

Motorola Solutions, Inc.
Request for Part 5 Experimental
Special Temporary Authority
ELS File No. 0449-EX-ST-2014

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 (2012), Motorola Solutions, Inc. ("Motorola Solutions") hereby respectfully requests special temporary authority ("STA") for a two month period from **June 20, 2014, through August 31, 2014**, to conduct limited operations in the 768-769/798-799 MHz bands at two locations in the New York City area for the purpose of testing and evaluating the propagation characteristics and reliability of prototype devices and systems designed to support land mobile communications.

Motorola Solutions notes that these operations will be conducted outside the bands licensed to the First Responder Network Authority ("FirstNet").

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 conduct tests to evaluate the functionality and acceptability of prototype devices designed to support the needs of the public safety community.

Specifically, Motorola Solutions proposes to conduct tests of prototype devices and systems at two locations in the New York City area. To accommodate set-up requirements as well as to ensure all operations are covered by Commission authorization, Motorola Solutions respectfully requests that the FCC grant the STA for the period June 20, 2014, through August 31, 2014.

Grant of an STA will allow Motorola Solutions to test and evaluate prototype equipment 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 Operations:

Motorola Solutions proposes to conduct its tests in the vicinity of the locations listed below. Equipment would include a temporary base station and associated antenna at the locations listed below, along with a limited number of portable/mobile units (25), all operating within 25 kilometers of each site. The approximate reference coordinates for the locations of the temporary fixed base station deployments are:

Site 1:
165 Cadman Plaza East
Brooklyn, NY 11201
40° 41' 56.59" North Latitude
73° 59' 21.52" West Longitude
Datum: NAD83

Site 2:
49 35th Street
Long Island City, NY 11101
40° 44' 18.67" North Latitude
73° 55' 53.56" West Longitude
Datum: NAD83

C. Technical Specifications:

1. Frequencies Desired

Motorola Solutions requests authorization to operate in the bands 768-769/798-799 MHz allocated for narrowband use as a guard band that is separate from the spectrum allocated for a nationwide public safety broadband network licensed to FirstNet.

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.

Up to 2 portable/mobile units will be deployed and configured to operate within 25 km of each site with a maximum peak power level of 2.5 Watts effective radiated power ("ERP"). One base stations will be located at each evaluation site and will be configured to operate at a maximum peak power level of 10 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 proposed sites.

3. Modulation and Emissions

Motorola Solutions proposes to operate using C4FM modulation. The primary emission designators are 8K10F1D (data) and 8K10F1E (voice). Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested.

4. Antenna Information

The antenna for the temporary fixed base station will be located at a height no greater than 20 feet above the ground or a building. The portable/mobile unit antennas in and around the test sites will be located as required for a successful evaluation. 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 to conduct its tests with one base unit and up to ten mobile/portable units. Moreover, Motorola Solutions will limit the power, area of operation, and transmitting times to the minimum necessary to support an effective test.

D. Protection Against Causing Interference:

As noted above, Motorola Solutions has requested authority to operate in the 768-769/798-799 MHz bands allocated for narrowband network. Under Commission rules, Low Power TV stations and auxiliary stations were previously required to vacate the 700 MHz band, so no interference should occur to broadcast facilities.

Motorola Solutions also conducted a search of the Commission's Universal Licensing System ("ULS") database and determined that the proposed tests should not interfere with any primary operations in that spectrum.

Furthermore, as noted above, the length of the evaluation period is short, extending only from June 20, 2014, through August 31, 2014.

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 disassemble the test facilities.

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

Entities will be advised in accordance with Section 2.803 of the Commission's rules, 47 C.F.R. §2.803 (2012), that any unapproved devices which have not been authorized as required by the FCC 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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