

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 PEA004 San Francisco, 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 outdoor fixed base stations and mobile terminals will employ directional, beamforming antennas and will have a maximum antenna elevation as described in the application. The equipment will be mounted using different orientations to avoid Earth Station interference compared to the orientations used today. Additional technical parameters are specified in the accompanying Form 442. The following table provides detail with the orientation of antennas where multiple values cannot be entered into the Form 442.

Site	Horizontal orientation of antennas (in degrees)
Benito Avenue	15, 137, 260
Beach Street	90, 210, 330
Mission Street	80, 200, 320
Soquel Avenue	40, 160, 280

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.