Description of Experimental Program

In its 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 experimental license, First Step Internet, LLC ("First Step") seeks to advance these goals through further testing of available equipment across the UNII-5 and UNII-7 bands to collect additional data on the use of these bands for delivery of enhanced fixed wireless broadband services on a shared basis with incumbent users.

The experimental operations will involve field deployment and testing of Cambium Network's 6 GHz radio technology on a tower in Moscow, ID. These operations will allow First Step to evaluate the greater throughput capabilities available in these bands using Cambium equipment on 80 MHz channels. The equipment trial will involve deployment at homes of three First Step employees and will be provided at no cost for the service. First Step will initially deploy ePMP Force 460/C and ePMP4625 CPE equipment in order to evaluate any performance differences between the models.

The data collection program will operate without causing harmful interference to incumbent users. First Step 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.

The ePMP 4600 (Access Point), sector antennas will provide 18 dBi gain, which when connected to 63mW output power will result in 2.43 W ERP.

The ePMP 4600/C and ePMP4625 CPE antennas will provide 24 dBi gain, which when connected to 15.8 mW output power will result in 2.43 W ERP.