

NARRATIVE STATEMENT

Pursuant to Section 5.3(d) and (f) and Section 5.53 of the Commission's rules, 47 C.F.R. §§ 5.3(d), (f), 5.53 (2010), Motorola Solutions, Inc. ("MSI") respectfully requests an experimental license to test, evaluate and demonstrate a prototype radio communications system designed to support the internal communications requirements of public safety entities in the State of Missouri.

Grant of this application would serve to replace and supplement Motorola's existing special temporary authority ("STA") for this experimentation granted under File No. 0585-EX-ST-2010 and issued under call sign WE9XQI. Specifically, this application proposes to replace the STA authorizing experimental operations at various locations in the State of Missouri.

As provided under Section 5.61(b) of the Commission's rules, 47 C.F.R. § 5.61(b)(2010), this application is also intended to serve as a continuance or extension of MSI's authority to operate as permitted under its STA pending action on the application. MSI understands that such continuance or extension applies only to the operations authorized and as conditioned under that STA and that it must wait action on this application for a regular license before it may operate in any manner or at any site proposed in this application that is at variance with operations authorized or conditioned under the STA. The regular license and extension are necessary to allow MSI to continue its tests pending Commission action on applications filed by its customer for licenses under Part 90 and other FCC Rules.

Specifically, MSI proposes to test and demonstrate the functionality and capability of the system, determine user acceptability, and obtain needed feedback to improve and enhance the design of the system. The experimental activities will be conducted on a non-interference basis using a limited number of non-Federal Government 12.5 kHz VHF channels allocated under Part 22, Section 22.561 of the FCC's rules for use in the Paging and Radiotelephone Service and that MSI has already coordinated, or will be coordinate, with co-channel licensees in the area.

Notably, MSI does not propose to operate on any channel allocated either on an exclusive basis or on a shared basis with the Federal Government. Moreover, it does not propose to operate on any channels allocated under FCC rule parts other than Part 22, such as Part 90 or Part 95. Its operations will be limited to the channels allocated under Section 22.561 of the FCC's rules for use in the Paging and Radiotelephone Service.

MSI does not seek authority to conduct market studies or provide communications services under the requested experimental authority. Nor does it propose to market, sell, or lease prototype equipment to end users in conjunction with this test. The participants in the test will be advised that (1) the test is being conducted under an experimental authority issued to MSI, (2) MSI is the party responsible for the operations, (3) all operations must be conducted on a non-interference basis, and (4) after the test is completed, MSI will retrieve and recover all devices that do not comply with FCC regulations. In addition, no fees will be charged to entities using the equipment during this test. MSI understands that the FCC may specify these as well as other conditions on its authorization.

The following information is provided in support of this request:

Proposed Operations / Locations and Frequencies:

As noted above, MSI requests authority to test, evaluate and demonstrate a prototype radio communications system designed to support the internal communications requirements of public safety entities. To obtain valid data and to present an accurate demonstration of real-world operations, MSI must deploy a sufficient number of units during the test and to simulate actual usage. MSI expects that it will be able to complete its demonstration with a small percentage of the units to be supported by the final system. Specifically, it proposes to test the system with a maximum of five fixed base stations and 100 mobile units or portables per transmitter site. It will also limit the power, area of operation, and transmitting times to the minimum necessary to evaluate the system.

The proposed locations of the base stations are specified in the accompanying application form and on the attached table. Mobile operations will occur within 40 kilometers of the base station locations. Operation under this experimental license will be conducted on a non-interference basis on a limited number of channel pairs allocated to the Paging and Radiotelephone Service under Section 22.561 of the FCC's rules. Specifically, MSI seeks to deploy approximately three, but not more than five, channel pairs per site that have already been or will be coordinated with co-channel licensees in the area.

Notably, MSI does not propose to operate on any channel allocated either on an exclusive basis or on a shared basis with the Federal Government. MSI will operate only on non-Federal Government channels fully under the Commission's jurisdiction to authorize operation.

Technical Specifications:

On Part 22, Section 22.561 Paging and Radiotelephone Service Channels Only:	152.03 – 152.81 MHz base 157.77 – 158.67 MHz mobile
Base Station Power:	250 W Peak Effective Radiated Power (ERP). All power levels will comply with the limits set forth in the FCC's rules, including those relating to human exposure to radiation)
Mobile Power:	45 W Peak ERP
Bandwidth:	12.5 kHz per channel
Modulation:	Frequency Modulation; C4FM and 2xTDMA
Emission Designators:	8K10F7W, 11K2F1D; 11K2F3E. Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested

Antenna Information:

The antennas used for these tests will be installed and operated in accordance with all FAA and FCC rules and regulations. The mobile/portable antennas will not, under any circumstances, extend more than 6 meters above ground.

Restrictions on Operation / Interference Protection:

MSI recognizes that experimental operations must not cause harmful interference to authorized facilities. As stated above, operation under this experimental license will occur only on a limited number of 12.5 kHz channel pairs on non-Federal Government channels allocated under the FCC's rules and that will be coordinated with co-channel licensees in the test area so as not to pose interference concerns. Should interference occur, however, MSI will take immediate steps to resolve the interference, including if necessary arranging for the discontinuance of operation.

In addition, MSI will advise entities participating in the test that permission to operate has been granted under experimental authority issued to MSI, that such operation is strictly temporary, and that the operation may not cause harmful

interference. To that end, MSI proposes to label prototype equipment or associated written information as follows:

FCC STATEMENT

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 cancelled at any time. Operation is subject to the condition that it not cause harmful interference. This device is not, and may not be, offered for sale or sold until the approval of the FCC has been obtained. Thus, the user does not hold a property right in the device and may be required to return the device.

MSI also requests a waiver of the station identification requirements set forth in Section 5.115 of the Commission's rules, 47 C.F.R. § 5.115 (2009).

Public Interest Statement:

MSI submits that issuance of an experimental license as requested is in the public interest, convenience, and necessity. Grant of such authority will permit MSI to design and develop an innovative system that will accommodate the public safety communications needs of government entities.

Contact Information:

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EXPERIMENTAL TEST LOCATIONS

Motorola Solutions, Inc., proposes to operate temporarily fixed base stations that will be located within 20 kilometers of the coordinates listed in the table below. Mobile operations will occur within 40 kilometers of the base station locations.

Base Station Name	Latitude (NAD83)				Longitude (NAD83)			
Bloomfield	36	54	56.0	N	89	53	30.0	W
Farrar	37	42	10.0	N	89	41	49.0	W
Scott	37	6	01.6	N	89	35	02.5	W
High Ridge	38	28	01.0	N	90	31	22.0	W
Lawrenceton	37	55	44.0	N	90	18	24.0	W