RECEIVED
SEP 7 1995
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services	)	CC Docket No. 92-297
and	)	
Suite 12 Group Petition for Pioneer's Preference	)	PP-22

DOCKET FILE COPY ORIGINAL

COMMENTS OF
ENTERTAINMENT MADE CONVENIENT ("Emc³") International, INC.

Entertainment Made Convenient ("Emc³") International, Inc. ("Emc³") hereby submits its Comments on the Commission's Third Notice of Proposed Rulemaking and Supplemental Tentative Decision concerning the establishment of rules and policies for Local Multipoint Distribution Service ("LMDS").[1] Emc³ demonstrates in these Comments that the Commission's goals of promoting efficient use of scarce spectrum, fostering competition in the local services market, and making available a wealth of new and innovative services to consumers will only be achieved if:

(1) the Commission awards multiple LMDS licenses within a geographical area: and

(2) restricts the eligibility of dominant local service providers from holding LMDS licenses within their service areas.

---

[1] *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services and Suite 12 Group Petition for Pioneer's Preference*, FCC 95-287 (released July 28, 1995) (*Third NPRM*)

No. of Copies rec'd 0+4
List A B C D E

LMDS promises to introduce much-needed competition in the local residential telephony and video services market and provide consumers with a choice of new and innovative services. This promise, however, will not be realized if only one LMDS license is awarded within a geographical area since no one service provider has a "lock" on all innovative service offerings. This promise also will not be realized if the existing dominant local service providers are allowed to obtain LMDS licenses within their service areas and thereby prevent new local service providers from entering the market.

Awarding the entire 1000 MHz of spectrum to a single licensee would *not* promote efficient use of the spectrum, and 1000 MHz of spectrum is not necessary to provide competitive video and telephony services to consumers. The goal should *not* be to create a cable TV-like usage,[2] but, rather, to encourage the initiation of *new and innovative* video and telephony services. To this end, Emc^3 submits these Comments on the establishment of a regulatory framework for LMDS that facilitates the entry of *multiple* competitive providers of new and innovative services into the local residential services market.

I. INTRODUCTION AND STATEMENT OF INTEREST

Emc^3 is an entrepreneurial company that anxiously awaits the opportunity to obtain LMDS licenses to provide new and innovative services to the American consumer. Over the

---

[2] If this were the case, LMDS systems, like CellularVision's analog 42-channel (within 850 MHz of spectrum) cable TV-like system, will have a difficult time anyway competing against advanced broadband systems capable of providing several hundred channels of video programming. This is so because a 1000 MHz LMDS system is equivalent, in terms of capacity, to a 160 MHz cable TV system (and today's cable TV systems use up to 750 MHz).

past few years, Emc^3 has been actively involved in the design, development, and implementation of an advanced digital technology that permits the efficient and cost-effective delivery of broadband video services to subscribers. This technology, the "Emc^3 Feature," permits, for example, a full-length (approximately 100 minute) movie to be transmitted to subscribers in a short, five-minute burst and stored in customer premise equipment ("CPE"), such as a specially-equipped VCR. The subscriber is then able to view the movie at her leisure and the communications channel is available to serve the entertainment needs of other subscribers.

Unlike traditional analog video distribution systems, digital video distribution systems, like the Emc^3 time and/or space compressed method, efficiently use scarce spectrum resources. Over a dozen major consumer electronic manufacturers, representing over three-fourths of the world's VCR production capacity, have recognized the benefits of the Emc^3 method of delivering video and information services to consumers and have signed letters of intent to incorporate the Emc^3 Feature into their products. Further, Emc^3 has entered into joint venture agreements with entities in Canada, Japan, and Mexico, and is in the process of negotiating joint venture agreements with potential partners in several other countries. Emc^3 stands ready to provide American consumers new and innovative video and information services -- the type of services that could be provided using LMDS.

II. The Commission Should Award Multiple LMDS Licenses Within a Geographical Area, Which Would Promote Efficient Use of Available Spectrum, Foster Competition, and Increase Consumer Choice.

The Commission seeks comment on whether multiple LMDS licenses should be awarded within a geographical area. The public interest requires efficient use of the 28 GHz spectrum,[3] which can be accomplished only by awarding multiple LMDS licenses within a geographical area. Awarding a single *1000 MHz* license would be an extremely inefficient use of scarce spectrum resources. This is especially true today given that digital technology is available, and is being used, to efficiently deliver new and innovative video and information services to subscribers using a limited amount of spectrum.

