S-3481-EX-1998

ORIGINAL

U S WEST, Inc.
Suite 700
1020 Nineteenth Street, NW
Washington, DC 20036
202 429-0303

Herbal 8-11-98
on 442
see lot 98-98

August 4, 1998

Federal Communications Commission
Experimental Radio Services
P.O. Box 358320
Pittsburgh, PA 15251-5315

Attn: Office of Engineering and Technology,
Experimental Licensing Branch

Re: Request for Special Temporary Authorization

Dear Sir or Madam:

On behalf of U S WEST Communications, Inc. ("U S WEST"), I am writing to request special temporary authority ("STA") pursuant to Section 5.56 of the Commission's rules to conduct testing of experimental LMDS transmission equipment in collaboration with the Institute of Telecommunications Sciences ("ITS")(the chief research and engineering arm of the United States Commerce Department's National Telecommunications and Information Administration) in the environs of Boulder, Colorado beginning on August 17, 1998. This request follows, with variations noted herein, U S WEST's pending FCC Form 442 application for experimental authority to conduct similar testing (*See* File No. 6198-EX-PL-1998; filed June 22, 1998), a copy of which is attached hereto. In support of this request, the following is shown.

REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION
Information Required by Rule Section 5.56(a)

(1) Name and Address of Applicant

U S WEST Communications, Inc.
700 West Mineral Avenue, Room CO G1.24
Attn: Lonna Warbutton
Littleton, CO 80120
(303) 707-8706

(2) Need for Special Action

As demonstrated in its pending application, U S WEST has been engaged for several

years in actively developing LMDS technology.[1] As the Commission has acknowledged, however, LMDS transmission equipment is still being developed and U S WEST is aware of no auction winning licensee who has yet commercially deployed an LMDS system. Indeed, equipment for the LMDS B-Block (31,000 - 31,075 MHz, and 31,225 - 31,300 MHz), in which U S WEST is the holder of numerous licenses, is barely in the prototype stage. Nevertheless, U S WEST is confident that experimentation of the type proposed herein will quickly lead to the development and deployment of transmission equipment capable of providing the kinds of competitive telecommunications services envisioned by the Commission when it created the LMDS.[2]

Accordingly, and providing the instant STA is granted, U S WEST proposes to conduct a series of experimental tests in the environs of Boulder, Colorado in collaboration with the ITS as part of the ITS' efforts to facilitate uniform LMDS technical standards. Expedited action on this request is necessary to allow tests to begin during the summer months. Specifically, given the operational sensitivity of LMDS to terrain and climatological variations (*e.g.*, foliage, air temperature, precipitation, humidity and line of sight considerations) U S WEST proposes to begin experimentation immediately upon Commission grant of the instant request, and before the seasons change in Boulder, Colorado, so that assessment of these operational variables can be completed as quickly as possible.

(3) Type of Operation to be Conducted

Downstream voice and data communications from one LMDS Hub Station interconnected with the Public Switched Telephone Network ("PSTN"), to four LMDS Node stations with similar upstream return communications.

(4) Purpose of Operation

Test objectives include: (1) assessing the operational sensitivity of LMDS equipment to

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[1]For example, in 1995, U S WEST conducted field trials of 28 GHz LMDS equipment in Phoenix, Arizona under developmental authority (Call Sign KAQ85), and in 1996, under experimental authority (Call Sign KA2XBJ), U S WEST conducted similar experiments in Boulder, Colorado. While many questions regarding propagation, line of sight characteristics, interference and other technical concerns related to LMDS have been answered, many questions and technical issues remain.

[2]Rapid development of viable equipment is also needed given the Commission's rule requiring LMDS licensees to provide "substantial service" in their respective market areas prior to the end of their initial license terms. *See* 47 C.F.R. § 101.1011.

seasonal variations, (2) determining the propagation characteristics of such equipment, and (3) verification of the technical requirements for interconnection and interoperability of LMDS equipment with the PSTN. These trials will assist the ITS in its ongoing efforts to establish an industry forum for the development of technical interconnection standards for the LMDS, and also will provide early validation of the efficacy of the radio equipment tested for the benefit of participating manufacturers and their customers. The ITS intends to share with equipment vendors and licensees whatever non-proprietary information results from these tests.

(5) Time and Date of Proposed Operation

U S WEST proposes to conduct experimental operations at various hours of the day and night beginning on August 17, 1998 and concluding on November 30, 1998 (*see* response to Item 9 below). U S WEST's proposed experiments will be conducted in full coordination with authorized users in order to prevent any harmful interference. U S WEST will immediately discontinue experimental activity whenever such activity causes harmful interference to current or future authorized primary users.

(6) Class of Station, Call Sign of Station, and Nature of Service

U S WEST will utilize equipment being developed for system use in the LMDS consistent with the nature of experimental operations detailed in its pending experimental license application.[3]

(7) Location of Proposed Operation

Experimental operations will be conducted at the following sites located in the environs of Boulder, Colorado.

