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LTE-Advanced "carrier aggregation" on commercial equipment a world first #MWC11

Nokia Siemens Networks demonstrates combination of LTE frequency bands aimed at providing improved mobile broadband

Nokia Siemens Networks has conducted the world's first successful demonstration of LTE-Advanced carrier aggregation on commercial equipment. The showcase, which is based on the company's Flexi Multiradio Base Station, demonstrates its leading role in commercializing the latest technology developments in LTE.

Carrier aggregation is a key feature of LTE-Advanced that enables operators to create larger "virtual" carrier bandwidths for LTE services by combining separate spectrum allocations. The benefits of this aggregation include higher peak data rates and increased average data rates for users.

"We saw an increase in LTE data rates of 90% using a combination of 800 MHz and 2.6 GHz bands, a scenario relevant to the spectrum allocations of many operators," said Thorsten Robrecht, head of Network Systems product management, Nokia Siemens Networks. "The demonstration underlines our holistic approach to LTE and LTE-Advanced where research and IPR activities are well aligned with product development, targeting real and relevant opportunities for network operators."

The demonstration was conducted at Nokia Siemens Networks' LTE Center of Excellence in Ulm, using the company's commercial Single RAN solution including the award-winning Flexi Multiradio Base Station*.

Customers, press and analysts are welcome to view the LTE-Advanced carrier aggregation demo at the Mobile World Congress in the Nokia Siemens Networks' Experience Center in Hall 8, C01.

About Nokia Siemens Networks

Nokia Siemens Networks is a leading global enabler of telecommunications services. With its focus on innovation and sustainability, the company provides a complete portfolio of mobile, fixed and converged network technology, as well as professional services including consultancy and systems integration, deployment, maintenance and managed services. It is one of the largest telecommunications hardware, software and professional services companies in the world. Operating in 150 countries, its headquarters are in Espoo, Finland. www.nokiasiemensnetworks.com

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Notes to editors:

* Nokia Siemens Networks' Single RAN including the Flexi Multiradio Base Station provides a futureproof, easy and cost-efficient path to LTE in both FDD and TDD spectrum bands via a simple software upgrade. The Flexi Multiradio Base Station, the commercial hardware platform on which Nokia Siemens Networks conducted the LTE-Advanced carrier aggregation demo, has already been shipped to more than 200 operators. Besides the Single RAN that supports GSM, 3G, FDD-LTE and TD-LTE, the company's LTE telecom infrastructure offering also features the Evolved Packet Core, including Flexi NS (Network Server) and Flexi NG (Network Gateway), transport solutions, network management system, Self Organizing Networks (SON) and award-winning Voice over LTE (VoLTE). For more information, click <u>here</u>

The recently launched LTE-Advanced ready Flexi Multiradio 10 Base Station is a perfect match for providing high-capacity base station sites and a smooth evolution towards the LTE-Advanced standard. For more information, refer to <u>New all-in-one mobile network supports LTE-Advanced, LTE, 3G, GSM</u>.

Long Term Evolution (LTE) is the next-generation mobile broadband technology and the evolutionary step from GSM, WCDMA/HSPA/HSPA+, TD-SCDMA, CDMA and WiMAX networks. LTE delivers the best broadband user experience and smart device services in an efficient manner due to increased data rates, reduced latency and scalable flat all-IP network architecture.

Nokia Siemens Networks is leading the commercialization of LTE. It was the first to make an LTE call using commercial hardware and standards-compliant software in 2009. In addition, Nokia Siemens Networks is running LTE trials with over 25 operators across the globe and has already been selected by 31 network operators for commercial LTE deployment. These include LTE pioneers TeliaSonera and Deutsche Telekom, who have been working with Nokia Siemens Networks for the world's first commercial LTE networks in service.