

NARRATIVE STATEMENT

Pursuant to Section 5.3(e), (f) and (g) and Section 5.51 of the Federal Communications Commission's ("FCC") rules, 47 C.F.R. §§ 5.3(e), (f) and (g), 5.51 (2016), Motorola Solutions, Inc., respectfully requests an export only, station code "XE" experimental license to support the testing and demonstration of prototype equipment under development for use outside of the United States that will operate in the 1350-1390 MHz and 1452-1492 MHz bands.

Grant of this application would serve to replace the existing special temporary authorization ("STA") issued to Motorola Solutions for experimentation granted under File No. 0275-EX-ST-2017, call sign WC9XQF. That STA allowed the company to collect sufficient data to assess the performance and reliability characteristics of prototype equipment and software to determine if additional research is needed and should be scheduled. This filing seeks authority to continue the research and development.

As provided under Section 5.61(c) of the Commission's rules, 47 C.F.R. § 5.61(c) (2016), this application is also intended to serve as a continuance or extension of the above-referenced STA. Motorola Solutions understands, however, that such continuance or extension applies only to the operations as authorized and as conditioned under the STA. The extension is necessary to allow the company to continue its technical tests pending Commission action on this application.

The following information is provided in support of this request:

A. Purpose of Operation:

Motorola Solutions, Inc. is a leading manufacturer of mobile radio equipment and systems and is continually engaged in the design and development of new and innovative solutions. It is actively involved in particular with researching and developing wireless data and voice capabilities incorporated into not only enterprise products, but also into non-commercial communications systems.

By this application, Motorola Solutions seeks to test and demonstrate equipment and solutions designed for use outside of the United States. It does not propose to test equipment for domestic use under the requested authority. Moreover, Motorola Solutions does not propose to market, sell, or lease prototype equipment under the requested authority for operation within the United States. After the experimentation ceases, Motorola Solutions will recall and recover all test devices.

B. Proposed Locations:

Motorola Solutions proposes to conduct tests and demonstrations at three locations specified in the attached application at: (1) its offices located at 500 W. Monroe Street, Chicago; (2) its facilities located in Schaumburg, IL; and (3) a remote, rural location in Sawyer County, Wisconsin, south of Line A.

C. Technical Specifications:

Application Type/Classification:	XE (Experimental Export Only)
Frequency Bands:	1350-1390 MHz and 1452-1492 MHz
Modulation:	OFDM, unmodulated carrier for reference only
Bandwidth / Emissions Designators:	5M00D1D, 5M00D7D, 5M00G1D, 5M00G2D, 5M00G7D, 5M00W7W, 10M0D1D, 10M0D7D, 10M0G1D, 10M0G2D, 10M0G7D, 10M0W7W, 20M0D1D, 20M0D7D, 20M0G1D, 20M0G2D, 20M0G7D, 20M0W7W
Antenna Data / Temp. Fixed Stations:	
Power Output (TPO):	4 Watts Peak
ERP / EIRP:	38.7 Watts / 63.4 Watts
Antenna Data / Mobile Units:	
TPO:	4 Watts Peak
ERP / EIRP:	38.7 Watts / 63.4 Watts

As the modulation bandwidth is scaleable, other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested. All power levels will comply with the limits set forth in the FCC's rules, including those relating to human exposure to radiation.

D. Equipment To Be Used:

Motorola Solutions proposes to deploy a limited number of units at the proposed locations. It expects that it will be able to complete its experimentation and demonstration with a maximum of 2 temporary fixed base stations at each location and 2 mobile units in the vicinity of each temporary base station location. Thus, the maximum number of temporarily fixed base stations will be 6 and the maximum number of mobiles will be 6 to be deployed under the requested authority. Moreover, Motorola Solutions will limit the power, area of operation, and transmitting times of these units to the minimum necessary to conduct its tests and demonstrations.

E. Antenna / Antenna Structure Heights:

The antennas to be installed under this authority will not extend more than six meters above the ground or, if mounted on an existing building, will not extend more than six meters above the building. If an antenna is mounted on an existing structure other than a building, it will be installed in accordance with FAA and FCC rules and regulations.

F. Restrictions on Operation:

As noted above, Motorola Solutions does not propose to market, sell, or lease prototype equipment to end users or conduct a market study in conjunction with this test. Moreover, no fees will be charged to entities using the equipment during this test. After the experimentation ceases, Motorola Solutions will recall and recover all devices that do not comply with FCC regulations. If any different treatment becomes necessary during the course of its experimentation, Motorola Solutions will seek separate and additional authority from the agency.

Motorola Solutions also recognizes that all operations under the requested authority must not cause harmful interference to authorized facilities. It does not anticipate that such interference will occur, but should such interference occur, Motorola Solutions will immediately take steps to resolve the interference, including if necessary discontinuing operation.

In addition, Motorola Solutions would advise entities using the equipment that permission to operate the equipment has been granted under experimental authority issued to Motorola Solutions, is strictly temporary and may be canceled at any time. Specifically, Motorola Solutions proposes to label the equipment or associated equipment information conspicuously as follows:

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Permission to operate this device has been granted under experimental authority issued by the Federal Communications Commission to Motorola Solutions, Inc., is strictly temporary, and may be canceled at any time.

This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained. Thus, the user does not hold a property right in the device and may be required to return the device.

G. Public Interest:

Motorola Solutions submits that issuance of the requested authority is in the public interest, convenience, and necessity, as it will permit Motorola Solutions to develop innovative equipment that will accommodate the communications needs of users.

H. Contact Information:

Technical Contact and "Stop Buzzer/Kill Switch:"

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