



Exhibit

Dell Inc.

9 September, 2016

File Number: 1336-EX-ST-2016



Summary and Overview of STA Request:

Consistent with the standards set forth in Section 5.61 of the Federal Communications Commission's (Commission's) Rules, 47 C.F.R. § 5.61, Dell Inc. requests experimental Special Temporary Authority (STA) for the period **October 7 through December 31, 2016**, to conduct tests, evaluations and demonstrations of the functionality of shared spectrum Small Cell Base Stations in a real world environment near its headquarters in Austin, Texas. Operations under this STA would be consistent with the Part 96 rules the Commission has adopted to govern use of the 3.5 GHz band and the incumbent operators will be protected from any harmful interference.

Specifically, Dell requests authorization to operate on the frequencies between 3550-3650 MHz, which has been opened for innovative small cell spectrum sharing in connection with the new Citizens Broadband Radio Service (CBRS). Operations across the proposed frequencies will be consistent with the rules for CBRS devices (CBSDs) set forth in Part 96 of the Commission's rules. As stated above and described below, Dell will avoid harmful interference to incumbent operations throughout the band, and to operations in adjacent bands.

Proposed Operations:

Dell anticipates performing the following tests under the requested STA. The proposed experimental operations in the 3.5 GHz band will be conducted without harmful interference to other authorized users.

- Small Cell Indoor coverage and performance: Dell in collaboration with its Radio supplier and SAS administrator partner will test:
 - The operation of the Small Cell base station to understand the coverage and performance of indoor base stations in the 3.5 GHz band in a large building in a dense urban environment.
 - The frequency of operation will be limited to 3550 to 3600 MHz.
 - The base stations are indoor units and will be installed inside the building.
 - The performance and operation of a CBSD when instructed by SAS to switch frequency.
 - The impact on an end user when a CBSD has switched its frequency
- SAS Management of Shared Spectrum: Dell, in collaboration with its SAS administrator partner and its radio supplier, will test spectrum sharing, including Priority Access License (PAL) and General Authorized Access (GAA) registration, CBSD spectrum grant request and SAS response, spectrum grant revocation, and simulated incumbent protection scenarios in an operation environment.



Non-Interference Analysis:

Operation under the STA will not adversely impact any authorized user of RF Spectrum.

Radar Protection (Shoreline): Austin is well outside the boundary of exclusion zone set by FCC. Since all Base Stations are category A, no ESC is needed and, Dell does not expect any interference to Radars that operate on the shorelines.

Federal Government Radiolocation Facilities: The Austin test bed is approximately 750 km away from Pascagoula, MS radiolocation facility meeting the 80 km distance requirement of the Part 96 rules.

Ground Based Radar: The Austin test bed is located outside of any ground-based radar Exclusion Zone. The nearest ground-based radar is in Fort Hood, and the Austin test bed is 81 km away from the southern edge of its Exclusion Zone.

International Border: Austin is more than 1820 km from the nearest Canadian border and over 304 km from the Mexican border. Therefore, no interference to incumbent operations is expected for international operation.

In-Band FSS Protection: The Commission has identified in-band fixed satellite service (FSS) operations in 3600-3700 MHz that require protection under Part 96. Part 96 further requires coordination with any in-band FSS operations within a 150 km coordination contour, operating within the 3650-3700 MHz band. Based on FCC database, there are no FSS sites within 3650-3700 MHz band within 150 Km distance to Austin Test Bed and Dell does not expect any interference or coordination with FSS operators within 3650-3700 MHz band.

Adjacent Band FSS Protection: The Commission has identified adjacent band Telemetry, Tracking, and Control (TT&C) FSS operations in the 3700-4200 MHz that require protection under Part 96. Part 96 requires adjacent band FSS protection within 40km of the FSS site. There are no TT&C FSS sites listed in FCC database within 40km of the Austin test site requiring protection in the adjacent band.

Part 90 (GWBL): By limiting the frequency of operation at the test site to 3550-3600 MHz, there will not be any interference with any part 90 GWBL operations in the Austin metro area.



Technical Information:

Base Station General Information

Equipment	Base Stations and mobiles
Quantity	10
Area of Operation	Operation not to exceed 0.5 km from the following geographic center points (NAD83): 30°15'48.85"N; 97°44'22.58"W

Only Category A Base Stations (30 dBm EIRP) with integrated antenna will be installed inside buildings to provide coverage within the buildings. No Base Station will be installed on the roof or outside the building.

Amplifier Detail

Antenna	Internal
Type	directional
Quantity	2 per Base Station
Gain	3 dB
Beamwidth at Half-Power Point	Various (60° to 360° Horizontal and 6° to 180° vertical)
Orientation in Horizontal Plane	Various (0° to 360°)
Orientation in Vertical Plane	Various (0° to -60°)

Radio	Modulation	Emission Designator	Bandwidth	Maximum Output Power	Maximum EIRP
TBD	Digital	10M0W7W	10 MHz	600 mW	30 dBm
TBD	Digital	20M0W7W	20 MHz	600 mW	30 dBm



Company Information and Contact Information:

Applicant Name: Dell Inc.

Applicant FRN: 0008359580

Legal Contact Details:

Name of Contact	Richard Worley
Contact Address	One Dell Way, MS PS4-30 Round Rock, TX 78682 Richard_Worley@dell.com

Technical Contact Details:

Name of Contact	Will Egner
Contact Address	One Dell Way, MS PS3-C176 Round Rock, TX 78682 Will.Egner@dell.com