

Exhibit
T-Mobile License LLC
Experimental Station WI2XHR
FCC Form 442
Application for Modification

DESCRIPTION OF APPLICATION AND EXPERIMENT

T-Mobile License LLC (“T-Mobile”) hereby submits the attached application, requesting that the Commission modify T-Mobile’s experimental Fifth Generation (“5G”) wireless operations in Bellevue, Washington conducted under the call sign WI2XHR.

On May 4, 2016, the Commission issued the authorization for station WI2XHR, allowing T-Mobile to conduct experimental operations in and around T-Mobile’s facilities in Bellevue, Washington. T-Mobile continues to conduct 5G testing at those facilities. However, T-Mobile’s research continues to evolve. In order to adequately test signal strength, transmission and reception characteristics and other parameters associated with using millimeter wave spectrum in its planned 5G network, T-Mobile seeks an increase in the Effective Radiated Power (“ERP”) of the transmitters employed at its facilities. Because the transmitters will continue to operate in closed environments, T-Mobile’s testing – albeit at a modified ERP level – will not cause harmful interference to licensees in the frequency bands. Nevertheless, T-Mobile acknowledges that its operations will occur on a secondary basis and that it will mitigate any interference caused to primary users of the bands. Such testing will further advance T-Mobile’s understanding of 5G technologies and operations in the millimeter bands.

Based on the foregoing, T-Mobile requests that the Commission process the modification application promptly to accelerate T-Mobile’s 5G research efforts.