

Narrative Statement

By this application, T-Mobile License, LLC (“T-Mobile”) seeks experimental authorization for a period of two years from the date of grant so that its affiliate, T-Mobile, USA, Inc., may test Fifth Generation (“5G”) wireless technologies across the full 600 MHz band at certain sites located in the following Partial Economic Areas (“PEAs”): PEA 2 (Los Angeles, CA); PEA 8 (Dallas, TX); PEA 16 (Seattle, WA); PEA 18 (San Diego, CA); and PEA 26 (Las Vegas, NV). As explained below, T-Mobile is the licensee of 600 MHz spectrum in each of these markets. If it is able to access the additional spectrum – spectrum that would otherwise remain temporarily unused – at specific sites in those areas covered by this application, it will gain a better understanding of the new innovative services that the 600 MHz band can offer during the technology development phase of the various advanced features and functionalities of 5G NR. Accordingly, grant of this application is in the public interest.

A. Background:

T-Mobile is licensed to operate on the 600 MHz band C, D, and E Blocks in both PEA 2 (Los Angeles, CA) and PEA 18 (San Diego, CA). Other entities hold authorizations for the 600 MHz band A, B, and F Blocks in PEA 2 (Los Angeles, CA) and for the F and G Blocks in PEA 18 (San Diego, CA).^{1/} The 600 MHz band G Block in Los Angeles and the A and B Blocks in San Diego remained unassigned and unused since the conclusion of the broadcast incentive auction.

T-Mobile is also licensed to operate on the 600 MHz A and B Blocks in PEA 8 (Dallas, TX); the B, C, and D Blocks in PEA 16 (Seattle, WA); and the C, D, and E Blocks in PEA 26 (Las Vegas, NV). Other entities hold authorizations for the other 600 MHz band blocks in PEA 8 (Dallas, TX); PEA 16 (Seattle, WA); and PEA 26 (Las Vegas, NV).^{2/} There are no unlicensed 600 MHz blocks in those PEAs.

B. Purpose of Operation and Need for Experimental License:

T-Mobile has been a leader in clearing the 600 MHz spectrum it won in the broadcast incentive auction and deploying that spectrum for mobile broadband operations. As it recently reported, T-Mobile is proceeding on, or ahead of, the schedule the Commission established for clearing the

^{1/} The 600 MHz band A and B Blocks in PEA 2 (Los Angeles, CA) are licensed to ParkerB.com Wireless L.L.C. (“ParkerB.com”), and the F Block is licensed to Channel 51 License Co LLC. In PEA 18 (San Diego, CA), the 600 MHz band F and G Blocks are licensed to ParkerB.com.

^{2/} In PEA 8 (Dallas, TX), LB License Co is authorized to operate on the 600 MHz C, D, and E Blocks, and ParkerB.com is authorized to operate on the F and G Blocks. In PEA 16 (Seattle, WA), CC Wireless Investment, LLC is authorized to operate on the 600 MHz A Block; LB License Co is authorized to operate on the E Block; and ParkerB.com is authorized to operate on the F and G Blocks. In PEA 26 (Las Vegas, NV), Bluewater Wireless II, L.P. is authorized to operate on the 600 MHz A Block; Star 600 is authorized to operate on the B Block; and ParkerB.com is authorized to operate on the F and G Blocks.

600 MHz band.^{3/} T-Mobile's 600 MHz spectrum now reaches nearly 8,300 cities and towns in 48 states and Puerto Rico and covers one million plus square miles, including rural areas.^{4/} T-Mobile's progress has allowed it to accelerate the planned launch of the first nationwide 5G network using 600 MHz spectrum, offering a truly mobile 5G experience to customers this year.^{5/}

