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Qualcomm Announces 5G NR Spectrum Sharing Prototype System

-- Qualcomm Technologies prototype system to test, demonstrate and trial new 5G spectrum sharing technologies and drive 3GPP 5G NR standardization --

SAN DIEGO, Nov. 14, 2016 /PRNewswire/ -- Qualcomm Incorporated (NASDAQ: QCOM) today announced that its subsidiary, Qualcomm Technologies, Inc., has introduced its first 5G New Radio (NR) spectrum sharing prototype system and trial platform. The industry is designing 5G NR to get the most out of spectrum available across all spectrum types – licensed, unlicensed and shared spectrum – and across spectrum from lower bands (sub-6 GHz) to high bands in the mmWave range. Qualcomm Technologies' prototype system aims to show that 5G spectrum sharing technologies will bring higher levels of mobile broadband performance to shared spectrum to enable fiber-like experiences, as well as extending 5G into new types of deployments, such as dedicated 5G networks for enterprise and industrial IoT.

"Qualcomm Technologies' new 5G spectrum sharing prototype system adds to our existing 5G NR sub-6 GHz and millimeter wave prototype systems and further demonstrates our commitment to drive and track 3GPP standardization of 5G NR, which is designed with forward compatibility to support new spectrum sharing technologies," said Matt Grob, executive vice president and chief technology officer, Qualcomm Technologies, Inc. "5G NR spectrum sharing innovations enable new spectrum sharing paradigms. This technology will benefit operators with licensed spectrum but also opens the doors to those without licensed spectrum – such as cable operators, enterprise or IoT verticals – to take advantage of the 5G NR family of technologies."

This new prototype is based on the Qualcomm Technologies' sub-6GHz and mmWave 5G NR end-to-end prototypes which includes both base station and user equipment (UE). The Qualcomm Technologies spectrum sharing testbed is expanded to support Listen-Before-Talk (LBT) technology, wideband waveforms with low latency, and enhancements in the radio and network protocols, on top of which new spectrum sharing technologies are being designed and evaluated.

5G spectrum sharing will expand and enhance the spectrum sharing technologies introduced in LTE, specifically License Assisted Access (LAA) to aggregate across spectrum types, LTE Wi-Fi Aggregation (LWA) to aggregate across technologies, CBRS/License Shared Access (LSA) to share spectrum with incumbents and other deployments, MulteFire™ to operate stand-alone deployments in unlicensed spectrum, as well as introducing new spectrum sharing paradigms.

Qualcomm Technologies' new prototype system will be utilized for technology development in 2017 with field trials together with industry leaders to follow.

For more information on how Qualcomm Technologies is leading in LTE, 5G and 5G NR technologies, please visit our [5G website](#).

About Qualcomm Incorporated

Qualcomm Incorporated (NASDAQ: QCOM) is a world leader in 3G, 4G and next-generation wireless technologies. Qualcomm Incorporated includes Qualcomm's licensing business, QTL, and the vast majority of its patent portfolio. Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, operates, along with its subsidiaries, substantially all of Qualcomm's engineering, research and development functions, and substantially all of its products and services businesses, including its semiconductor business, QCT. For more than 30 years, Qualcomm ideas and inventions have driven the evolution of digital communications, linking people everywhere more closely to information, entertainment and each other. For more information, visit Qualcomm's [website](#), [OnQ blog](#), [Twitter](#) and [Facebook](#) pages.

Qualcomm Contacts:

Pete Lancia, Corporate Communications
Phone: 1-858-845-5959
Email: corpcomm@qualcomm.com

John Sinnott, Investor Relations
Phone: 1-858-658-4813
Email: ir@qualcomm.com

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