

**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 **January 25 to March 25, 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 entities in the Oklahoma City, Oklahoma area.

A letter from the Public Safety Spectrum Trust ("PSST") in support of this request is attached.

Also attached as Exhibit B is a request for expedited treatment of this application.

**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 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 to public safety personnel in the Oklahoma City, Oklahoma area. To accommodate set-up requirements, Motorola respectfully requests that the FCC grant the STA for the period January 25, 2012 through March 25, 2012.

Grant of an STA will allow Motorola 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. Locations of Proposed Operation:**

Motorola Solutions proposes to conduct its demonstrations using up to three fixed base station transmitter antennas located in Oklahoma City with mobile/portable units operating within a radius of 3.22 kilometers from each fixed base station. The address and approximate coordinates (in NAD83 Datum) of the demonstration sites are:

Emergency Medical Services Authority  
1111 Classen Drive  
Oklahoma City, OK 73103  
35° 28' 45" North Latitude  
97° 31' 20" West Longitude

Oklahoma City 911 Center  
715 Robert S. Kerr Avenue  
Oklahoma City, OK  
35° 28' 14" North Latitude  
97° 31' 30" West Longitude

Sheraton Hotel  
1 North Broadway Avenue  
Oklahoma City, OK  
35° 28' 02" North Latitude  
97° 30' 54" West Longitude

**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.

The mobile/portable units to be deployed are configured to operate at a power level of no more than 2 Watts effective radiated power ("ERP"). The base stations will be configured to operate at an average power level of no more than 40 Watts ERP and a peak power level of 400 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 (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 antennas at all three sites specified above will be located at a height of no more than 20 meters above ground level. The mobile/portable antennas will be installed at a height not greater than 6 meters above ground when used outdoors or at various locations as needed for testing when used indoors. 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 up to three base units and up to twenty mobile/portable units. The base station is a prototype unit from Ericsson and the mobile/portable units are prototypes 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. 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 consent is attached from the PSST regarding operation on its portion of the spectrum. No consent is necessary or possible on the D block portion because there is no regular licensee of that spectrum.

Motorola Solutions also searched the Commission's 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 facility is translator station K67IA, on channel 67, in Gainesville, Texas, approximately 115 miles from the proposed LTE demonstration sites. This station is listed as under a construction permit but off-the-air and moving to channel 48. There are no adjacent channel stations within interference range. Furthermore, under the Commission's rules, LPTV and translator stations were required to vacate the 700 MHz band by 12/31/2011, so there should be no interference from the proposed operation.

Motorola Solutions also conducted a search of the Commission's Universal Licensing System ("ULS") database and found no stations with which the proposed short-term demonstration would conflict. No public safety narrowband stations are authorized to operate on this spectrum under the former 700 MHz bandplan within interference range of the proposed operation.

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

**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 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:

Kurt DeSoto, Counsel to Motorola Solutions, Inc.  
Wiley Rein LLP  
1776 K Street, N.W.  
Washington, DC 20006  
Telephone: (202) 719-7235  
Facsimile: (202) 719-7207  
[kdesoto@wileyrein.com](mailto: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](mailto:Stu.Overby@motorolasolutions.com)



January 4, 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  
Oklahoma City, OK – January 25, 2012 to March 25, 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 to public safety entities in Oklahoma City, Oklahoma area between January 25, 2012, and March 25, 2012, 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 Oklahoma City area. Equipment would include temporary base stations and associated antennas located at the Emergency Medical Services Authority (EMSA), 1111 Classen Drive, Oklahoma City, OK, the Oklahoma City 911 Center, 715 Robert S. Kerr Ave., Oklahoma City, OK, and at the Sheraton Hotel, 1 North Broadway Avenue, Oklahoma City, OK, along with a small number of portable units operating at no more than 2 miles from each base 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 January 25, 2012, and March 25, 2012, allowing time during that period for setup and testing, scheduling of multiple demonstrations, and teardown.

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.

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 Oklahoma City, OK. 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  
Chairman  
Public Safety Spectrum Trust Corporation  
(607) 227-1664  
[chiefhrm@pubsaf.com](mailto:chiefhrm@pubsaf.com)