T-Mobile seeks to make its 600 MHz service even better. That is why, among other things, it is working with equipment vendors to test innovative 5G technologies. One such test would evaluate 5G NR across wider bandwidths, especially in densely populated areas. T-Mobile can best conduct that evaluation by using spectrum that is currently not deployed. Accordingly, T-Mobile seeks experimental authorization to test 5G NR technologies across the entire 600 MHz band at certain sites in PEA 2 (Los Angeles, CA); PEA 8 (Dallas, TX); PEA 16 (Seattle, WA); PEA 18 (San Diego, CA); and PEA 26 (Las Vegas, NV). In PEA 2 (Los Angeles, CA) and PEA 18 (San Diego, CA), T-Mobile seeks to use a combination of the 600 MHz spectrum blocks: (i) for which it is licensed; (ii) that have been licensed to other entities but are unused; and (iii) that remained unassigned after the broadcast incentive auction. In PEA 8 (Dallas, TX), PEA 16 (Seattle, WA), and PEA 26 (Las Vegas, NV), T-Mobile seeks to use a combination of the 600 MHz spectrum blocks: (i) for which it is licensed; and (ii) that have been licensed to other entities but are unused. Grant of the application would allow T-Mobile to better understand the full characteristics of the 600 MHz band using different technology vendors, particularly in congested markets, and gain a better understanding of the new, innovative services that this low-band spectrum can offer, without causing harmful interference to existing users of the band.

C. 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:

Christopher Wieczorek
T-Mobile USA, Inc.
601 Pennsylvania Ave., NW
Washington, DC 20004
202-654-5913

^{3/} See Letter from Steve B. Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile, to Ms. Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-268, *et al.*, at 1 (filed Oct. 24, 2019).

^{4/} See T-Mobile News, *T-Mobile Maintains Unprecedented Momentum in Q3 and Sets the Stage for the First Nationwide 5G Network Launch in 2019* (Oct. 28, 2019), <https://www.t-mobile.com/news/t-mobile-q3-2019-earnings>.

^{5/} See T-Mobile, *5G is Coming to More Places on Our Newest, Most Powerful Signal* (last visited Nov. 8, 2019), https://www.t-mobile.com/coverage/4g-lte-5g-networks?icid=WMM_TMO_U_195G4GOOD_4CGP942I0FQO535T18781# ("Nationwide 5G is coming to T-Mobile on December 6, with our powerful 600 MHz signal at its foundation."); T-Mobile News, *OnePlus 7T Pro 5G McLaren Coming to T-Mobile This Year to Light Up the Un-carrier's 5G Nationwide* (Oct. 23, 2019), <https://www.t-mobile.com/news/oneplus-7t-pro-5g>.

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Should interference occur, T-Mobile will take immediate steps to resolve the interference, including, if necessary, arranging for the discontinuance of operation.

D. Restrictions on Operation:

To implement the testing, T-Mobile will enable approximately 10 retail or experimental handsets per a site and connect them to certain base stations that will be able to access the spectrum for which it seeks authorization. T-Mobile will not activate either customer units or base stations for the exclusive purpose of using the 600 MHz spectrum to which T-Mobile is seeking access.

E. Public Interest:

Grant of the application is in the public interest because it will allow T-Mobile to further develop its plans for its 5G network using low-band spectrum and provide innovative services to consumers. In addition, grant of the application would allow T-Mobile to put the otherwise fallow spectrum to productive use without harming other licensees.

T-Mobile recognizes that experimental authorizations are issued on a secondary basis only and that grant of the application will provide it with no additional rights to permanently operate on the channels blocks covered by the experimental authorization. Where T-Mobile proposes to use spectrum licensed to others that is unused today, it will notify those other licensees of its proposed operations and that it will terminate its operations immediately upon notification that they have initiated operations on their otherwise unused licensed spectrum. For currently unlicensed spectrum in PEA 2 (Los Angeles, CA) and PEA 18 (San Diego, CA), T-Mobile expects that the Commission will ultimately initiate a process to make those 600 MHz blocks available for the provision of service on a permanent basis. When that occurs, T-Mobile will cease all operations on the unassigned blocks under this authorization.