





PRESS RELEASE

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Ericsson, Orange and PSA Group to partner on 5G connected car

- Partnership between Ericsson, Orange and PSA Group to test 5G network technology for connected vehicle applications as part of "Towards 5G" initiative
- The partnership will conduct live testing using a test track on a French site, equipped with an end-to-end wireless network
- The partnership addresses connected vehicle requirements to improve road safety, as well as new automotive connected services for better user experience

Ericsson, Orange and PSA Group have signed a partnership agreement to conduct 5G technology pilot for automotive applications. "Towards 5G" connected car partnership aims to leverage 4G to 5G technology evolution to address connected vehicle requirements such as intelligent transport system (ITS) to improve road safety, new automotive and in-car services.

The partnership is technically focused on Vehicle-to-Vehicle (V2V) and Vehicle-to-everything (V2X) architecture and real-time performances for the deployment of ITS and connected services in vehicles. Initial tests use end-to-end architecture system with LTE technology and will evolve to LTE-V and 5G technology.

First use cases on Cooperative ITS have been defined and are currently tested on the field test track such as "see through" between two connected vehicles on a road and connected emergency vehicle aiming at notifying in real-time emergency vehicle approach.

Other deliverables will be produced during 2017 in the framework of this research initiative.

"Towards 5G" connected car initiative is an important opportunity for the three partners to combine their expertise in connected vehicles to meet the challenges of new mobility services and of the Internet of Things (IoT).

Ericsson provides the radio and a distributed virtualized core network to enable network slicing capabilities and intelligent geo-messaging service.

Orange provides the cellular network with the associated spectrum on the field trial site and the on-board connectivity integrating vehicular use cases.

PSA Group is in charge of automotive use case requirement definition, embedded architecture integration, user experience and technical validation.

As a result of their collaboration, the partners will develop a comprehensive experience of the requirements for a 5G infrastructure that fits to the needs of the connected vehicles industry. They will also identify the full potential of innovative services and use cases for the benefit of improving road safety and for better quality of services to end users.

"Connected IoT services are a crucial way to enhance the user experience for our customers, who today demand unprecedented levels of comfort and convenience as well as personalised services in their vehicles," said Carla Gohin, Research, Innovation and Advanced Technologies VP, PSA Group.







"Connected vehicles are part of our IoT strategic vision along with home, smart cities, e-health and Industry 4.0. Vehicle manufacturers expect us to provide the connectivity they need for remote maintenance management, for example, or to keep on-board systems software permanently up-to-date. By teaming with Ericsson and PSA Group, we are combining our capabilities to drive 5G development for innovative services with the perspective of the availability of 5G by 2020," said Mari-Noëlle Jégo-Laveissière, Executive Vice President, Innovation, Marketing and Technologies, Orange.

"5G technology will play a key role in the transport system of tomorrow. Ericsson is bringing Networks, IT and specific innovative solutions to the automotive industry. Along with key players like PSA and Orange, we will ensure the required levels of safety and security as well as contributing to a more sustainable and smart society," said Charlotta Sund, Vice President and Head of Customer Group Industry & Society, Ericsson.









About Ericsson

Ericsson is the driving force behind the Networked Society – a world leader in communication technologies and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfil their potential and create a more sustainable future

Our services, software and infrastructure — especially in mobility, broadband and the cloud — are enabling the telecoms industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With more than 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Over 40% of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions and our customers stay in front.

Founded in 1876, Ericsson has its headquarters in Stockholm, Sweden. Net sales in 2015 were SEK 246.9 billion (USD 29.4 billion). Ericsson is listed on NASDAQ OMX stock exchange in Stockholm and the NASDAQ in New York.

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FOR FURTHER INFORMATION, PLEASE CONTACT

Ericsson Corporate Communications

Phone: +46 10 719 69 92

E-mail: media.relations@ericsson.com

Ericsson Investor Relations Phone: +46 10 719 00 00

E-mail: investor.relations@ericsson.com

About Orange

Orange is one of the world's leading telecommunications operators with sales of 40 billion euros in 2015 and 154,000 employees worldwide at 30 September 2016, including 95,000 employees in France. Present in 29 countries, the Group has a total customer base of 256 million customers worldwide at 30 September 2016, including 194 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).

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Press contact:

Olivier Emberger

+33 1 44 44 93 93 - olivier.emberger@orange.com

About PSA Group

With sales and revenue of €54 billion in 2015, the PSA Group designs unique automotive experiences and delivers mobility solutions that provide freedom and enjoyment to customers around the world. The Group leverages the models from its three brands, Peugeot, Citroën and DS, as well as a wide array of mobility and smart services from its Free2Move brand, to meet the evolving needs and expectations of automobile users. PSA is the European leader in terms of CO₂ emissions, with average emissions of 104.4 grams of CO₂ per kilometre in 2015, and an early innovator in the field of autonomous and connected cars, with 1.8 million such vehicles worldwide. It is also involved in financing activities through Banque PSA Finance and in automotive equipment via Faurecia. Find out more at groupe-psa.com/en.

Press contact:

Laure de Servigny

+ 33 1 40663542 - <u>laure.deservigny@mpsa.com</u>