NextNav, LLC Application for Modification of Experimental License FCC Call Sign WF2XLW

October 2023

NextNav LLC ("NextNav") hereby seeks to modify its experimental license to identify additional equipment and to increase transmit power levels within the spectrum currently allocated to the Multilateration Location and Monitoring Service ("M-LMS") and licensed to its affiliate, Progeny LMS, LLC ("Progeny").

Background

On August 10, 2010, NextNav was granted full experimental authority to operate up to twenty (20) transmitters to conduct experimental testing in Santa Clara, San Mateo and San Francisco Counties. NextNav's experimental license has since been modified a number of times to add more transmitter sites, frequencies, power levels and emissions designators for testing. NextNav is now seeking authority for further modifications, including experimenting with higher power levels using LTE waveforms to measure its effect on the performance of NextNav's wireless location capabilities.

All of the spectrum at issue, 919.75-927.75 MHz, is licensed to Progeny. As indicated in correspondence from Progeny that was previously provided to the Commission by NextNav, NextNav and Progeny are sister companies and NextNav has Progeny's consent for the use of its licensed spectrum.²

Public Interest Statement

The Commission has repeatedly recognized that NextNav's indoor location technology has the potential to significantly improve position location technology for mobile devices. In addition to consumer and commercial uses for improved position location, the need for better wireless location accuracy has been a significant concern of public safety entities and the Commission.³ NextNav's technology could substantially enhance these efforts.

Grant of this application is in the public interest because it will enable NextNav to experiment with more accurate and higher yield versions of its location system, potentially providing for greater flexibility in operations and better spectrum sharing.

NextNav has been testing its position location technology for more than a decade across multiple counties in the greater San Francisco Bay Area. In that time, NextNav received only a single complaint of interference related to its service, which was determined to be from a malfunctioning transmitter and was immediately rectified.

¹ See ELS File No. 0268-EX-PL-2010 (call sign WF2XLW).

² See ELS File No. 0268-EX-PL-2010, Exhibit 3.

³ Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Service Rules Progeny LMS, LLC Demonstration of Compliance with Section 90.353(d) of the Commission's Rules, WT Docket No. 11-49, Order, FCC 13-78 (June 6, 2013) (noting the benefits of Progeny's WAPS network, including "improved delivery of E911 emergency services that can bring significant public safety benefits").