

EXHIBIT 1

PROGRAM OF RESEARCH AND EXPERIMENTATION

Cellco Partnership d/b/a Verizon Wireless (“Verizon Wireless”) hereby requests an experimental short term authorization (“STA”) to use the 3.7 – 3.8 GHz band in portions of PEA002 Los Angeles, CA. Verizon Wireless plans to use this STA to co-develop different mobile devices with OEM partners. The 100 MHz sought under this STA is a subset of the recently auctioned flexible use C-Band at 3.7 to 3.98 GHz and ultimately will be part of Verizon Wireless’ post clearing assignments. Verizon Wireless’s request is temporary, expiring nine months from grant.

Testing under the STA will occur both outdoors and indoors, and all transmissions will be controlled at the locations provided in the application. The fixed base stations and mobile terminals will employ directional, beamforming antennas and will have a maximum antenna elevation as described in the application. The base station antenna has a half-power beam width of approximately 30° vertically and 120 ° horizontally. In addition to the newly requested locations, Verizon Wireless seeks to expand testing at three previously approved locations included in the experimental authorization WL2XQH. Based on further analysis and earth station interference mitigation techniques, these additional sectors are being incorporated in Costa Mesa and Newport Beach, CA. The equipment will be mounted using different orientations to avoid Earth Station interference compared to the orientations used today. This site and orientations were specifically selected due to their distance to the nearest Earth Station to perform this specific testing.

Additional technical parameters are specified in the accompanying Form 442. The following table provides details of the previous approved three locations as well as the new locations with the orientation of antennas where multiple values cannot be entered into the Form 442.

Sites in Call Sign WL2XQH	Horizontal orientation of antennas (in degrees)
Newport Beach, CA	100;220;340
Costa Mesa, CA	100;220;340
Newport Beach, CA	10;100;190

Site	Horizontal orientation of antennas (in degrees)
Irvine, CA	30;120;210;300
Costa Mesa, CA	130;260;10
Irvine, CA	90;230;340
Newport Beach, CA	120;210;350
Costa Mesa, CA	110;230;30

Site	Horizontal orientation of antennas (in degrees)
Irvine, CA	95; 240; 0
Costa Mesa, CA	110;230;350
Costa Mesa, CA	110;230;350

Verizon Wireless has identified the nearest Earth Stations and will coordinate operations under the STA with those Earth Station licensees to avoid any potential disruptions to their operations. Verizon has strategically selected test locations that will not interfere with existing Earth Stations. If those licensees do experience interference, Verizon Wireless will cease interfering operations. In addition, while Verizon Wireless expects this testing will end once the Earth Stations have successfully cleared Phase 1 (100 MHz of the A-Block), Verizon Wireless will cease operations in the areas which are part of the A-Block clearing phase upon notice by a new licensee that they plan to initiate operations in the relevant area.