

## **Experiment Description**

An Experimental license is requested in order to support a integration testing and demonstration of ancillary voice communications in addition to the Internet data capability of our satellite communications equipment offering.

The integration testing and demonstrations will take place at ViaSat's facilities in Carlsbad, CA in a campus lab environment well isolated from other public access areas and is unlikely to cause interference with cellular services of any provider.

Short term demonstrations may also take place at ViaSat facilities in Denver, CO.

The equipment to be used in support of the demonstration, for which this Experimental STA is requested, is a femto-cell device which has been approved for commercial operation in Europe and Japan. The device allows regular cell phones to communicate over an IP data link when normal cellular telephone service is not available, i.e. inside buildings or in rural or remote areas with poor or non-existent cellular service.

The device is capable of operation on a number of different frequency bands. The transmit frequencies are as follows: Band I is 1920 – 1980 MHz, band II is 1850 – 1910 MHz, band IV is 1710 – 1755 MHz, and band V is 824 – 849 MHz. The actual frequency used will be limited to a single 5 MHz wide channel within one of the above bands that can be selected at the time of the demo.

The device operates at very low power, with a maximum output of 20 dBm into an Omni directional antenna with little or no gain. The output power is variable and is reduced to less than the maximum when in communicating with cellular handsets nearby.

The point of contact to cease transmissions is Daryl Hunter and the phone number is 1-760-476-2583.