenue, offering a coherent package of solutions and services that offer users security and the chance to really benefit from data analysis and the Internet of Things. Datavenue now features two new complementary offerings: Live Objects, for connected objects, and Flexible Data, for data analysis.

Live Objects enables businesses to:

- select connected objects or sensors from a catalogue;
- choose the most suitable connectivity option (cellular networks, LoRa, home gateway);
- process and store data from objects;
- integrate the relevant data into their information systems and view it.

Flexible Data offers businesses a Big Data environment comprising:

- data analysis applications enabling them to build datawarehouses from multiple sources (in partnership with Splunk) and perform predictive analysis (in partnership with PredicSis);
- a private data sharing space, enabling them to buy third-party data (weather, visitor metrics etc.) and get the most out of their own data;

² 2G EC-GSM (extended coverage GSM) standard / 4G: cat 0 LTE and PSM (Power Saving Mode).

 a secure cloud infrastructure enabling them to deploy Big Data solutions in a sovereign cloud.

Orange is thus offering its business customers end-to-end support for their data and Internet of Things projects.

A kit for start-ups and connected objects designers to create LoRa technology-based services

True to its open innovation approach, Orange is now offering start-ups and industrial partners a turnkey connectivity kit. This kit offers the chance to prototype connected objects and create LoRa technology services. It can be used on the networks Orange is currently trialling in Grenoble and in the Paris region on two Orange sites. The data from the prototypes is processed by Datavenue. Start-ups can already submit an application to receive the kit on the Orange Partner site (www.orangepartner.com/lorakit).

The Internet of Things, key diversification focus of the Essentials2020 strategic plan

- Goal: 600m euros in revenues by 2018 in IoT
- Ambition: a presence across the whole value chain:
 - to supply adapted connectivity solutions;
 - to distribute connected objects that enrich access offerings via the network of stores including *Smart Stores* and to be customers' digital coach;
 - to supply value-added services for objects in healthcare, well-being and the connected home;
 - to construct the Internet of Things ecosystem thanks to Datavenue, which is open to partners seeking to improve the services on offer.

To learn more: Datavenue web site for companies and partners (http://datavenue.orange.com)

About Orange

Orange is one of the world's leading telecommunications operators with sales of 39 billion euros in 2014 and 157,000 employees worldwide at 30 September 2015, including 98,000 employees in France. Present in 28 countries, the Group has a total customer base of 263 million customers worldwide at 30 September 2015, including 200 million mobile customers and 18 million fixed broadband customers. Orange is also a leading provider of global IT and telecommunication services to multinational companies, under the brand Orange Business Services. In March 2015, the Group presented its new strategic plan "Essentials2020" which places customer 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). For more information on the internet and on your mobile: www.orange.com, <

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