NARRATIVE STATEMENT

Pursuant to Section 5.3(a) and (e) and Section 5.61 of the Federal Communications Commission ("FCC") rules, 47 C.F.R. §§ 5.3(a), (e), 5.61 (2016), Motorola Solutions, Inc., hereby respectfully requests a short-term, export only special temporary authority ("STA") from **June 11 through June 15, 2018**, to operate on two Band Class 28 channels to demonstrate the functionality and performance of prototype equipment and solutions for the Department of Energy ("DoE") at DoE facilities in Albuquerque, New Mexico.

A. <u>Purpose of Operation and Need for STA</u>:

Motorola Solutions is a leading manufacturer of mobile radio equipment for the critical infrastructure and public safety community and is continually engaged in the design and development of new and innovative communications systems. The experimental authority requested herein will allow the company to support DoE's evaluation of the functionality and reliability of systems needed to support the requirements of potential users.

Specifically, Motorola Solutions proposes to demonstrate prototype equipment to government personnel at DoE's facilities in Albuquerque, New Mexico. To accommodate set-up requirements as well as to ensure all operations up to demonstration and tear-down are covered by FCC authorization, Motorola Solutions respectfully requests that the FCC grant the STA for the period June 11 through June 15, 2018.

Moreover, Motorola Solutions does not propose to market, sell, or lease equipment under the requested authority for operation in the Band Class 28 band within the United States. Thus, this application seeks authority under the station class code "XE" for export-only. In addition, after the experimentation ceases, Motorola Solutions will recall and recover all test devices.

Grant of an STA will allow Motorola Solutions to demonstrate the prototype system to the DoE as a possible proof of concept and obtain feedback so that it may enhance the efforts to design, develop and improve its equipment to meet the communications needs of potential users.

B. Location of Proposed Operation:

A limited number of temporary fixed and portable units (not more than a total of ten) would be operated within a radius of 0.5 kilometers of the test site located at 2417 Baylor Dr. SE, Albuquerque, NM 87106 (coordinates 35-03-22.1 N Latitude; 106-37-10.1 W Longitude (in Datum: NAD83)) as specified in the accompanying application.

C. <u>Technical Specifications</u>:

1. Frequencies Desired

Motorola Solutions requests authorization to operate on a two Band Class 28 channels, 723.000 / 768.000 MHz and 720.500 / 765.500 MHz, as specified in the accompanying application.

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 units centered on 723.000 and 720.500 MHz will be deployed and configured to operate with a mean effective radiated power ("ERP") of 0.65 Watts. The units centered on 768.000 and 765.500 MHz will be deployed and configured to operate with a mean effective radiated power ("ERP") of 0.160 Watts. Motorola Solutions will reduce the actual powers to the minimum power needed for successful operation, based on set-up and testing at the site of the exercise.

3. Modulation and Emissions

Motorola Solutions proposes to operate using OFDMA - LTE and SCFDMA - LTE modulation. For the operations on channels 723.000 and 768.000 MHz, the primary emission designators are 10M0D7D; 10M0G2D; 10M0G7D; and 10M0W7W. For the operations on channels 720.500 and 765.500 MHz, the primary emission designators are 5M0D7D; 5M0G2D; 5M0G7D; and 5M0W7W Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested.

4. Antenna Information

No antennas will be installed in a fashion that will require approval under FAA and FCC rules and regulations.

5. Equipment To Be Used

Motorola Solutions expects to conduct the demonstration by deploying not more than a total of ten temporary fixed and portable units. Moreover, Motorola Solutions will limit the power, area of operation, and transmitting times to the minimum necessary to support an effective demonstration.

D. <u>Protection Against Interference</u>:

Motorola Solutions understands that it must accept interference from any other users of these bands and that all operations by Motorola Solutions will be on a secondary basis and must not cause interference to operations approved to operate in the band. Motorola Solutions will also coordinate with and obtain required consent from existing licensees authorized in the band.

In addition, Motorola Solutions recognizes that multiple STAs might have been requested and granted for operation in the same area to other entities, that these entities must effectively coordinate their operations, and that failure to do so may result in immediate suspension of STA. Motorola Solutions has established a point of contact ("POC") identified below with "kill switch" authority, and it agrees to cease operations immediately upon receipt of request to the kill switch POC.

Motorola Solutions does not expect the proposed operation to cause interference with any licensed operation. Should interference occur, however, Motorola Solutions will take immediate steps to resolve the interference, including if necessary arranging for the discontinuance of operation.

E. <u>Restrictions on Operation</u>:

Motorola Solutions is not seeking authority to perform a market study of unapproved devices under the requested STA. Moreover, the operation will not involve live-duty operations by first responders or others to protect life, property, or safety. In addition, 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.

Entities will be advised in accordance with Section 2.803 of the Commission's rules, 47 C.F.R. §2.803 (2017), 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. <u>Public Interest</u>:

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 support the development of innovative equipment that will accommodate the communications needs of potential users.

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

Technical Point of Contact ("POC") and "Stop Buzzer/Kill Switch:"

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