

## **EXHIBIT 1**

Pursuant to Sections 5.3(j) and 5.61 of the FCC's rules, 47 C.F.R. §§ 5.3(j) and 5.61, NetScout Systems Texas, LLC ("NETSCOUT") requests a six-month special temporary authorization ("STA"), starting on October 16, 2017, for conducting RF propagation characterization experiments.

### **Description and Purpose of STA Operations**

NETSCOUT is a leading provider of RF propagation modeling and tuning services to the wireless operators in the US. NETSCOUT requires an STA to advance the understanding of RF propagation characteristics in 27.5-28.5 GHz frequencies.

During the six months of testing, NETSCOUT will conduct Continuous Wave (CW) testing in indoor and outdoor locations to characterize signal propagation behavior in various morphologies (dense urban, urban, suburban, commercial, and industrial) in the area of the experiment. Additionally, NETSCOUT will characterize RF penetration properties for different building types within these morphologies. RF propagation for various seasonality conditions will be characterized.

Testing will take place in the San Francisco Bay area, within a 30 km radius of the locations detailed in the accompanying STA application using a mobile transmitter between the dates 10/16/2017 to 3/16/2017. Operation radius for each test will be limited to 1.5km from the mobile transmitter. NETSCOUT will coordinate with authorized earth stations that operate within the 25-mile radius. Engineers will be on site during the testing to further ensure that no interference takes place. NETSCOUT will immediately resolve any interference issues that might occur during testing.

### **Antenna Notes**

For the experiment a combination of omnidirectional and directional antennas will be used during testing on the transmit and receive side. The omnidirectional antennas have 6 dBi gain and 10 degrees vertical beamwidth. Directional antennas have 20 dBi gain and 16 degrees horizontal and 14 degrees vertical beamwidth.

The antennas will be mounted on a mobile vehicle with hydraulic masts, which will be moved within the requested test area. In most cases, surrounding buildings and trees are taller than the masts. The mast will not exceed 15 meters when extended, and will be raised only when testing is being conducted. Please see Figure 1 for a picture of the mobile transmitter.



Figure 1 - Mobile transmitter unit for CW testing. Maximum height for telescoping mast is 15m.

### **Conclusion**

The following may be contacted in the event of any issues arising from the proposed STA operations or for additional information.

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