

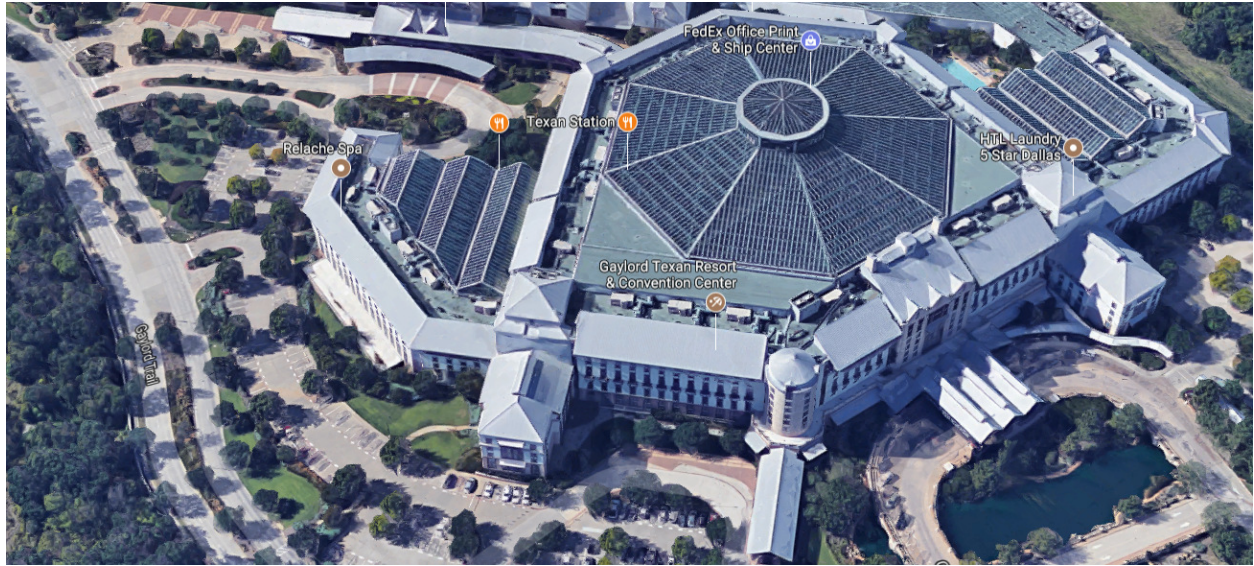
Exhibit

Applicant seeks a one (1) month Special Temporary Authority (STA) to demonstrate at the 2018 AT&T Business Summit held at Gaylord Texan Resort in Dallas Texas, the functionality, features, and capabilities of the fifth generation wireless communication systems “5G systems” using experimental equipment operating in the 28 GHz spectrum band. The STA is needed from September 1, 2018 to October 1, 2018.

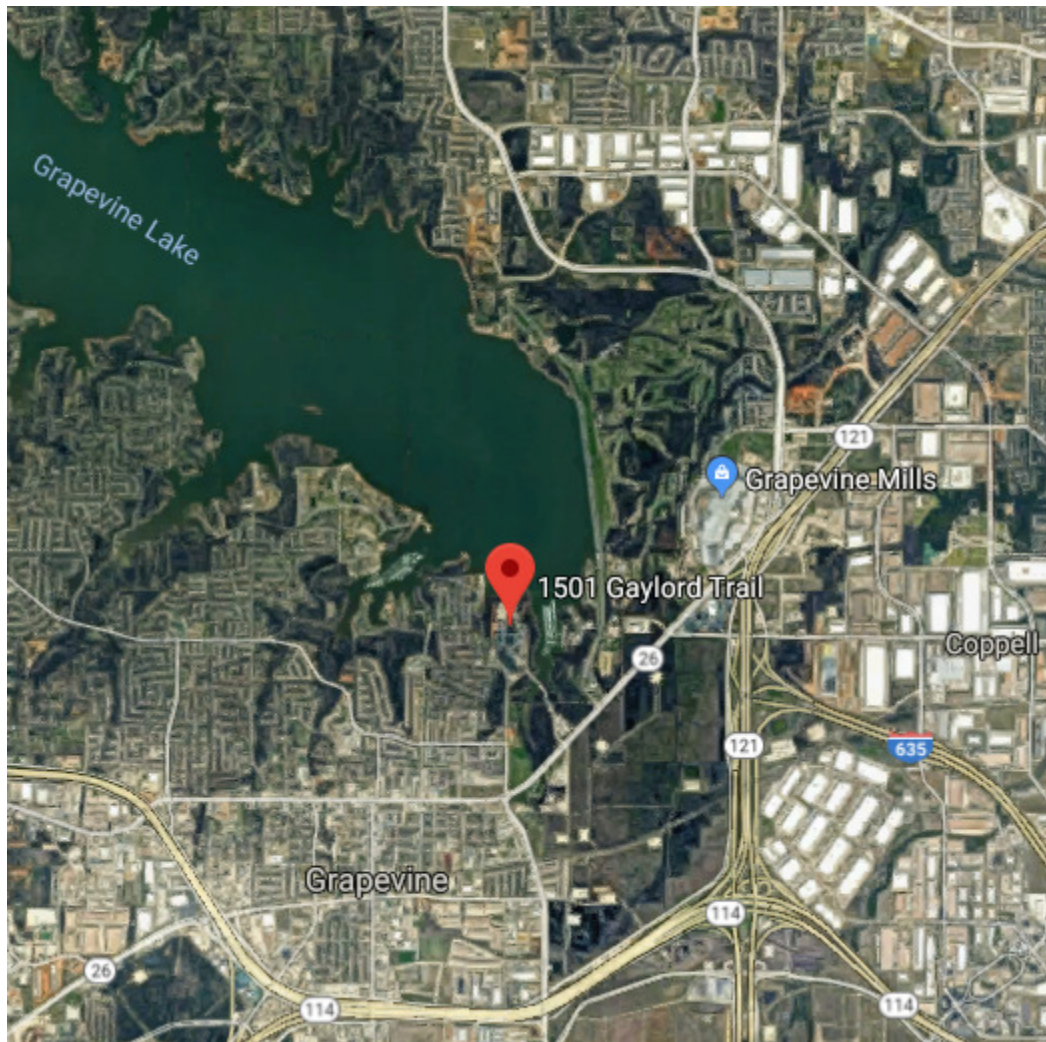
The industry standards organization, 3rd Generation Partnership Project (“3GPP”), has developed 5G standards that became available in 2018. 5G systems will utilize advanced antenna technologies with beamforming and multiple in multiple out (“MIMO”) technology, as well as more efficient coding and modulation schemes. These technologies are expected to 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 fixed (FX) base stations and up to 3 user equipment (UE) units placed within 100 meters of the base station antennas. The 5G air link will be used in demonstration of digital technologies requiring very high speeds and low latencies, such as AR (Augmented Reality), VR (Virtual reality), robotics, 4K video, and gaming, as well as edge computing. The base station and the UE antennas will be placed indoors at a height of less than 6 meters above the floor inside the Gaylord Texas Resort located at 1501 Gaylord Trail, Grapevine, TX 76051. The base station will have connectivity to internal servers providing content over the 5G air interface for this demonstration. The UEs can provide services to various devices through Wi-Fi access points connected to the UEs via Ethernet cable.

The demonstrations using this STA will provide valuable information to users, whose feedback could be used to enable product development and system optimization, as well as to improve future system deployments.







32°57'17.0"N 97°03'52.0"W

32.954726, -97.064456

