

Motorola Solutions, Inc.
Request for Part 5 Experimental
Special Temporary Authority
OET File No. 0152-EX-ST-2011

NARRATIVE STATEMENT

Pursuant to Section 5.3(d) and (f) and Section 5.61 of the Commission's rules, 47 C.F.R. §§ 5.3(d), (f), 5.61 (2009), Motorola Solutions, Inc., hereby respectfully requests special temporary authority ("STA") from **March 25 through April 1, 2011**, to operate in the 758-768/788-798 MHz band for the purpose of demonstrating prototype broadband Long-Term Evolution ("LTE") devices to public safety agencies in the Philadelphia, PA area.

Motorola Solutions is requesting a letter of concurrence from the Public Safety Spectrum Trust ("PSST") for the proposed operation on its portion of the spectrum, and will provide the PSST's response once it is received.

A. Purpose of Operation and Need for STA:

Motorola Solutions is a leading manufacturer of mobile radio equipment for the public safety and homeland security community and is continually engaged in the design and development of new and innovative communications equipment. The experimental authority requested herein will allow the company to demonstrate the functionality of prototype devices designed to support the needs of the public safety and homeland security community.

Specifically, Motorola Solutions proposes to conduct demonstrations of prototype equipment to a public safety agency in Philadelphia, PA, on or about March 31, 2011. To accommodate preliminary testing during set-up prior to the demonstration and to allow for any follow-up operations that may occur during tear-down, Motorola Solutions respectfully requests that the FCC grant the STA for the period March 25 through April 1, 2011.

Grant of an STA will allow Motorola Solutions to demonstrate prototype equipment and obtain additional feedback so that it may enhance the company's efforts to design, develop and improve its equipment to meet the communications needs of potential users.

B. Location of Proposed Operation:

Motorola Solutions proposes to conduct its demonstrations using a single fixed base station transmitter antenna located in the vicinity of the following location in Philadelphia, communicating with portable units operating within a radius of no more than 5 kilometers from the fixed base station. The address and approximate coordinates of the fixed station are:

Philadelphia Police Academy
8501 State Road
Philadelphia, PA 19136

40° 02' 21" North Latitude
75° 00' 25" West Longitude
Datum: NAD83

C. Technical Specifications:

1. Frequencies Desired

Motorola Solutions requests authorization to operate in the band 758-768/788-798 MHz. This band encompasses both the 758-763/788-793 MHz band known as the upper 700 MHz D block, which has not yet been licensed for regular operation, and the 763-768/793-798 MHz public safety block licensed on a nationwide basis to the Public Safety Spectrum Trust ("PSST").

2. Effective Radiated Power

All power levels will comply with the limits set forth in the FCC's rules, including those relating to human exposure to radiation.

Portable units will be deployed and configured to operate at a maximum average power level of 250 mW effective radiated power ("ERP") and a maximum peak power level of 2.5 Watts ERP. The base station will be configured to operate at a maximum average power level of 5W ERP and a maximum peak power level of 125 Watts ERP.

Motorola Solutions will reduce the actual powers to the minimum power needed for successful operation, based on set-up and testing at the demonstration site.

In addition, Motorola Solutions will evaluate environmental considerations to ensure compliance with Section 1.1306 of the FCC's rules, 47 C.F.R. § 1.1306 (2009), and, in particular, the human exposure requirements set forth in FCC OET Bulletin No. 65.

3. Modulation and Emissions

Motorola Solutions proposes to operate using OFDM modulation. The primary emission designators are 5M0G7D, 5M0W7W, 5M0G2D, 5M0D7D, 10M0G7D, 10M0W7W, 10M0G2D, and 10M0D7D. Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested.

4. Antenna Information

The fixed base station transmitter antenna will be located on an existing structure at an elevation of 199 feet above the ground. Outside portable antennas will not, under any circumstances, extend more than 6 meters above ground. Portable antennas inside the demonstration site will be located as required for a successful demonstration. No antennas will be mounted in a fashion that will require approval under FAA and FCC rules and regulations.

5. Equipment To Be Used

Motorola Solutions expects that it will be able to conduct its demonstration with a single base unit and up to 20 mobile/portable units. Moreover, Motorola Solutions will limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the equipment.

D. Protection Against Causing Interference:

As noted above, Motorola Solutions has requested authority to operate in the 758-768/788-798 MHz band. This band encompasses both the 758-763/788-793 MHz band known as the upper 700 MHz D block, which has not yet been licensed for regular operation, and the 763-768/793-798 MHz public safety block licensed on a nationwide basis to the Public Safety Spectrum Trust ("PSST"). A letter of concurrence from the PSST is being requested for operation on its portion of the spectrum. The PSST's response will be provided when it is received. No concurrence is necessary or possible on the D block portion because there is no regular licensee of that spectrum.

Motorola Solutions searched the Commission's TV database to determine if any Low Power TV stations are licensed in the area and did not find any co-channel LPTV stations within 75 miles of the proposed test site. WPHA-CD is licensed on adjacent channel 63 spectrum; according to the database information, however, that station went silent on that channel in 2009 and is being converted to a digital LPTV facility on channel 38, which far removed in frequency from the frequencies proposed in this STA request.

Motorola Solutions also conducted a search of the Commission's Universal Licensing System ("ULS") database, and it found no active public safety licenses authorizing operation within 75 miles of the Philadelphia area on frequencies which are co-channel to those proposed in this STA request.

Furthermore, as noted above, the length of the demonstration period is short, extending only from March 25 through April 1, 2011, and Motorola Solutions will limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the equipment.

E. Restrictions on Operation:

Motorola Solutions is not seeking authority to perform a market study under this STA. Moreover, no fees will be charged to entities using the equipment during this test. After the test is completed, Motorola Solutions will recall and recover all devices that do not comply with FCC regulations.

Motorola Solutions also recognizes that the operation of any equipment under experimental authority must not cause harmful interference to authorized facilities. Should interference occur, Motorola Solutions will take immediate steps to resolve the interference, including if necessary arranging for the discontinuance of operation.

In addition, Motorola Solutions will advise entities using the equipment that permission to operate has been granted under experimental authority issued to Motorola Solutions, that such operation is strictly temporary, and that the equipment may not cause harmful interference. Entities will also be advised in accordance with Section 2.803 of the Commission's rules, 47 C.F.R. §2.803 (2009), that any unapproved devices have not been authorized as required by the rules of the FCC and are not being offered for sale or lease, or sold or leased, until authorization is obtained.

F. Public Interest:

Motorola Solutions submits that issuance of an STA as requested is in the public interest, convenience, and necessity. Grant of an STA will help Motorola Solutions to develop innovative equipment that will accommodate the communications needs of the public safety community.

G. Contact Information:

For questions about this application, please contact:

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In the unlikely event interference concerns should arise during the period of authorization for this STA, please contact:

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