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Successful international roaming test between Orange and KPN LoRaWAN™ networks with Actility opens new horizons for IoT business applications

Orange, KPN and IoT connectivity platform supplier Actility today reveal the first successful field test of actual roaming between nationwide public IoT networks, implementing the latest LoRa Alliance<sup>™</sup> specifications. Roaming is the ability for an IoT device to seamlessly connect to different LoRaWAN networks to transmit its data. This successful implementation of roaming protocols in the field opens up the possibility of connecting sensors or trackers that move between countries. It also simplifies the implementation of international business applications – by removing the need to both integrate several IoT platforms and contract with multiple LoRaWAN operators – thereby reducing time to market for customers.

In October, the LoRa Alliance released the first version of the LoRaWAN Backend Interfaces Specification. This governs how LoRaWAN sensor data are passed between different networks to enable roaming. Based on this specification, Orange and KPN set up a secure roaming interface between their Actility network server platforms, and have successfully tested Orange devices operating on the KPN network in the Netherlands and KPN devices operating on the Orange France network.

"This first successful LoRaWAN compliant roaming communication in the field is a critical milestone to unlock several key segments of the IoT market by removing the barrier of national borders," says Bertrand Waels, head of Alternative Radio Access at Orange. "Our tests in an open collaboration with KPN in the Netherlands and with the support of Actility show that the specifications published by the LoRa Alliance do work reliably in the field."

Roaming is important for the whole IoT ecosystem (device manufacturers, device owners, application platforms, and network operators). Roaming simplifies the development of international use cases, such as with a trucking company's logistics chain or a start-up selling products across Europe. It can eliminate the need to develop variants of devices and applications for each IoT network and national markets, optimizing time to market and bringing economies of scale.

"Unlocking international markets is a major driver for our customers. We are pleased with this major step, roaming is key to extending our LoRaWAN based IoT services around the globe," adds Carolien Nijhuis, Director IoT at KPN.

Since its foundation in 2015, the LoRa Alliance has been developing open LoRaWAN IoT standards to the benefit of a large and dynamic ecosystem. "Actility was a major contributor to the roaming specification work because we believe the benefits in terms of applications and greater simplicity and reduced costs for the ecosystem are clear," says Olivier Hersent, CTO of Actility. "Ultimately the LoRaWAN ecosystem can seamlessly cluster thousands of networks. We believe an open and multi-vendor system can scale up to the requirements of the Internet of Things."

## About KPN

KPN is the leading telecommunications and ICT provider in The Netherlands, offering fixed and mobile telephony, fixed and mobile broadband internet and TV to retail consumers. KPN is also market leader in The Netherlands in ICT services, infrastructure and network related ICT solutions to business customers, including other telecommunications operators. KPN also provides wholesale network services to third parties and operates an IP-based infrastructure for international wholesale customers through iBasis. KPN's mission is to make life more free, easy and more fun by connecting people. By offering secure, reliable and future-proof networks and services, enabling people and things to be connected anytime, anywhere. For more information about KPN visit www.kpn.com or follow us on Twitter: @kpn

## About Orange

Orange is one of the world's leading telecommunications operators with sales of 41 billion euros in 2017 and 152,000 employees worldwide at 31 December 2017, including 93,000 employees in France. Present in 29 countries, the Group has a total customer base of 273 million customers worldwide at 31 December 2017, including 211 million mobile customers and 20 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).

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## About Actility & ThingPark™

Actility connects the industrial internet of things. Our IoT connectivity platform, tools, and fast-growing ecosystem enable our customers to create IoT solutions that transform business, industries and processes. The ThingPark LPWA platform connects sensors gathering data to cloud applications on any scale, from global or national networks to secure on-campus enterprise solutions, managing devices, data flows and monetization. Our value-added applications and business services enable roaming, device software update, geolocation and smart grid. Actility is at the heart of a thriving customer ecosystem, connecting solutions partners, supporting developers and device makers preparing their LPWA product for market, and providing an e-commerce Marketplace offering global distribution to solution providers. Actility co-founded the LoRa Alliance and continues to pioneer LPWA networking technology.

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