

Ascent Broadband LLC

FRN #: 0027876390

File Number: 1326-EX-CN-2022

Form 442

February 2023

Description of Experimental Program

In 2020'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 an experimental license, Ascent Broadband LLC seeks to advance these goals by testing available equipment in the UNII-5 and UNII-8 bands for potential delivery of enhanced fixed wireless broadband services.

The experimental operations will involve field deployment and testing of Cambium Networks equipment on twelve (12) towers at rural sites in Northern Colorado. This will consist of thirty-three (33) Cambium ePMP 4600 and twelve (12) ePMP 4600 L radios. These operations will evaluate the greater throughput capabilities available in these bands using 80/160 MHz channels. The program will also use up to forty (40) remote units (CPEs) at customer testing locations.

The following tower locations will be receiving the experimental equipment:

1. T02 - Severance, WELD,CO- NL 40-31-01; WL 104-49-49
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
2. T03 - Severance, WELD,CO- NL 40-32-41; WL 104-52-35S
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
3. T04 - Severance, WELD,CO- NL 40-35-19; WL 104-54-17
 - a. Four (4) ePMP 4600 L radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
4. T05 - Eaton, WELD,CO- NL 40-31-04; WL 104-45-16
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt

5. T06 - Eaton, WELD,CO- NL 40-32-50; WL 104-41-42
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
6. T14 - Wellington, WELD,CO- NL 40-42-06; WL 104-55-44
 - a. One (1) ePMP 4600 radio
 - i. The sector antenna has a beamwidth of 90°
 - ii. Sector will be positioned with the center of beamwidth at azimuth of 270°.
 - iii. The sector will have a down tilt of 1°, inclusive of the electric down tilt
7. T08 - Ault, WELD,CO- NL 40-34-58; WL 104-43-51
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
8. T07 - Greeley, WELD,CO- NL 40-23-39; WL 104-53-15
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
9. T13 - Milliken, WELD,CO- NL 40-17-48; WL 104-52-01
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
10. T09 - Lucerne, WELD,CO- NL 40-29-09; WL 104-42-01
 - a. Four (4) ePMP 4600 L radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
11. T11 - Pierce, WELD,CO- NL 48-36-06; WL 104-45-03
 - a. Four (4) ePMP 4600 L radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt
12. T15 - Windsor, WELD,CO- NL 40-27-05; WL 104-58-49
 - a. Four (4) ePMP 4600 radios
 - i. Each sector antenna has a beamwidth of 90°
 - ii. Sectors will be positions with the center of beamwidth at azimuths of 0°, 90°, 180, and 270°.
 - iii. Each Sector will have a down tilt of 1°, inclusive of the electric down tilt

All remote stations will be set up within 12km of the tower in which they are connected. No specific test locations have been established. Ascent Broadband will pursue working with its current client-base to proceed with the experimental efforts. Customers who accept the program will not incur any subscription fees for the testing process.

Ascent Broadband's data collection program will operate without causing harmful interference to incumbent users. Ascent Broadband 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.