

**Covad Communications Group, Inc.**  
**FCC Form 442**  
**Application for Experimental Radio Service**  
**Response to Question 7**

**Narrative Statement**

By the attached application, Covad Communications Group, Inc. (“Covad”) seeks experimental authorization to employ facilities in the 3650-3700 MHz band (the “3.6 GHz Band”) in five (5) geographic areas. As the first company to commercially deploy DSL in the United States, Covad is a broadband expert. It owns the only nationwide broadband DSL network. It has spent hundreds of millions of dollars building a network that passes more than 57 million homes and businesses, which represent over 50 percent of all United States homes and businesses. Covad broadband services are currently available across the nation in 44 states and 235 Metropolitan Statistical Areas (“MSAs”).

Covad’s services are offered today over wireline networks. Covad seeks to conduct the experimental operations contemplated by the attached application in order to assess the provision of broadband services over a wireless platform. Covad is developing tools that will enable it to determine the viability of potential wireless subscriber locations prior to sending out an installation team. The reliability of this tool is an important element in Covad’s wireless deployment plans for any proposed spectrum it would use. It has calibrated the tool for the use of devices in the unlicensed 5.8 GHz band. However, Covad may not ultimately employ the 5.8 GHz band to provide wireless services. Accordingly, it wishes to develop its “pre-qualification” tool under a variety of radiofrequency propagation scenarios.

One of the possible bands in which Covad will provide service is the 3.6 GHz band, recently made available by the FCC for use in fixed and mobile applications. Covad has no experience in real world radiofrequency propagation characteristics in this spectrum and thus desires to better understand what these characteristics are and how they effect its technology and economic model under a variety of real world scenarios. Covad will employ Aperto PacketWave® equipment configured to operate in the 3.6 GHz band. All base stations and remote devices will be professionally installed and will operate in compliance with the equipment authorization obtained by Aperto and within the parameters adopted by the FCC in the Docket No. 04-151 proceeding. Covad has attached hereto material describing the equipment provided by Aperto.

Covad is mindful that rules adopted in the Docket No. 04-151 proceeding prohibit the operation of 3.6 GHz band equipment nearby to fixed satellite station (“FSS”) facilities in the same band. Covad proposes to operate within the areas prohibited by the FCC’s decision. Nevertheless, Covad believes that it will not cause interference to existing FSS operations and hereby agrees not to cause interference to FSS operations. However, if Covad does cause such interference, it recognizes that its operations are secondary to those of FSS stations, and it will suspended use of the band in the vicinity of the FSS station, immediately pending resolution of the interference.

The Commission will note that Covad seeks authority to operate from sixteen (16) fixed sites in five (5) markets. Covad seeks authority to conduct operations in these five markets to evaluate this spectrum under a number of radiofrequency propagation characteristics, collocation site types, and terrain and canopy models. In addition, qualification of the 3.6 GHz band equipment's capability to provide planned service offerings in any of the tested terrain models and the ability to utilize Covad's pre-qualification tool are essential to Covad's planned wireless operations. The characteristics of each of the markets that make it important for a separate test are described below:

- (1) Miami – This represents long, narrow geographical terrain with target demographics bounded by swamps and the Atlantic Ocean. These terrain characteristics limit the normal adjacent cell overlap models, thus requiring testing to better understand propagation and overlap models.
- (2) Atlanta – Covad selected this market because real world radiofrequency propagation models for the requested spectrum are untested in heavily wooded (pine trees) terrain with minimal high ground site availability. Once again, real world radiofrequency propagation data is required to build accurate wireless business models in this spectrum; the data that Covad expects to obtain can be expanded to project propagation characteristics in Houston, TX; Nashville, TN; Charlotte, NC; Denver, CO; and other Southeastern metropolitan areas
- (3) Los Angeles – Covad proposes to conduct tests in the market because it represents a large metropolitan area with high mountain tops, which create a bowl effect. Tests in this market will represent a unique opportunity to provide coverage from high sites, thereby limiting the number base station locations necessary and influencing deployment economics. The propagation data that Covad expects to develop will be relevant for San Diego, CA, Albuquerque, NM and Las Vegas NV.
- (4) Phoenix – Phoenix is representative of a number of markets in which there is relatively flat terrain. Therefore, all sites typically cover a much smaller area of operation. Such markets include Chicago, Phoenix, Dallas and others. Again, understanding the RF propagation under these terrain characteristics is critical to being able to execute effective deployments in other like cities.
- (5) San Francisco – This market represents a unique opportunity in that it: (a) is Covad's home market; and (b) has a combination of terrain features (hills, water,) that make it a good propagation surrogate for cities such as Seattle, WA; San Diego, CA and Portland, OR. Covad specifically seeks authority to conduct limited market studies in this market, in the San Francisco and San Jose areas. The use of limited market studies will permit equipment testing (like other markets) as well as deployment of limited subscriber equipment to understand market requirements as well as technological issues associated with this spectrum. Covad hereby agrees to comply with the provisions of Section 5.93 in conducting its limited market study. In particular, Covad will: (a) own all of the transmitting and/or receiving equipment; and (b) be responsible for informing anyone

participating in the experiment that the service is granted under an experimental authorization and is strictly temporary.

Should there be any questions regarding this application or the foregoing justification for experimental operations, the FCC is asked to contact FCC counsel for Covad, Russell Fox of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo at 202-434-7483 or [rfox@mintz.com](mailto:rfox@mintz.com).