

NARRATIVE STATEMENT

Pursuant to sections 5.51 and 5.53 of the Commission's rules 47 CFR 5.51 and 47 CFR 5.53, Parlier Unified School District ("Parlier") respectfully requests an experimental authorization to operate in the 3.55 to 3.70 GHz (CBRS) band, for the purpose of conducting tests which will allow Parlier to evaluate the feasibility of deploying their own wireless broadband network to provide broadband services to students within the Parlier Unified School District.

A. Purpose of Operation and Need for Experimental License

Parlier is investigating options to address the lack of affordable broadband within the School District. The challenge faced is one of affordability; virtually all of the households within the targeted area are classified as low income. The fact that the District provides free breakfast/lunch/dinner to 98.04% of the student population speaks to the need for affordable, or even free, broadband service within the District. Currently, the school district estimates that 45% of its student population (total student population of approximately 3000 students) does not have home internet access.

Broadband connectivity provided by Parlier without the boundaries of the school district would allow such things as:

1. Supporting our 1:1 Initiative to help provide endless learning while leaving the campus.
2. Closing the "Homework Gap" by providing access to digital educational materials.
3. Allow Parents / Guardians to access our Parent Portal to keep up with student grades and attendance.

It is a given that access to such tools will enhance the student learning experience; Parlier's mission is to determine the best solution for providing that access.

Parlier is currently evaluating use of the 3.55 to 3.70 GHz band as a potential means for providing wireless broadband connectivity to these students. Granting of this experimental application will allow Parlier to deploy five test sites, and determine if long-term use of CBRS spectrum is a viable solution for broadband delivery within the school district.

Selection of the 3.55 to 3.70 GHz frequency band for this experimental proposal is driven by several factors:

1. the desire to deploy and test LTE as a long-term broadband delivery solution
2. lack of spectrum holdings in the 2.5 GHz (EBS/BRS) spectrum band
3. spectrum congestion in the (unlicensed) 2.4 ghz and 5 ghz bands along with technology limitations that raise concern as to the ability to achieve and maintain acceptable network performance if using these frequencies for a network deployment
4. the desire to share results of testing with other school districts that may be faced with a similar connectivity challenge.

B. Location of Proposed Operations

Parlier has selected five (5) locations for deployment of equipment provided by Baicells Technologies that will allow the district to evaluate the feasibility of fixed broadband LTE service as a viable means of providing broadband service to students who current do not have any broadband access.

All five locations are Parlier Unified School district properties, which allows the District to deploy this equipment at no cost other than one-time expenditures for equipment and installation. Further, the district will make use of existing backhaul facilities, once again avoiding any additional monthly expenditures.

C. Operational Specifications

1. Equipment

The LTE base station equipment used for the purpose of testing is FCC approved equipment manufactured by Baicells Technologies. CPEs will also be provided by Baicells, and are also FCC approved.

2. Effective Radiated Power

The Baicells Nova 9 base station will operate per spec with 1 Watt conducted power output, with power adjustments made as necessary to stay within permitted EIRP limits. Each base station will operate at an EIRP not to exceed the 47 dBm limit as per category B CBSD requirements.

3. Antennas

Parlier will be using commercially available antennas made by KP Performance, Inc. Each test site has been designed for maximum coverage using a minimum of emission points, as described in the application.

D. Summary of Planned Testing

The proposed experimental authorization will allow Parlier to evaluate coverage and throughput of the Baicells LTE base stations at relatively low radiation centerlines (30-45 feet AGL). Additional testing will be performed as students are added to the network to evaluate the ability of the Baicells Technologies equipment to provide expected throughput on a per-location basis as user-loading on each operating sector is increased.

A second phase of testing, once Parlier is satisfied with the coverage and throughput of the network when completed, will involve testing and evaluation of SAS Management of the deployed spectrum, further providing Parlier with data and insight that will allow them to make a determination as to whether use of the CBRS spectrum is a viable long-term solution for broadband delivery to its students. Parlier will select an SAS provider at a later date to assist them with preparing an SAS test plan and executing the agreed-upon test plan.

E. Restrictions on Operations

Parlier recognizes that all operations under this proposed experimental operation are on a non-interfering basis, and agrees to cease operations upon notification of any suspected harmful interference. Parlier will have full remote connectivity to all operational equipment, allowing it to cease operations quickly in the event of any suspected interference.

F. Public Interest Statement

Parlier submits that issuance of an experimental license as requested is in the public interest, convenience, and necessity. Granting of this license will allow Parlier to determine the benefit and feasibility of providing low cost or free broadband services to its student population using LTE operating on CBRS spectrum, with a focus on serving the needs of students who do not currently have viable broadband options.