

Robert Bosch LLC
Request for Grant of Special Temporary Authority
File No. 0031- EX-ST-2019
Telematics Composite Device for Connectivity
Narrative Exhibit Describing Operation

This facilities specified in this application for STA is similar to several granted applications for Special Temporary Authority (See File Nos. 1893-EX-ST-2018, Call Sign WN9XPI; 2050-EX-ST-2018, Call Sign WN9XUD; and 2061-EX-ST-2018, call sign WN9XUE) proposing operation of a telematics composite device to provide connectivity at two separate locations (the granted STA is at Novi, Michigan and the application is for Columbus, Indiana). The purpose of this STA is to validate the telematics product during the development stage. This STA will permit testing of the device under development.

This application is filed by Robert Bosch LLC, an international manufacturer of tools, automotive equipment, and industrial and consumer products. Bosch respectfully requests special temporary authority during a six-month period beginning as soon as possible and ending six months later, to permit development and testing to validate the product during the development phase, at two locations, Farmington Hills, Michigan (at a Bosch facility) and Urbandale, Iowa and within a 20 kilometer radius of each centerpoint specified in the application. The product is a telematics unit which supports connectivity *using a commercial mobile network in the area*. The product is intended to address the challenges of connectivity associated with current transportation and management of vehicles (including commercial vehicles, passenger cars and other mobility applications). Some of the applications of this product are vehicle management, Geofencing, fleet management, remote diagnostics, theft prevention, alerts and preventive maintenance. Commercial service for these devices in the listed bands will be commercially provided through AT&T for this experiment. All arrangements for this have already been made with AT&T using SIM cards from the local commercial mobile service provider. *Bosch will not be using spectrum in the cellular bands that is allocated to any commercial service provider other than AT&T.* Specific frequencies will be determined by the network operator only and not by Bosch. There will be no RF signals transmitted without the SIM card from the commercial service provider. The product uses network data services provided by the commercial service provider to transfer information to the server. This system is capable of using 3G and LTE depending on the SIM provided by the commercial mobile services provider. IMEI numbers have been issued by AT&T for this test already.

Wi-Fi and Bluetooth capabilities are incorporated in the product, but those will be used only for in-vehicle applications where the product acts as a local hotspot. Only Part 15 bands are specified for these components of the product.

The bands sought herein are as follows:

3G Band 2: 1850 to 1910 MHz& 1930 to 1990 MHz
3G Band 5: 824 to 849 MHz& 869 to 894 MHz
LTE Band 2: 1850 to 1910 MHz& 1930 to 1990 MHz

LTE Band 4: 1710 to 1755 MHz & 2110 to 2155 MHz
LTE Band 5 : 824 to 849 MHz & 869 to 894 MHz
LTE Band 12: 699 to 716 & 729 to 746 MHz
WiFi 2GHz: 2400 – 2483.5 MHz
WiFi 5GHz: 5180 – 5320 MHz & 5500 - 5825 MHz
BLE: 2402 – 2483.5 MHz

There will also be a GPS receiver included in the product.

Neither the composite product nor its components are certified in the United States as of yet.
Hence the need for the STA.

Bosch will comply with all conditions associated with the STA grants for the similar products referenced above in WN9XUD and WN9XUE.

The Stop Buzzer contact in the United States for Bosch for this test series will be Mr. Bhat Ajay Krishnamurthy of Bosch, whose direct phone number is 248-318-1828 and whose e-mail is AjayKrishnamurthy.Bhat@bosch.com. Should any interference arise or be complained of by any entity during the testing, all operation will cease until the interference complaint is resolved to the satisfaction of the complainant.

Should any question arise concerning this application, kindly notify undersigned counsel.

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