<u>**ATTACHMENT TO FCC APPLICATION**</u>
OET File No. 0632-EX-CN-2019

<u>**Description and Purpose of Proposed Experimental Operations**</u>

By the above-referenced application, Amazon.com Services, Inc. seeks an experimental license 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 recently received experimental special temporary authority to conduct preliminary tests near its facilities located in Sunnyvale, California, so that it could obtain sufficient data to determine whether to continue and expand its research into CBRS technologies at other locations. That STA was granted under OET File No. 1431-EX-ST-2019 and issued call sign WP9XAM. By this application, Amazon seeks a regular experimental authorization so that it will be prepared to expand its research as necessary to three other locations (in Arlington, VA, Herndon, VA, and Seattle, WA) and to continue its research at its initial location in Sunnyvale. The addresses and coordinates of the locations are provided in the accompanying application.

As is the case under its STA, Amazon does not propose to conduct market studies or provide communications services under the experimental authority it requests in this application. 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 persons listed below have been designated as the technical contacts/"stop buzzer" contacts for the proposed operations.

<u>**Technical Contact/"Stop Buzzer" Contact Information**</u>

Omar Zakaria Sr. Manager, RF systems 1160 Enterprise Way Sunnyvale, CA 94089 Telephone: (813) 454-1010 Email: device-certification@amazon.com	Nathan Labadie RF Engineer 1160 Enterprise Way Sunnyvale, CA 94089 Telephone: (858) 775-1157 Email: device-certification@amazon.com

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 per location. Second, tests will be conducted initially within a building and the operational area for the outdoor tests will be limited to a 10 km radius of the coordinates provided for each location. 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.