

T-Mobile Licensee LLC
Request for Part 5 Special Temporary Authority
ELS File No. 1385-EX-ST-2019
July 30, 2019

NARRATIVE STATEMENT

Pursuant to Section 5.61 of the Commission’s rules, 47 C.F.R. §§ 5.61 (2018), T-Mobile Licensee, LLC (“T-Mobile”) hereby respectfully requests experimental authority from August 15, 2019 to December 31, 2019, to test 5G prototype technologies from multiple vendors. Tests would be conducted in Los Angeles, California at sites in close proximity to the Los Angeles Convention Center as part of T-Mobile’s participation in the Mobile World Congress Americas event in October of 2019. Operations would use the AWS-3 G-Block spectrum at 1755-1760/2155-2160 MHz band.

A. Purpose of Operation and Need for Experimental License:

T-Mobile is working with equipment vendors to test 5G NR in multiple spectrum bands interworking with LTE for Dual Connectivity. T-Mobile proposes to demonstrate these capabilities using spectrum that is currently not carrying commercial traffic before, during and after the Mobile World Congress Americas to be held in October, 2019.

B. Location of Proposed Operation:

T-Mobile intends to continue to conduct testing of mobile operations within 10 kilometers of the 4 locations below:

Address	Latitude	Longitude	Radius
Los Angeles, CA	33° 58' 28"	118° 19' 50"	10 km
Los Angeles, CA	34° 04' 26"	118° 13' 01"	10 km
Huntington Park, CA	33° 58' 49"	118° 13' 32"	10 km
W. Hollywood, CA	34° 05' 24"	118° 20' 39"	10 km

C. Technical Specifications:

1. Frequencies Desired

At each location, T-Mobile proposes to use 1755-1760 MHz for mobile transmissions and 2155-2160 MHz for fixed transmissions.

2. Equipment To Be Used

Manufacturer: Ericsson
Model Number: 4415
No. Of Units: 2
Experimental: No

Manufacturer: Ericsson
Model Number: 2203
No. Of Units: 2
Experimental: No

3. Power Levels

The fixed stations will utilize up to 40 watts ERP (peak) for outdoor testing. The mobile units will operate with up to 200 milliwatts ERP.

4. Type of Emission, Modulation Technique, and Bandwidth Required

The prototype equipment will utilize 5 megahertz of bandwidth and an emission designator of 5M0F7D. The modulation technique is digital OFDM.

5. Directional Antenna

Base stations will utilize a directional antenna. The width of the beam at the half-power point is 65 degrees. The orientation in the horizontal plan is 0/120/240 degrees and 0 degrees in the vertical plane.

D. Protection Against Causing Interference:

T-Mobile has established a point of contact identified below with “kill switch” authority should any interference occur to primary licensed services. Should interference occur, T-Mobile will take immediate steps to resolve the interference, including, if necessary, arranging for the discontinuance of operation.

E. Restrictions on Operation:

T-Mobile is not seeking authority to perform a market study under the requested experimental STA. Moreover, no fees will be charged to entities using the equipment during this test. Entities will be advised in accordance with Section 2.803 of the Commission’s rules, 47 C.F.R. §2.803, that any unapproved devices which have not been authorized as required by the FCC are not being offered for sale or lease, or sold or leased, until authorization is obtained.

F. Public Interest:

T-Mobile submits that issuance of the experimental STA as requested is in the public interest, convenience, and necessity. Grant of an experimental STA will help T-Mobile to develop and test innovative equipment to provide service to consumers.

G. Contact Information:

Technical Contact and “Stop Buzzer/Kill Switch:”

John Hunter
T-Mobile USA, Inc.
601 Pennsylvania Ave., NW
Washington, DC 20004
202-654-5907
John.Hunter21@t-mobile.com

FCC Legal Counsel/Contact:

Michael Lewis
Senior Engineering Advisor
DLA Piper LLP
500 8th Street, NW
Washington, DC 20004
Telephone: 202.799.4042
Michael.A.Lewis@dlapiper.com