Description of Experimental Program

In last year's 6 GHz Report & Order, the Commission designated additional spectrum for unlicensed operations, envisioning its use for "new innovative technologies and services that will advance the Commission's goal of making broadband connectivity available to all Americans, especially those in rural and underserved areas." *Unlicensed Use of the 6 GHz Band,* 35 FCC Rcd 3852, 3853 (2020). Through this application for Special Temporary Authority, unWired Broadband, LLC seeks to advance these goals by testing available equipment across the UNII-5 and UNII-7 bands for potential delivery of enhanced fixed wireless broadband services.

The experimental operations will involve field deployment and testing of Tarana Wireless' 6 GHz radio technology onto the existing and granted parameters of callsign WN2XCM. unWired Broadband, LLC is nearing the end of testing the Cambium Networks equipment that is authorized on WN2XCM, and want to test Tarana Wireless on that same network upon grant of this application.

These operations will evaluate the greater throughput capabilities available in these bands using 5925.00000000-6425.00000000 MHz and 6525.00000000-6875.00000000 MHz channels. The program will use four Base Nodes and up to 50 Remote Nodes at customer locations, deploying transceivers at specific locations within a 16-kilometer radius around the fixed tower site.

The G1BN6ASI002 gain for UNII-5 is 16.9dBi (Base Node) The G1BN6ASI002 gain for UNII-7 is 17.3dBi (Base Node)

The G1RN6AHB012 gain for UNII-5 is 14.9dBi (Remote Node) The G1RN6AHB012 gain for UNII-7 is 15.0dBi (Remote Node)

unWired Broadband, LLC's data collection program will operate without causing harmful interference to incumbent users. It will work with any nearby licensed incumbents that it identifies, based on information provided in the FCC's databases, to ensure that its operations will avoid any harmful impact on such existing users.