

## QUALCOMM 1915-1920 MHz Experiment Proposal RevB

### 1 Introduction

Qualcomm Incorporated (NASDAQ:QCOM - News) is the world leader in 3G and next-generation mobile technologies. For 25 years, Qualcomm ideas and inventions have driven the evolution of wireless communications, connecting people more closely to information, entertainment and each other. Today, Qualcomm technologies are powering the convergence of mobile communications and consumer electronics, making wireless devices and services more personal, affordable and accessible to people everywhere. For more information, please visit [www.qualcomm.com](http://www.qualcomm.com).

QUALCOMM will be completing limited testing of an experimental TDD technology in San Diego, CA and Bridgewater, NJ. Initial testing has been completed using STA Call sign WF2XRV granted on February 25, 2011. Testing is planned to continue for one year and therefore this experimental license is required to continue testing.

This modification to call sign WF2XUA adds a second transmitter configuration to the existing experimental license.

Two transmitter configurations with different frequency, power, and transmitter bandwidth configurations will be tested. For each configuration, a single fixed transmitter will be installed and operated at each geographic location. Mobile units will operate within a 5 mile radius of the fixed sites. Both the fixed and mobile transmitters utilize the same frequency range

### 2 Transmitter Information

The maximum output power for mobile units and the fixed site is listed in Table 1. For transmitter configuration #2, the 10MHz transmitter will be tuned within the requested 15MHz bandwidth.

Table 2 lists the fixed site location and operational radius where mobiles will be operated. The actual fixed site ERP deployed may be lower than the power listed after the network design has been finalized.

**Table 1 Transmitter Information**

| Configuration | Type   | Frequency (MHz) | Power (dBm EIRP) | Power (W EIRP) | Power (W ERP) | Bandwidth (MHz) | Emissions Designator: |
|---------------|--------|-----------------|------------------|----------------|---------------|-----------------|-----------------------|
| 1             | Fixed  | 1915-1920       | 50               | 100            | 60.7          | 5               | 5M00W7W               |
|               | Mobile | 1915-1920       | 24               | 0.251          | 0.152         | 5               | 5M00W7W               |
| 2             | Mobile | 1915-1930       | 24               | 0.251          | 0.152         | 5               | 10M00W7W              |

**Table 2 Transmitter Site Information**

| Type  | Address                                           | County    | Lat       | Long       | Radius (miles) | Radius (km) | Antenna Type |
|-------|---------------------------------------------------|-----------|-----------|------------|----------------|-------------|--------------|
| Fixed | 500 Somerset Corporate Blvd Bridgewater, NJ 08807 | Somerset  | 40-35-6N  | 74 37 26W  | 5              | 8           | Omni         |
| Fixed | 100 Somerset Corporate Blvd Bridgewater, NJ 08807 | Somerset  | 40-35-13N | 74-37-34W  | 5              | 8           | Omni         |
| Fixed | 6455 Lusk Blvd<br>San Diego, CA 92121             | San Diego | 32-53-45N | 117-11-46W | 5              | 8           | Omni         |
| Fixed | 5775 Morehouse Dr.<br>San Diego, CA 92121         | San Diego | 32 54 9N  | 117 12 3W  | 5              | 8           | Omni         |

### 3 Frequency Coordination

A search of the FCC online databases has shown no active licenses, experimental licenses, or STAs issue for the requested frequency range within the identified experimental area.