

## **ATTACHMENT TO FCC APPLICATION**

OET File No. 1431-EX-ST-2019

### **Description and Purpose of Proposed Experimental Operations**

By the above-referenced application, Amazon.com Services, Inc. seeks an experimental special temporary authority from the Federal Communications Commission to operate in the 3650-3700 MHz portion of the Citizens Broadband Radio Service spectrum to test and analyze the performance and functionalities of prototype CBRS devices and software under development to support communications requirements and applications.

Amazon requires a six-month STA to conduct preliminary tests near its facilities located in Sunnyvale, California (as specified on the accompanying FCC application form) so that it may obtain sufficient data to determine whether to continue and expand its research into CBRS technologies at other locations. It does not propose to conduct market studies or provide communications services under the experimental authority it requests. Moreover, test participants will be advised that the operations are being conducted under an experimental authority issued to Amazon and that Amazon will retrieve and recover all non-compliant devices after the tests are completed.

Amazon also recognizes that the spectrum is allocated for other uses. Accordingly, it will coordinate and cooperate with licensees and other users to ensure against interference. In addition, company personnel will monitor the activities of other users before commencing transmissions and select appropriate channels and operational times so that it may avoid interference. In the event that Amazon receives a complaint of interference resulting from its operations, it will take immediate action to address the interference, including discontinuing its transmissions, if necessary. Should questions arise relating to interference, the following persons have been designated as the technical contacts/“stop buzzer” contacts:

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Although Amazon is taking these precautions, it does not expect harmful interference to occur, as the proposed operations will be limited in scope. First, the tests will typically occur only periodically during the term of the experimental authority it has requested and will involve the deployment of the minimum number of units to obtain accurate tests results; at no time will Amazon deploy more than a total of 25 base stations and 50 mobiles. Second, tests will be conducted initially within a building and the operational area for the outdoor tests will be limited to a 5 km radius of its corporate facilities at Sunnyvale. Last, the peak effective radiated power of the devices to be deployed will be limited to not more than 10 Watts (*i.e.*, not more than 5 Watts for mobiles and 10 Watts for temporary base stations). All power levels will comply with the limits set forth in the FCC’s rules, including those relating to human exposure to radiation, and any antennas will be installed in accordance with Federal Aviation Administration (“FAA”) and FCC rules and regulations.

Amazon submits that issuance of an experimental STA as requested is in the public interest, convenience, and necessity, as it will permit Amazon to test and evaluate the performance and functionalities of CBRS devices and software under development to support communications requirements and applications.