

## **Exhibit**

Applicant seeks a one (1) month Special Temporary Authority (STA) license to demonstrate at the Electronic Entertainment Expo (E3) held at Los Angeles Convention Center, the functionality, features, and capabilities of the fifth generation (“5G”) wireless communication systems using experimental equipment operating in the 28 GHz spectrum band. The STA is needed from June 1, 2018 to June 30, 2018.

The industry standards organization, 3<sup>rd</sup> Generation Partnership Project (“3GPP”), has developed 5G standards that became available in 2018. 5G systems will utilize advanced antenna technologies with beamforming and multiple in multiple out (“MIMO”) technology, as well as more efficient coding and modulation schemes. These advanced techniques can result in higher spectral efficiencies, reduce latency to 1-5 milliseconds, and enable gigabyte per-second (Gbps) mobile and fixed broadband services, significantly faster than today’s average 4G speeds using long term evolution (“LTE) connections.

Applicant’s 5G demonstrations will involve communications between up to 3 fixed (FX) base stations, and up to 3 user equipment (UE) units placed within 100 meters of the base station antennas. The base station and the UE antennas will be placed indoors at a height of less than 5 meters above the floor in an exhibit hall inside the Los Angeles Convention Center located at 1201 S. Figueroa Street, Los Angeles, CA 90015. The red oval in the diagram below indicates the proposed location of the base station(s) and UE(s). The base station(s) will have connectivity to an internal server providing content over the 5G air interface for these demonstrations. The UE(s) can provide services to various devices through Wi-Fi access points connected to the UE(s) via Ethernet cabling.

E3 is considered one of world’s premier trade shows for computer and video games and related products. Groundbreaking new technologies and products for on-line gaming will be demonstrated using the 5G air interface. The demonstrations using this license will provide valuable information to potential users whose feedback on the perceived performance of services provided through the 5G system could enable future standards and system optimizations





