

**T-Mobile License, LLC**  
**Application for Experimental Authorization**  
**Special Temporary Authority**

**DESCRIPTION OF REQUEST**

By the associated application, and pursuant to Section 5.54 of the FCC's rules,<sup>1/</sup> T-Mobile License, LLC requests special temporary authority ("STA") from May 1, 2022 to November 1, 2022 for its affiliate, T-Mobile USA, Inc. ("T-Mobile"), to operate on spectrum in the 39.2-39.6 GHz portion (the N7, N8, N9, and N10 Blocks) of the 38.6-40 GHz ("39 GHz") band in and around the Las Vegas, Nevada area. Grant of the STA will permit T-Mobile to assess how networks incorporating significant contiguous spectrum in the 39 GHz band can be optimized and further evaluate the future use of millimeter wave spectrum for innovative next-generation wireless services.

**A. Purpose of Operation and Need for Experimental License**

As the Commission is aware, T-Mobile was a successful bidder in the auction of 39 GHz licenses,<sup>2/</sup> submitting \$931,609,379 in gross bids and winning more than 2,300 licenses covering nearly 400 Partial Economic Areas ("PEAs").<sup>3/</sup> Among others, T-Mobile was licensed to operate across the N11, N12, N13, and N14 Blocks (covering 39.6-40 GHz) of the 39 GHz band in PEA026 – Las Vegas, Nevada. T-Mobile seeks an STA to operate on the adjacent N7, N8, N9, and N10 Blocks (covering 39.2-39.6 GHz) so that it may assess how networks incorporating 800 megahertz of contiguous 39 GHz spectrum can be optimized.

T-Mobile previously submitted requests for authority to conduct experimental and other operations in the 39 GHz band, including for the use of 800 megahertz of contiguous 39 GHz spectrum held by T-Mobile and others as well as for the continued use of 39 GHz spectrum in and around Las Vegas, Nevada, and other areas while waiting for approval of its long-form application.<sup>4/</sup> All of those requests were granted by either the FCC's Office of Engineering and

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<sup>1/</sup> See 47 C.F.R. § 5.54; see also *id.* § 5.61.

<sup>2/</sup> See *Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Services Closes; Winning Bidders Announced for Auction 103*, Public Notice, 35 FCC Rcd 2015 (2020).

<sup>3/</sup> See *id.* at Attachment B.

<sup>4/</sup> See, e.g., Application for Special Temporary Authority of T-Mobile License LLC, ELS File No. 0836-EX-ST-2020 (filed May 21, 2020) (amended June 17, 2020) (requesting authority "to use spectrum in the 39 GHz band to begin testing base station and handset use of 800 megahertz of 39 GHz band spectrum in three markets – Dallas/Ft. Worth, TX, Irvine, CA, and San Diego, CA"); Application for Experimental Authorization of T-Mobile License LLC, ELS File No. 1041-EX-CN-2020 (Dec. 12, 2020) (requesting a two-year experimental authorization to operate in the 39 GHz band consistent with its May 2020 STA request); Application for Special Temporary Authority of T-Mobile License LLC, ULS File No. 0009056096 (filed Apr. 23, 2020) (requesting STA for T-Mobile's 39 GHz licenses in Las Vegas, NV (PEA026)); Application for Special Temporary Authority of T-Mobile License LLC, ULS File No. 0009056095 (filed Apr. 23, 2020) (requesting STA for T-Mobile's 39 GHz licenses in San Francisco, CA (PEA004)); see also Application for Modification of Experimental Authorization of T-Mobile License LLC, ELS File No. 0074-EX-CM-2022 (filed Mar. 24, 2022) (seeking to modify the authority it received in 2016 to conduct experimental operations in the 39 GHz band).

Technology or the Wireless Telecommunications Bureau.<sup>5/</sup> Consistent with those applications, grant of the instant STA request would serve the public interest because it would allow T-Mobile to further explore how to make even more productive use of its millimeter wave spectrum and test its network capabilities and features, many of which require wide bandwidths for optimal functioning, across the 39 GHz band. That, in turn, will help accelerate T-Mobile's ability to provide services using 39 GHz spectrum now and in the future.

**B. Restrictions on Operation**

T-Mobile's operations pursuant to the STA will be limited in time and geographic scope. As the attached application indicates, T-Mobile proposes to transmit using 11 base stations in and around Las Vegas, Nevada. And it will conduct its experimental operations using approximately 10 handsets. The end user handsets with which each base station will be able to communicate are those that already include 39 GHz spectrum. There are a limited number of those handsets in operation today, and because of the limited range of 39 GHz signals, they will only be able to communicate when they are near one of the limited number of base stations T-Mobile will operate. T-Mobile will actively work with equipment manufacturers during the STA period to test the equipment. And it will conduct its operations consistent with the Commission's equipment marketing and importation rules.<sup>6/</sup>

**C. Protection Against Causing Interference**

T-Mobile recognizes that an STA affords only secondary, non-interfering rights vis-à-vis the primary 39 GHz licensee and that AT&T is currently licensed to operate in the 39 GHz band on the N7, N8, N9, and N10 Blocks in PEA026 – Las Vegas, Nevada. T-Mobile will coordinate its spectrum use to remediate interference, including, if necessary, by terminating operations on the 39 GHz band N7, N8, N9, and N10 Blocks in PEA026 – Las Vegas, Nevada.

T-Mobile has established a point of contact identified below with "kill switch" authority should any interference occur to primary licensed service:

Chris Wieczorek  
T-Mobile USA, Inc.  
601 Pennsylvania Ave., NW  
Washington, DC 20004  
202-654-5913  
[chris.wieczorek@t-mobile.com](mailto:chris.wieczorek@t-mobile.com)

Finally, T-Mobile agrees that grant of its STA request will provide it with no additional rights to operate permanently on the spectrum covered by the STA. Indeed, because T-Mobile is already

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<sup>5/</sup> See, e.g., FCC Experimental Authorization (Call Sign WL2XKM); FCC Experimental Special Temporary Authorization (Call Sign WQ9XNJ); see also *Wireless Telecommunications Bureau Market-Based Applications; Action*, Public Notice, Report No. 15025 (June 30, 2020).

<sup>6/</sup> See 47 C.F.R. §§ 2.803, 2.1204.

licensed to operate in the 39 GHz band, no reliance interest will be created by grant of this request.

Should there be any questions regarding this application, the Commission is asked to contact Mr. Wiczorek.