Motorola Solutions, Inc.
Request for Part 5 Experimental
Special Temporary Authority
OET File No. 0600-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 (2010), Motorola Solutions, Inc., hereby respectfully requests a special temporary authority ("STA") from **October 20 to October 26, 2011**, to operate in the 758-768/788-798 MHz band for the purpose of demonstrating prototype broadband Long-Term Evolution ("LTE") devices at the International Association Chiefs of Police (IACP) Annual Conference to be held in the McCormick Place Convention Center, Chicago, Illinois.

Motorola Solutions has requested a letter of consent from the Public Safety Spectrum Trust ("PSST") for the proposed operation on this spectrum and will submit that letter once it is available.

A. <u>Purpose of Operation and Need for STA:</u>

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 performance and 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 at the IACP Annual Conference to be held October 22-26, 2011, in the McCormick Place Convention Center in Chicago, Illinois. To accommodate set-up requirements, Motorola Solutions respectfully requests that the FCC grant the STA for the period October 20, 2011 through October 26, 2011.

Grant of an STA will allow Motorola Solutions to demonstrate prototype equipment and obtain additional feedback during the IACP Annual Convention 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. <u>Location of Proposed Operation</u>:

Motorola Solutions proposes to conduct its demonstrations using a single fixed base station transmitter antenna located inside the McCormick Place Convention Center communicating with mobile/portable units operating within a radius of 150 meters from the fixed base station. The address and approximate coordinates of the Convention Center are:

McCormick Place Convention Center 2301 South Lake Shore Drive Chicago, IL 60616

41° 51' 07" North Latitude 87° 36' 42" West Longitude

Datum: NAD83

C. <u>Technical Specifications:</u>

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.

The mobile/portable units to be deployed are configured to operate at an average power level of 50 mW effective radiated power ("ERP") and a peak power level of 160 mW ERP. The base station will be configured to operate at an average power level of 630 mW ERP and a peak power level of 1 Watt ERP.

Motorola Solutions will reduce the actual powers to the minimum power needed for successful operation, based on set-up and testing at the McCormick Place Convention Center 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 (2010), 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 inside the McCormick Place Convention Center in Chicago, Illinois at a height no greater than 20 feet above the floor. The mobile/portable antennas will not, under any circumstances, extend more than 6 meters above ground. 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 five mobile/portable units. The base station is a prototype unit from Ericsson and the mobile/portable units are prototype equipment from Motorola Solutions. Moreover, Motorola Solutions will limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the equipment.

D. <u>Protection Against Causing Interference:</u>

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 consent has been requested from the PSST regarding operation on its portion of the spectrum. That letter will be provided when available. No concurrence is necessary or possible on the D block portion because there is no regular licensee of that spectrum.

Motorola Solutions also searched the Commission TV database to determine what if any licensed Low Power TV (LPTV) stations are in the area and the results of that search indicate the proposed operation should not interfere with any LPTV reception. The proposed operation is co-channel with LPTV channels 62, 63, 67 and 68.

The closest co-channel licensed LPTV station is WYTU-LP in Milwaukee, Wisconsin, operating on channel 63, approximately 88 miles from the McCormick Place Convention Center. Further, industry information shows that WYTU-LP has vacated channel 63 and is operating on Channel 49 for analog and channel 17 for digital. The Commission's database also shows that TV translator W63DG in

Rochelle, Illinois, approximately 78 miles from McCormick Place has a construction permit for channel 63 but is off the air and has an application to operate in the digital mode on channel 9.

WMYS-LP in South Bend, Indiana, approximately 75 miles from McCormick Place is licensed to operate on adjacent-channel 69. However, the Commission database shows this station is silent on that channel. Industry information shows WMYS-LP is operational in analog on channel 34 and in digital on channel 23.

Motorola Solutions also conducted a search of the Commission's Universal Licensing System ("ULS") database. While the State of Illinois uses narrowband spectrum under the former 700 MHz bandplan for vehicular repeaters, the proposed operation is low power and totally indoor at McCormick Place Convention Center and is not expected to interference with any vehicular repeaters receivers which would be located outside.

In summary, the analysis conducted by Motorola Solutions indicates the proposed operation should not interference with any licensed operation.

Furthermore, as noted above, the length of the demonstration period is short, extending only from October 20 through October 26, 2010.

E. <u>Restrictions on Operation</u>:

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 (2010), 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. <u>Public Interest</u>:

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