

Altice USA description of proposed CBRS experimental operation

Introduction

Pursuant to Section 5.61 of the Federal Communications Commission's rules, Altice USA Wireless, Inc., wholly owned subsidiary of Altice USA, Inc. ("Altice USA") requests special temporary authority to conduct experimental operations for a term of 6 months from August 1st, 2018 to January 30th, 2019, to evaluate the technical performance of pre-commercial equipment for both outdoor and indoor experiments in Citizens Broadband Radio Service ("CBRS") band.

Altice USA will perform the experimental trial testing in Bethpage, NY. To ensure full compliance with the operational restrictions in the NTIA's 3.5 GHz exclusion zone, all experimental testing subject to this application will be limited to the 3650–3700 MHz band.

Location of Testing

Altice USA intends to conduct the experimental testing within 4Smile radius of the location below:

Address	Latitude	Longitude	Radius	Frequency
Bethpage, NY	40 45 33 N	73 29 41 W	4 mile	3650-3700Mhz

Experiment Testing Description

Altice USA will evaluate propagation characteristics for different type of set ups, data throughput performance, inter-cell mobility, and advanced Spectrum Access System ("SAS") functionality. The data obtained will help us better understand the full potential of the technology and equipment utilized in these experimental operations.

This trial will use experimental cells and user equipment operating in CBRS spectrum only. It will consist of an aggregate of up to 66 small cells for the test location. The trial will consist of both indoor and outdoor cells.

The indoor cells will be installed on or below 3rd floor – less than 12 meters above ground. The outdoor cells will be between 4 and 6 meters above the ground.

Hours of operation and equipment shut down

The intent is to operate the evaluation devices, both small cells and mobile units, 24 hours per day, 7 days per week, during the test period. Equipment can be shut down speedily, if needed, by contacting one or more of the interference coordinators below:

Perminder Dhawan
Principal Engineer
Perminder.Dhawan@alticeusa.com
516-497-2667

Interference Coordination / Protection against interference

Pursuant to the Commission's experimental licensing rules, Altice USA understands that, for purposes of the experimental operations described in this application, it must accept interference from any federal and nonfederal incumbent users of the 3650–3700 MHz band and that all operations by Altice USA will be on a secondary basis.

Altice USA's experimental operations will be conducted in cooperation with a SAS vendor that the Commission has already authorized to operate. Altice USA will employ the vendors' SAS databases when conducting experimental operations to avoid interfering with incumbent users.

For this trial location, in addition to work with SAS vendors, Altice USA will coordinate with FSS incumbents operating in the area of the trial as directed by FCC to protect against interference.

Should interference occur during these testing periods, Altice USA will take immediate steps to resolve the interference, including discontinuing operations. Immediate requests to stop transmissions under this STA can be communicated to Perminder Dhawan, Principal Engineer at 516-497-2667 or by email at Perminder.Dhawan@AlticeUSA.com.

Evaluation equipment transmitter information/Radio equipment description

The radio equipment that will be used in the proposed experiment will consist of a mix of Category A and Category B transmitters (as those terms are defined in Sections 96.3 and 96.41 of the Commission's rules). All of these proposed radios are prototypes not available in the commercial market.

Fixed Equipment (5 models)

The tables below summarize the technical characteristics of each piece of equipment described above.

Transmitter	CAT	Tx Power (W)	EIRp (dbm)	ERP (W)	Mean or Peak	Emission Designator	Frequency tolerance	Modulation
Prototype 1	B	0.8	39	4.9	Mean	20M0W7W	0.00000005	64QAM/ 16QAM/QPSK
Prototype 2	B	0.63	37	3.0	Mean	20M0W7W	0.00000005	64QAM/ 16QAM/QPSK
Prototype 3	B	20	47	61.0	Mean	20M0W7W	0.00000005	64QAM/ 16QAM/QPSK
Prototype 4	B	20	47	61.0	Mean	20M0W7W	0.00000005	256QAM/64QAM/ 16QAM/QPSK
Prototype 5	A	0.2	23	0.2	Mean	20M0W7W	0.00000005	256QAM/64QAM/ 16QAM/QPSK
Prototype 6	B	4.0	36	4.0	Mean	20M0W7D	0.00000005	256QAM/64QAM/ 16QAM/QPSK

Contact info for this Application

FCC Licensing Issues:
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