Motorola Solutions, Inc. Request for Part 5 Experimental Special Temporary Authority OET File No. 0114-EX-ST-2012

EXHIBIT A

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 special temporary authority ("STA") from **February 23, 2012 through April 15, 2012**, 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 Los Angeles, California area.

Attached for the staff's reference is a letter of concurrence from the Public Safety Spectrum Trust ("PSST") for the proposed operation on its portion of the spectrum, and an associated letter from the Los Angeles Regional Interoperable Communications System Authority, which holds a Commission waiver and lease with the PSST for use of the public safety broadband 700 MHz spectrum

A request for expedited treatment is being filed concurrently with this request under a separate exhibit.

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 public safety agencies in Los Angeles, CA. To accommodate set-up requirements as well as to ensure all operations up to demo tear-down are covered by Commission authorization, Motorola Solutions respectfully requests that the FCC grant the STA for the period February 23 through April 15, 2012.

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 that will be located within 1.6 km of the location identified below, communicating with portable units operating within a radius of no more than 1500 feet (approximately 465 meters) from the fixed base station. The address and approximate coordinates of where the fixed station will be deployed are:

500 East Temple Street Los Angeles, California

34° 03' 00" North Latitude 118° 14' 06" 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 portable units to be deployed are configured to operate at a peak power level of 2.5 Watts effective radiated power ("ERP"). The base station will be configured to operate at a peak power level of 50 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 outside the facility at a height no greater than 20 feet above the ground. Outside portable antennas will not, under any circumstances, extend more than 6 meters above ground, except that 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 <u>minimum</u> 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 attached for the requested operation on its portion of the spectrum. The letter from the PSST also includes a letter of concurrence from the Los Angeles Regional Interoperable Communications System Authority, as it holds a conditional waiver from the FCC and a lease from the PSST for the 763-768/793-798 MHz public safety spectrum. 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 what if any licensed Low Power TV stations are in the area. The closest licensed LPTV station is KNLA-LP, licensed to Venture Technologies Group, LLC, on channel 68 (792-800 MHz) in Los Angeles, approximately 24.4 km (15.2 miles) from the Los Angeles facility. However, KNLA-LP is currently operating under displacement STA on channel 27, not channel 68. Therefore, there would be no interference from the proposed operation. Also, the Commission previously issued a decision that all LPTV stations were required to vacate the 700 MHz band by December 31, 2011.

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 in the Los Angeles area on frequencies which are co-channel to those proposed in this STA request. Although Riverside, CA and San Bernardino, CA hold licenses in the 700 MHz band, they are authorized to operate within the 769-775/799-805 MHz narrowband 700 MHz spectrum block, *i.e.*, outside of the spectrum requested in this STA request. Similarly, California holds a license for the designated state channels within the 769-775/799-805 MHz narrowband 700 MHz spectrum block, but these channels, too, are outside the spectrum Motorola Solutions has requested in this application. Moreover, the State of California is not listed as a licensee operating under the previous bandplan, so its operations must conform to the current 700 MHz bandplan and, therefore, should not be affected by Motorola Solution's proposed operation.

Furthermore, as noted above, the length of the demonstration period is short, extending only from February 23 through April 15, 2012.

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 (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. 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. <u>Contact Information</u>:

For questions about this application, please contact:

Kurt DeSoto, Counsel to Motorola Solutions, Inc. Wiley Rein LLP 1776 K Street, N.W. Washington, DC 20006 Voice: (202) 719-7235

Facsimile: (202) 719-7207 kdesoto@wileyrein.com

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

Stu Overby Senior Director, Spectrum Strategy Motorola Solutions, Inc. 1303 E. Algonquin Rd. Schaumburg, IL 60196 Telephone: (847) 576-2952

Stu.overby@motorolasolutions.com



February 7, 2012

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Room TWA325 Washington, DC 20554

Re: Application of Motorola for Temporary Spectrum Use Los Angeles, California – February 23, 2012, to April 15, 2012

Dear Ms. Dortch:

The Public Safety Spectrum Trust ("PSST") hereby provides its consent to the application of Motorola Solutions, Inc. for experimental special temporary authority ("Experimental STA") regarding its proposed temporary operation in the PSST's 700 MHz band spectrum to demonstrate Long Term Evolution ("LTE") equipment in Los Angeles, California, as described in more detail below. The PSST understands that the demo operation planned would conform to the following parameters:

- 1) Operation will be conducted in the vicinity of the Los Angeles Emergency Operations Center, 500 East Temple Street, Los Angeles, California. Equipment would include a temporary base station and associated antenna located no more than one mile from this site, along with a small number of mobile/portable units all operating at no more than 1,500 feet from the base station site.
- 2) Motorola Solutions will request authority from the FCC to operate over the 758-768/788-798 MHz band. This encompasses both the 763-768/793-798 MHz bands, which are currently licensed on a nationwide basis to the PSST as part of the 700 MHz Public Safety Broadband License, and the 758-763/788-793 MHz bands known as the Upper 700 MHz D Block, which has not yet been licensed for regular operation.
- 3) Operation will occur between February 23, 2012 and April 15, 2012, allowing time during that period for setup and testing, multiple demonstrations, and teardown.
- 4) We understand that Motorola Solutions has analyzed information from the FCC's license databases and has determined that the proposed operation

would not interfere or create a significant potential for interference with any public safety operations in the 700 MHz band. The analysis found no active public safety licenses authorizing operation in the Los Angeles area on frequencies which are co-channel to those proposed in this STA request.

5) Attached is a letter from the Los Angeles Regional Interoperable Communications System (LA-RICS) to the PSST expressing support for this STA application. The LA-RICS is the recipient of a FCC Waiver and the holder of a FCC approved lease for use of the PSST licensed spectrum in the Los Angeles area.

Given the above information, the PSST concurs with the proposed operation by Motorola Solutions on certain frequencies currently licensed to the PSST as part of the 700 MHz Public Safety Broadband License for purposes of demonstrating LTE equipment in Irving, Texas. As you are aware, decisions on the permanent use of the adjacent Upper 700 MHz D Block spectrum are still pending at the FCC. The PSST takes no position as to the Motorola Solutions request regarding use of the D Block spectrum.

This consent is subject to the PSST's ongoing ability to monitor any operations and use of the PSST's licensed spectrum.

Respectfully submitted,

Chief Harlin R. McEwen

Hallin R. WEven

Chairman

Public Safety Spectrum Trust Corporation

(607) 227-1664

chiefhrm@pubsaf.com

cc: Stu Overby, Motorola Solutions

Sara Henry, LA-RICS



LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 200 Monterey Park, California 91754 (323) 881-8291

PATRICK J. MALLON EXECUTIVE DIRECTOR

February 6, 2012

Chief Harlin R. McEwen, Chairman Public Safety Spectrum Trust 3221 M Street, NW Washington, DC 20007

Re: Application of Motorola Solutions, Inc. for Temporary Spectrum Use Los Angeles, CA – Feb. 23, 2012 through April 15, 2012

Dear Chief McEwen:

The Los Angeles Regional Interoperable Communications System (LA-RICS) hereby provides its consent to the application of Motorola Solutions for Secondary Experimental Operations in the 700 MHz band spectrum licensed to the Public Safety Spectrum Trust (PSST) and for which LA-RICS holds a Long Term DeFacto Spectrum Transfer Lease agreement with the PSST.

It is our understanding that Motorola Solutions requests this consent for the purpose of demonstrating Long Term Evolution (LTE) equipment to public safety agencies in Los Angeles between February 23, 2012 and April 15, 2012.

We understand that Motorola Solutions has analyzed information from the FCC's license databases and has determined that the proposed operation would not interfere or create a significant potential for interference with any public safety operations in the 700 MHz band.

We understand that Motorola Solutions has indicated that this special temporary authority (STA) will not be used for mission critical operations or in the delivery of live transmissions in duties to protect life, property or safety and that the equipment will be used in testing scenarios only.

Given the above information, LA-RICS concurs with the proposed operation by Motorola Solutions on certain frequencies currently licensed to the PSST as part of the 700 MHz Public Safety Broadband License (PSBL), and leased to LA-RICS.

Sincerely,

PATRICK J MALLON EXECUTIVE DIRECTOR