

Exhibit 1: Experimental Description

SkyRiver Communication's business model is designing, building, deploying and maintaining a wireless infrastructure capable of delivering commercial grade broadband to businesses. It has been on the leading edge of development since 1999. It is our desire to test the effectiveness of delivering bandwidth in the 3650-3700 MHz frequency. To that end, Skyriver is requesting authorization from the FCC to conduct performance trials in the Southern California region in that frequency.

The objective of the system trials proposed is to determine the feasibility and optimum equipment configuration requirements for the utilization of the 3650-3700 MHz band to deploy high speed LOS and Near LOS wireless data services to commercial installations in the Southern California region. Additionally, these system trials will help ascertain the interference impact of the system transmissions on existing co-channel and adjacent channel Fixed Satellite Service ("FSS") facilities along with various interference mitigating protocols used in the modulation. The results of these tests will be used to establish the minimum system parameters and hardware required to provide reliable, affordable high speed wireless services without an adverse impact on existing FSS operations as well as adverse impact on additional band users as outlined in the Commissions Report and Order (ET Docket No. 04-151).

SkyRiver proposes to utilize 14 MHz-wide channels in 14MHz steps utilizing Quadrature Amplitude Modulation with an EIRP not to exceed 70dBm (10 watts). All transmission devices will be fixed and located within a 16.09 km radius area. Primary base station and remote equipment for these trials will be the AN-100 system developed by Redline Communications and configured by the manufacturer for transmissions in the 3650 MHz band. All base stations and remote devices utilized by SkyRiver for these tests will be professionally installed and will operate in compliance with Part 90 and within the parameters and power levels in the Report and Order, ET Docket No. 04-151. Information provided by the manufacturer for the antennas and transmission equipment is attached for reference ad Exhibit 2 and Exhibit 3.

To assure protection of existing FSS earth stations and Federal Government operations in this band, a search of the IBFS database was conducted to identify facilities in the 3650 – 3700 MHz band located within 180 km of the proposed service area. This separation distance is the maximum radius of the FSS Protection Zone as defined in Report and Order, ET Docket No. 04-151. A printout of the database study is attached as Exhibit 4.

As demonstrated by the database search, the nearest facilities were found to be more than 216 km distant, well outside the protection zones identified in the Report and Order. Due to the distance separation of the proposed operations to the existing facilities in the database, no interference to FSS earth stations and Federal Government operations is expected to occur.

Should interference from these experimental operations occur to existing authorized facilities, the test will be suspended immediately pending resolution of the interference.

While this equipment does meet the Commissions intent of “Interference Mitigation”, this equipment does not presently meet the “letter of the law” regarding the “contention-based” protocol requirement currently under Commission Reconsideration. The planned equipment has an excellent compliance record from its utilization in the licensed 3.6 GHz bands utilized outside the United States. Additionally, a major portion of this trial will be to provide the Commission adequate data sufficient to act on currently open Petitions for Reconsideration regarding the mandatory requirement of the use of “contention-based” protocols.

Another specific goal of these tests is to monitor for interference in the adjacent frequency bands. From these tests, SkyRiver 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, SkyRiver will take immediate action, including discontinuance of operation, to eliminate the interference.

An important aspect of these trials is to determine the coverage capabilities of this band for fixed SkyRiver-type wireless communications systems to both indoor and outdoor user installations. As this band is currently being used for this type of service in Europe, the results will be used to establish the minimum system design specifications required to achieve reliable coverage in the typical rural and suburban areas of the United States under recently released changes to Part 90 of the Commissions rules.

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
- Changes in signal propagation due to weather conditions
- System durability based on the number of users simultaneously accessing the network
- Quality of Service (QOS) reliability based on new technologies such as VOIP, and Video Over IP

Up to 25 test sites may be utilized at various distances from the hub site. Locations currently utilizing regular SkyRiver service on other spectrum will be utilized for the test transmissions. By using SkyRiver's extensive customer base for these tests, the impact of an actual full system deployment can be experienced for this spectrum. Since a TDD system is proposed, a maximum of only six of simultaneous transmissions will exist at any one point in time. Once service is verified at a test site, the trial of service availability at that site continues on a 24-hour basis for at least 1000 hours. Among other collection procedures, reports from volunteer users at each site will be utilized to determine system performance and reliability.

SkyRiver already holds significant experience providing wireless broadband to customers in other frequency bands in a variety of markets. It currently serves almost 2,000 customers in the Ventura, Los Angeles, Riverside, Coachella Valley and San Diego markets. SkyRiver has learned how the local topography, foliage, building structures and weather patterns affect the propagation and interference characteristics of these diverse platforms. SkyRiver has also learned the business and communication demands of its commercial clientele within these service areas. From its technical and marketing experience, SkyRiver is uniquely qualified to model operation in the 3650 -3700 MHz spectrum and help determine its ability to match the reliability and quality of service expected by commercial customers.

The data obtained from these tests will contribute to the further development and utilization of unlicensed operation as a secondary service to FSS earth stations and government operations in the 3650 3700 MHz band.

Upon successful completion of these trials, SkyRiver will report its data and other findings from their tests to the Commission to support future Rules for this service. Should the Commission require further information or materials regarding the information submitted herein, such will be promptly furnished upon request.

With regards to SkyRiver's selected trial area of Southern California, the Commission is advised that these markets represent a typical metropolitan area of planned deployment by typical Wireless Internet Service Providers across the United States. SkyRiver view these market areas as essential to the 3650 – 3700 trial.

Exhibits

1. Experimental Description
2. Directional Antenna Data
3. Equipment Information
4. FSS Facilities Considered
5. Antenna Structure Data
6. Modulating Signal Description
7. Necessary Bandwidth
8. TOWAIR Antenna Structure Registration Results