Site Name	Function	Latitude	Longitude
ITS Facility at Green Mountain Mesa	Hub	39-59-32.4 North	105-16-22.94 West
Table Mesa Central Office	Node	39-58-41.1 North	105-14-31.8 West

[3]Part 101.3 of the Commission's rules defines an LMDS system as "[a] fixed point-to-point or multipoint radio system consisting of LMDS Hub Stations and their associated LMDS Subscriber Stations." 47 C.F.R. § 101.3.

Walnut Central Office	Node	40-01-04.5 North	105-16-27.6 West
Advanced Technologies	Node	40-00-35.1 North	105-14-28.3 West
28th Street Lab	Node	40-02-03.8 North	105-15-24.5 West

(8) Equipment

Experimental transmission equipment will be supplied by at least four vendors utilizing existing antenna structures and will be interconnected to the PSTN by means of existing fiber optic infrastructure.

(9) Frequencies Desired

24250 - 25250 MHz
~~24500 - 26100 MHz~~
27500 - 28350 MHz*
31000 - 31075 MHz*
31225 - 31300 MHz*

*NOTE: U S WEST's pending application for experimental authority requests use of these same frequencies throughout the state of Colorado, among other places, which entirely encompasses the area of experimental operation proposed herein. Thus, STA for the frequencies denoted with an asterisk (*) is needed only until such time as the Commission acts on U S WEST's pending experimental license application; STA for the other frequencies listed above, which are needed to test and evaluate prototype equipment being developed by one of the vendors participating in the ITS experiments, will be required for the period August 17, 1998 through November 30, 1998 irrespective of the date on which U S WEST's experimental license application is granted.

(10) Plate Power Input to Final Radiofrequency Stage

The maximum plate power input to the final radiofrequency stage will not exceed 20 dBm; effective radiated power will not exceed 40 dBm.

(11) Type of Emission

The emission designator for all frequencies, and all equipment that will be used pursuant to the STA requested herein, is 10MOD7W.

(12) Overall Height of Antenna Structures

The maximum overall height of all antenna structures that will be utilized, does not exceed 2 meters, and thus does not require FAA notification or registration with the FCC. *See* 47 C.F.R. §§ 17.4, 17.14.

CONCLUSION

For the reasons specified herein, U S WEST submits that grant of the instant request for STA, which will aid in the development of technology and equipment benefitting the LMDS industry generally, will serve the public interest, convenience and necessity. Indeed, U S WEST is hopeful that its government-industry partnership with the ITS will help facilitate the development of the LMDS into a commercially viable provider of competitive telecommunications services. To the extent that these tests are at variance from the experimental program proposed in U S WEST's pending application for experimental authority, STA is respectfully requested.

Any questions regarding the preceding request should be addressed to the undersigned.

Respectfully submitted,

Elridge A. Stafford

Elridge A. Stafford

WILKINSON, BARKER, KNAUER & QUINN, LLP

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August 19, 1998

By Hand

Mr. Carl Huie
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, Room 286
Washington, DC 20054

Re: U S WEST Communications, Inc.
Request for Special Temporary Authority

Dear Carl:

Pursuant to our recent telephone conversations (August 11, 1998 and August 12, 1998), the purpose of this letter is to memorialize your verbal grant of U S WEST Communications, Inc.'s ("U S WEST") request for Special Temporary Authority. As you indicated, this grant is subject to certain modifications and conditions which are also memorialized herein. Accordingly, and unless notified otherwise by your office, U S WEST intends to begin experimental operations consistent with the specifications of its August 4, 1998 request for STA, subject to the modifications and conditions set forth below.

I. Modifications

U S WEST's request for STA specified use of the following frequency bands: 24250 - 25250 MHz, 24500 - 26100 MHz, 27500 - 28350 MHz, 31000 - 31075 MHz, and 31225 - 31300 MHz. As you indicated in your verbal grant, however, some of the frequencies in the 24250 - 25250 MHz and 24500 - 26100 MHz frequency bands are shared with the federal government and would therefore require inter-governmental coordination before the Commission could authorize non-governmental use. Accordingly, it is our understanding that the STA, as granted, encompasses the following frequencies only ("STA Frequencies"):

24250 - 24450 MHz■
25050 - 25250 MHz■
27500 - 28350 MHz

31000 - 31075 MHz
31225 - 31300 MHz

■ Note: In the event that U S WEST's experimental operations require use of the requested frequencies that were excluded from your verbal grant, U S WEST will contact your office so that the process of mandatory inter-governmental coordination can be initiated.

II. Conditions

In addition, you also indicated that U S WEST's experimental STA will be subject to the following conditions:

1. U S WEST will obtain the consent of all licensees authorized to operate on the STA Frequencies in the environs of Boulder, Colorado prior to commencing operations; and

2. U S WEST will cease transmissions immediately if its operations cause harmful interference to such authorized users, and will not resume transmissions until and unless such harmful interference can be avoided consistent with the technical parameters specified in its request for STA dated August 4, 1998.

In closing, and on behalf of U S WEST, I want to thank you, very much, for your timely and cooperative assistance in processing U S WEST's request for STA. Please call with any questions.

WILKINSON, BARKER, KNAUER & QUINN, LLP

Very truly yours,

Brian W. Higgins*

* Practice limited to matters before federal courts and agencies