

L&G Communications, Description of Proposed Operations
FCC Form 442 Exhibit

L&G Communications (L&G), a new provider of fixed wireless services for medium to below 50 rural markets in the United States, plans to develop and deploy systems for the delivery of efficient local and long distance telephone service, high-speed Internet access and Voice Over Internet Protocol (VOIP) service to local governments and schools utilizing radio spectrum in the 36.5-3.7 MHz band. L&G hopes that this promising new technology can be utilized to provide advanced telecommunications services to communities presently undeserved by the major telecommunications companies. Such communities include the medium-sized population centers and under-represented ethnic groups within the larger urban areas.

To support this advanced system development, L&G hereby requests an authorization to conduct system performance trials in various areas to determine the relationship between theoretical performance predictions and actual system performance of new technology for high-speed Non-Line Of Sight (NOLS) wireless broadband service under signal propagation conditions typical in the urban and rural areas.

The objective of the system trials proposed herein is to determine the feasibility and optimal equipment configuration requirements for utilizations of the 36.5 MHz band to deploy high-speed NOLS wireless internet and VOIP services to indoor and outdoor installations within the areas.

L&G proposes to utilize 20 MHz-wide channels. Primary base station and remote equipment for these trials will be determined at a later time. This equipment will be configured for transmission in the 36.5 MHz band. All base stations and remote devices utilized by L&G for these tests will be professionally installed and will operate in compliance with Part 15 of the Federal Communications Commission's rules. Information provided by the manufacturer for the antennas and transmission equipment and the precise location of the antennas will be included in a future exhibit.

While this equipment will meet Part 15 requirement, a specific goal of these tests is to monitor for interference in the adjacent frequency bands. From these tests, L&G can determine if additional filtering at the band edges is necessary to avoid adjacent channel interference problems. Should interference to existing adjacent channel users of this band occur, L&G would take immediate action. Including discontinuance of operation, to eliminate the interference to licensed facilities. L&G is also simultaneously requesting similar permission to test transmissions in several other markets.

An important aspect of these trials is to determine the coverage capabilities of this band for fixed Part 15-type wireless communications systems to both indoor and outdoors user installations. As this band has previously not been used for this type of service, the results will be used to establish the minimum system design specifications required to achieve reliable coverage in the typical metropolitan area. Parameters to be determined by the system tests will include the following:

Maximum coverage area from a single hub site;
Signal reliability over time;
Signal penetration losses through foliage and building walls;
Changes in signal propagation due to weather conditions; and
System durability based on the number of users simultaneously accessing the network.

For further information regarding the information submitted herein, please contact L&G's owner, Paul Grandinetti.