

Question 7: Response

Form 442 Confirmation Number -- Modification Application

This modification application seeks an additional 250 subscriber units to complete the limited market and interference studies begun under the original experimental station grant. The demand for Fixed Wireless Access (“FWA”) service to underserved residents of the Salt River Community was higher than initially expected. In addition, the initial 150 FWA deployments (which are almost completed) have revealed additional demand for internet, business and second line usage on the reservation. As with the original experimental license, the equipment will be owned by the Salt River Community, but operated under contract by Mountain Telecommunications, Inc. To complete the limited market study for which the experimental license was granted, Mountain Telecommunications, Inc. and the Salt River Pima Maricopa Indian Community must examine the market characteristics and economics for higher traffic and higher density configurations than are permitted by the current experimental license restrictions. Therefore, authorization for an additional 250 subscriber stations is necessary and will serve the public interest.

Regarding concerns about what happens to these customers if the spectrum ultimately is not licensed for the FWA application, the Applicant shares that concern and will make the significant additional expenditures to upgrade the copper grid if that is the only solution.

Attached below for the Commission’s information and convenience is Attachment 2 to the original Experimental Station Application describing the nature and scope of the experimentation. The other attachments to that application are incorporated herein by reference.

ATTACHMENT 2

2.0 PROGRAM OF RESEARCH AND EXPERIMENTATION

Mountain Telecommunications Inc. (MTI) seeks Radio Station Authorizations under Part 5 of FCC Rules - Experimental Radio Service - for the purpose of conducting a pilot deployment of the Nortel Proximity I Fixed Wireless Access system on the Salt River Pima Maricopa Indian Community (SRPMIC) reservation near Scottsdale, AZ.

MTI specifically references the following types of operations (per section 5.202 of FCC rules governing the Experimental Radio Service) as being applicable:

- (i) *Development of radio technique, equipment, operational data or engineering data related to an existing or proposed radio service.*
- (ii) *Limited market studies*
- (iii) *Other types of experiments that are not specifically covered under paragraphs (a) through (j) of this section*

MTI intend to operate the system under conditions approximating those that would exist in full-scale commercial deployments of the system, in order to evaluate its technical and operational viability and its ability to satisfy the telecommunications service requirements of SRPMIC members.

For this pilot deployment, MTI is planning to deploy and operate up to three Proximity I base stations on the reservation. These base stations will interface directly to MTI's existing DMS-500 local exchange and support up to 150 live (non-commercial) subscribers, of which 65 are presently un-served and would be receiving telephone service for the first time.

The trial subscribers would utilize a range of standard telephone apparatus (DTMF telephones, cordless telephones, FAX machines, answering machines and voiceband data modems) and have access to the full set of data and telephony services provided by the DMS-500 and supported by the Proximity I system. This includes local voice telephony, CLASS services, FAX and data services, Internet access, intra- and inter-LATA toll, operator services and 911 emergency services.

The trial subscribers would have the Proximity I RSS installed at their premises and be expected to provide feedback to MTI and the equipment vendor (Nortel), on the performance and overall acceptability (aesthetics, ease of use, service benefits) of the system and the services provided. This feedback data would then be used to optimize the operational, performance and deployment characteristics of the system and prepare MTI for future commercial deployment.

As the Proximity I base stations and subscriber terminals will be radiating and receiving RF signals in the 3.4-3.5 Ghz band, MTI understands that the system may be susceptible to interference from, and have the potential to interfere with, other systems operating in this band. As part of the research and experimentation to be carried out under this experimental authorization, MTI will assist Nortel in collecting data on the nature of any interference observed and its effect on the performance of the Proximity I system.

It is our understanding that Nortel has been working with the NTIA, DoD and Joint Spectrum Centre (JSC) on technical characterization of the Proximity I to determine whether this system can coexist with other systems in this band and what the coordination rules would need to be. MTI fully supports this activity and by conducting this pilot deployment, believes it can demonstrate the economic and social benefits available to SRPMIC members through shared access to the 3.4 – 3.5 GHz band.

3.0 OBJECTIVES

A summary of the objectives of this program of research and experimentation then follows:

Mountain Telecommunications Inc. Objectives

- demonstrate economic and social benefits of Fixed Wireless technology
- evaluate customer acceptance of services provided
- demonstrate progress towards becoming facilities-based CLEC
- evaluate system performance in a real network environment
- investigate service, application and business opportunities
- develop staff knowledge on technology and associated functions/processes
- develop plans for product standardization, market introduction and deployment
- address regulatory aspects of wireless technologies

Nortel Objectives

- support regulatory and spectrum initiatives, including DoD/JSC technical project
- characterize system performance in US network and propagation environment
- confirm performance within operator's environment
- develop application and economic/business case scenarios
- identify and resolve product deployment issues
- address operational support and operations process issues

4.0 CONTRIBUTION TO RADIO ART

This program of research and experimentation will enable MTI, Nortel and the industry to evaluate and observe the application of wireless technology in providing wireline-equivalent telephony services and the associated economic and social benefits. Fixed Wireless systems such as Proximity I can be enablers for the provision of urban services

to under-served rural areas and true facilities-based competition, given the availability of suitable spectrum.

This activity will also serve to demonstrate that commercial applications can coexist with existing government or military applications in the same spectrum and that sharing arrangements are technically feasible and should be encouraged.

Based on the track record of the Proximity I system (50,000+ subscribers in service in 15+ countries), MTI and Nortel are extremely confident in its ability to successfully test and ultimately deploy this system in its service area in Arizona.