

T-Mobile License LLC
Application for Modification of Experimental Authorization
FCC Form 442
Call Sign WN2XAK

DESCRIPTION OF REQUEST

By the associated FCC Form 442, T-Mobile License LLC seeks to modify its experimental authorization associated with call sign WN2XAK so that its affiliate T-Mobile USA, Inc. (“T-Mobile”) may continue operating in the 3.45-3.55 GHz (“3.45 GHz”) band, but only in and around the Seattle, WA area. T-Mobile no longer requires experimental authority to operate in and around the Dallas, TX, Kansas City, MO, and New York City, NY areas, which are currently authorized under call sign WN2XAK. The technical parameters of the current experimental authorization and the associated operations will otherwise remain the same. T-Mobile requests authorization for a period ending May 1, 2024.

A. Background

On October 14, 2022, T-Mobile filed an application for experimental authorization to operate in the 3.45 GHz band in and around the Dallas, TX, Kansas City, MO, New York City, NY, and Seattle, WA areas.^{1/} T-Mobile requested experimental authorization to assess use of its facilities in the 3.45 GHz band – particularly how its network can incorporate 40 megahertz of contiguous 3.45 GHz spectrum in densely populated markets – for 5G services. The Commission granted the application and issued T-Mobile an experimental authorization under call sign WN2XAK on January 24, 2023.^{2/}

B. Purpose of Operation and Need for Experimental License:

Since the grant of its application, T-Mobile discovered that its business needs no longer require it to conduct testing using the 3.45 GHz band at all of the sites authorized in January. Specifically, T-Mobile no longer requires experimental authority to operate in and around the Dallas, TX, Kansas City, MO, and New York City, NY areas. It therefore submits this application for modification to remove those sites from – and retain only those sites in and around Seattle, WA on – its authorization. Grant of this request would serve the public interest because it would allow T-Mobile to continue experimenting as described in its initial application while reducing the geographic footprint of its experimental operations to only those areas required for testing.

C. Protection Against Causing Interference:

The impact on the spectrum environment by grant of the modification to the experimental authorization will be minimal. In fact, because T-Mobile is reducing the number of locations at which it seeks to conduct experimental testing, the potential for interference will be *reduced*. In addition, testing in the remaining locations in Seattle will be limited in scope and scale. Indeed, testing will now occur only in the controlled environment of T-Mobile’s Bellevue lab facilities

^{1/} See Application for Experimental Authorization of T-Mobile License LLC, ELS File No. 1164-EX-CN-2022 (filed Oct. 14, 2022).

^{2/} See FCC Experimental Authorization (Call Sign WN2XAK).

T-Mobile License LLC
Application for Modification of Experimental Authorization
FCC Form 442
Call Sign WN2XAK

and areas in and around its Bellevue headquarters. It will occur using only 9 base stations and approximately 15 handsets operating within 5 kilometers (or 12.4 miles) of those base stations. T-Mobile will also continue working with equipment manufacturers during the period covered by the experimental authorization to test the equipment. And it will continue conducting its operations consistent with the Commission's equipment marketing and importation rules.^{3/}

No other operators using 3.45 GHz band spectrum in and around the Seattle, WA areas will be adversely impacted. *First*, as T-Mobile explained in its application for experimental authorization, there will be no harm to federal operations. While T-Mobile's proposed experimental operations in Seattle, WA will overlap with the Bremerton, WA Cooperative Planning Area ("CPA") and Periodic Use Area ("PUA") – where federal users remain in the 3.45 GHz band and non-federal users must accept harmful interference – they will *not* impact the specific *census tracts* within the Bremerton, WA CPA or PUA where the Department of Defense ("DoD") has indicated its operations will occur and for which the Commission has indicated requires protection.^{4/} *Second*, there will be no harm to other licensed users. To the contrary, Columbia Capital – which holds the A Block (3.45-3.46 GHz) and B Block (3.46-3.47 GHz) of the 3.45 GHz band in PEA016 - Seattle, WA under the name Three Forty-Five Spectrum, LLC – has consented to T-Mobile's proposed testing. Moreover, neither Whitewater Wireless II, L.P., which holds the C Block (3.47-3.48 GHz), nor AT&T, which holds the D Block (3.48-3.49 GHz), has objected to T-Mobile's proposed testing, which, as noted above, it was authorized to conduct starting in January.

T-Mobile nevertheless recognizes that experimental authorizations are issued on a secondary basis only. Thus, T-Mobile will notify licensees of its proposed operations and, unless they have agreed otherwise, terminate its operations immediately upon notification that harmful interference has occurred.

^{3/} See 47 C.F.R. § 2.803.

^{4/} See *The Federal Communications Commission and the National Telecommunications and Information Administration: Coordination Procedures in the 3.45-3.55 GHz Band*, Public Notice, 36 FCC Rcd 9225, Appendix A (2021) (explaining that the DoD will provide a "Workbook" about its operations and coordination expectations and that "[t]he Workbook will be in the form of an Excel spreadsheet containing additional information about where the DoD anticipates its operations will encumber *census tracts* inside of the Cooperative Planning Areas and Periodic Use Areas based on frequency block and commercial tower height") (*emphasis added*); *3.45 GHz Auction Workshop*, DoD, at 31 (July 12, 2021), https://www.ntia.gov/files/ntia/publications/dod_3.45_ghz_workshop.pdf (highlighting that "[o]nly census tracts containing encumbrances are listed" and that "[t]otal encumbrances (ie CPA/PUA overlays) provided for each census tract"); NTIA, *Transition Plans and Transition Data for the 3450-3550 MHz Band*, <https://www.ntia.doc.gov/other-publication/2021/transition-plans-and-transition-data-3450-3550-mhz-band> (July 31, 2021) (including a link to DoD's Workbook).

T-Mobile License LLC
Application for Modification of Experimental Authorization
FCC Form 442
Call Sign WN2XAK

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

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

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