

World's first validation of LTE-Advanced Pro uplink 64QAM and LTE-Advanced uplink CA with R&S TS8980

The R&S TS8980 RF conformance test system from Rohde & Schwarz has achieved the world's first validation for both LTE-Advanced uplink carrier aggregation (UL CA) and LTE-Advanced Pro uplink 64QAM (UL 64QAM). RF conformance is a critical part of device certification as specified by the Global Certification Forum GCF. Mobile manufacturers that use the most advanced chipset solutions will now be able to certify their devices in line with GCF requirements for UL CA and UL 64QAM.

Munich, May 12, 2016 — With the validation of LTE-Advanced Pro uplink 64QAM and LTE-Advanced uplink carrier aggregation, Rohde & Schwarz paves the way for wireless operators worldwide to make use of the latest LTE features. Both functionalities will grant individual users higher uplink data rates and offer all users higher average uplink data rates. The validation took place at the recent Global Certification Forum (GCF) meeting CAG#46 in New Jersey, USA, supported by leading wireless network operators and cellular equipment manufacturers.

LTE uplink carrier aggregation (LTE UL CA) is a new feature in the 3GPP Rel. 12 specification that combines two LTE uplink channels for a single user, effectively doubling the uplink data rate. This feature increases the currently available maximum uplink rate of 50 Mbit/s per LTE user to 100 Mbit/s per LTE user (using the traditional 16QAM modulation in the uplink).

LTE UL 64QAM was introduced in 3GPP Rel. 13 as a new modulation scheme for the LTE uplink. It boosts the uplink data throughput by transmitting 6 bits per transmitted LTE uplink symbol instead of the current 4 bits per LTE uplink symbol with 16QAM. This translates to a 50 percent increase in uplink data speed. LTE 64QAM is part of LTE-Advanced Pro, which is intended to mark the point in time where the LTE platform has been dramatically enhanced to address new markets as well as adding functionality to improve efficiency.

When these features are combined, LTE UL CA and LTE UL 64QAM enable a new maximum uplink data rate of 150 Mbit/s. This takes LTE-Advanced to the next level, with both downlink and uplink peak data rates now surpassing 100 Mbit/s. Higher data rates in

the LTE uplink finally address the main bottleneck caused by today's hunger for more data that is mainly due to social networking and cloud services.

The R&S TS8980 from Rohde & Schwarz is a scalable and validated GCF and PTCRB test system. It provides test coverage for Rel. 8 to Rel. 13 versions of 3GPP 36.521-1 (TX, RX, and performance), 36.521-3 (radio resource management – RRM) and supplementary RF/RRM test plans for wireless network operators. The recent validations are part of the ongoing commitment of Rohde & Schwarz to be the leading manufacturer of conformance test equipment and to help network operators, chipset and mobile device manufacturers certify their user equipment and keep service quality high in wireless cellular networks.

Press contacts:

Europe (headquarters): Christian Mokry, Phone: +49 89 4129 13052, E-mail: press@rohde-schwarz.com

North America: Pam Sanders, Phone: +1 410 910 7908, E-mail: pam.sanders@rsa.rohde-schwarz.com

Asia Pacific: Wen Shi Tong, Phone: +65 6 307-0029, E-mail: press.apac@rohde-schwarz.com

Contacts for readers:

Customer Support Europe, Africa, Middle East: +49 89 4129 12345
customersupport@rohde-schwarz.com

Customer Support North America: +1 888 TEST RSA (+1 888 837 87 72)
customer.support@rsa.rohde-schwarz.com

Customer Support Latin America: +1 410 910 79 88
customersupport.la@rohde-schwarz.com

Customer Support Asia Pacific: +65 65 13 04 88
customersupport.asia@rohde-schwarz.com

Customer Support China: +86 800 810 8228 or +86 400 650 5896
customersupport.china@rohde-schwarz.com

Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, cybersecurity, secure communications, radiomonitoring and radiolocation. Founded more than 80 years ago, this independent company has an extensive sales and service network and is present in more than 70 countries. The electronics group is among the world market leaders in its established business fields. On June 30, 2015, Rohde & Schwarz had approximately 9900 employees. The group achieved a net revenue of EUR 1.83 billion in the 2014/2015 fiscal year (July to June). The company is headquartered in Munich, Germany, and also has strong regional hubs in Asia and the USA.

R&S ® is a registered trademark of Rohde & Schwarz GmbH & Co. KG.

All press releases, including photos for downloading, are available on the Internet at <http://www.press.rohde-schwarz.com>.