

## EXHIBIT

Applicant seeks a one (1) month Special Temporary Authority (STA) to demonstrate the functionality, features, and capabilities of fifth generation (“5G”) 3GPP NR-based wireless communication systems leading up to, during, and after the Super Bowl in Miami, FL. Applicant requests that the STA authorize the use of experimental equipment operating in the 39 GHz spectrum band from January 20 to February 7, 2020.

The industry organization 3<sup>rd</sup> Generation Partnership Project (“3GPP”) completed the R15 NR specifications in June 2018, which together with 3GPP final NR specifications in Release 16, will be submitted for consideration as an IMT 2020 Radio Interface Technology at the July 2019 ITU-R WP5D meeting. 5G systems provide low latency multi-gigabyte per-second (Gbps) mobile and fixed broadband services. AT&T seeks the STA to further demonstrate the advanced applications and services possibilities in the requested mmWave frequency band.

Applicant’s 5G demonstrations will involve communications between up to 3 fixed (FX) base stations, and up to twenty (20) user equipment (UE) units placed within 100 meters of the base station antennas. The base station and all UE antennas will be placed at a height of less than four (4) meters at locations indoors at 950 MacArthur Causeway, Miami, FL 33132 (25.785935 - 80.177371), as shown in the maps below. The base stations will connect to an internal server that provides content.



