

Exhibit 1: Description of Research and Experimentation

CableLabs respectfully requests the issuance of an experimental license using the equipment and operating parameters set forth in this document. The goal of our related test procedure is to allow CableLabs' Wireless Department to run a test procedure involving the co-existence of LTE-LAA and WiFi networks operating in the 5 GHz band and better understand the performance impact on both networks when operating on the same or adjacent channels in the related 5 GHz unlicensed bands. Since the LTE unlicensed equipment operates as an aggregated Secondary Cell (SCell), the anchor primary cell (PCell) is expected to operate in Band 7. Accordingly the goal of this application is to allow CableLabs to operate a PCell in Band 7.

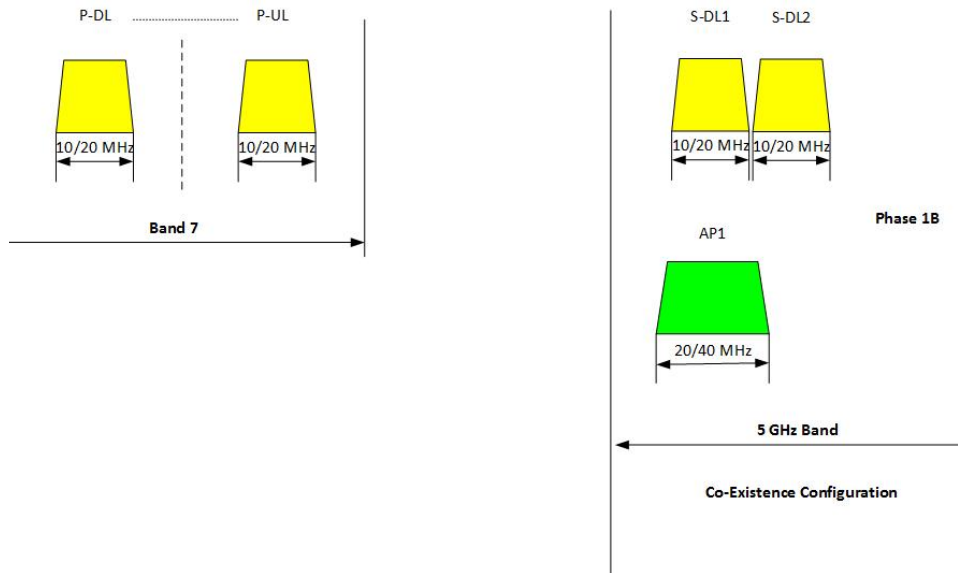


Fig. 1. Graphical description of the intended test scenario, targeting the co-existence of WiFi and LTE equipment (operating in the un-licensed 5 GHz bands, with a LTE PCell operating in Band 7).

The completion of this test procedure complements the research done by CableLabs on LTE in un-licensed bands (LTE-U), as a way to increase the efficiency and performance of wireless communications employed in un-licensed bands.

CableLabs intends to operate pre-commercial LTE-U equipment (comprising both the PCell and SCell equipment) from Qualcomm. This equipment has been designed in line with the PHY and IP stack requirements as defined by the related 3GPP specifications. The band 7 equipment (PCell) is not different than other femto/pico cell BS (eNB) based on Qualcomm System on Chip (SoC) femto eNB.

CableLabs intends to run the test procedure in a test house located at 14652 Beeler Street, Brighton, CO 80602. This house was modified in order to accommodate wireless testing in indoor environments targeting particularly Non Line-Of-Sight (NLOS).

CableLabs has already contacted the current licensed operator of these frequency ranges in the relevant geographic region and provided an overview of the proposed operations. The operator has tentatively agreed to coordinate to enable these experiments. Accordingly, CableLabs contemplates that coordination with the licensee will be a condition of the license, and CableLabs intends to limit

operations to the coordinated frequencies. CableLabs has proposed an experimental license duration of 24 months, at the end of which CableLabs may request a renewal subject to the consent of the FCC and continued coordination with the spectrum operator.