The use of digital technology has significantly expanded the capabilities of communications systems, including direct broadcast satellite ("DBS") systems, multipoint multichannel distribution systems ("MMDS"), video dialtone systems, and cable TV systems. All-digital DBS systems, such as Hughes' DirecTV DBS system, are now operating and providing over 150 channels of video programming to subscribers. Digital MMDS systems capable of providing up to 250 channels of video programming will soon replace existing 33-channel analog MMDS systems. Digital video dialtone systems are being constructed and will be capable of providing several hundred channels of video programming. Traditional 60-channel analog cable TV systems are now being replaced by advanced digital cable TV systems. Not

---

[3] Section 1 of the Communications Act of 1934 requires the Commission to "make available, as far as possible, to all people of the United States a rapid, *efficient*, Nation-wide, and world-wide wire and radio communications service. . . ." 47 U.S.C. § 151 [emphasis added].

only is the marketplace moving towards a digital environment, but the Commission's regulatory policies reflect the important role digital technology is playing the communications industry.[4]

The Commission recently recognized the important role digital technology is playing in the marketplace.

> Direct Broadcast Satellite (DBS) is already transmitting with digital technologies with SDTV-type quality. Cable systems have been aggressively evaluating and investing in digital technology to increase programming capacity, improve picture quality and provide new services to consumers. Wireless cable operators have announced their interest in using digital compression technologies to increase the number of program streams they provide. Other new services, such as "video dialtone," that would use digital transmission technologies are also being initiated or planned. In this environment, broadcasters have added incentive to convert more rapidly in order to remain competitive.[5]

Notwithstanding the wide-scale introduction of digital technology into the communications marketplace, certain LMDS proponents are planning on using analog technology to provide video and information services to consumers and are demanding full access to the entire 1000 MHz of LMDS spectrum. The Commission should not support such an inefficient use of the spectrum.[6]

The Commission's allocation of spectrum for LMDS has spurred the entrepreneurial spirits and ingenuity of telecommunications equipment manufacturers. Emc^3 is currently

---

[4] *See Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Fourth Further Notice of Proposed Rulemaking and Third Notice of Inquiry, FCC 95-315 (released August 9, 1995) (*ATV Notice*) (the Commission proposes an advanced digital TV service); *Memorandum Opinion and Order on Reconsideration and Third Further Notice of Proposed Rulemaking*, FCC 94-269 (released November 7, 1994) (the Commission seeks comment on mandating all-digital video dialtone systems).

[5] *ATV Notice*, FCC 95-315 at ¶ 50.

[6] CellularVision, for example, would use 18-20 MHz of spectrum to deliver a single analog video service to subscribers.

negotiating with a manufacturer that has designed and developed digital LMDS equipment capable of supporting multimedia applications (video, voice, and data) using only a fraction of the 1000 MHz of LMDS spectrum. The Commission should continue to encourage the efforts of manufacturers to develop innovative solutions for LMDS through a pro-competitive regulatory framework.[7]

A. The Commission Should Award Four 212.5 MHz licenses and Three 50 MHz licenses Within a Geographical Area.

The Commission should adopt an allocation plan for LMDS that encourages efficient use of the spectrum, while making available sufficient spectrum to provide competitive video, telephony, and information services to subscribers. To that end, Emc[3] suggests that the 1000 MHz of available LMDS spectrum be divided as follows:

- four licenses of 212.5 MHz licenses within the 27.5 to 28.35 GHz band; and
- three licenses of 50 MHz within the 29.1 to 29.25 GHz band.

The four 212.5 MHz licenses would be ideally-suited for LMDS providers to offer video, telephony, and data services to subscribers. Further, by incorporating a broadband switching capability into the network, LMDS providers would be able to provide a virtually unlimited number of video and information services to consumers.[8] The three 50 MHz licenses could be used to provide return path communications from subscribers or could be used to provide

---

[7] The Commission, in fact, has a statutory mandate to "encourage the provision of new technologies and services to the public." 47 U.S.C. § 157(a).

[8] While video distribution systems are now capable of providing several hundred channels of video programming using digital technology, a broadband switching capability would allow consumers to "select" the services they want from an unlimited number of video program providers. This Internet-style broadband network is precisely the type of innovative service that LMDS is capable of providing with a limited amount of spectrum.

stand-alone narrowband voice and data services to consumers. By awarding multiple LMDS licenses, the Commission would facilitate the entry of several new and innovative service providers into the local residential market.

B. The Commission Should Impose a Cap On the Amount of LMDS Spectrum Directly or Indirectly Held By A Single Entity.

The Commission should impose a 475 MHz cap on the amount of LMDS spectrum directly or indirectly held by a single entity This cap would allow potential bidders to acquire two 212.5 MHz licenses and a 50 MHz license within a geographical area, if necessary, to provide a service.

C. Other LMDS Licensing Issues.

Emc[3] supports the Commission's proposals to:

- award licenses to serve Basic Trading Areas ("BTAs");
- provide for flexible regulation (*i.e.*, common carriage or private carrier) of LMDS providers depending upon the type of services being offered; and
- adopt preferences for small businesses, including installment payment options, 25% bidding credit and reduced upfront payments.

III. The Commission Should Restrict the Eligibility of Dominant Local Service Providers From Holding LMDS Licenses Within Their Service Areas.

LMDS provides an opportunity for the entry of competitive service providers into the local residential market The local residential market is currently served by two dominant providers: LECs and cable TV operators. While DBS and MMDS providers have made in-roads into the local services market, cable TV operators and LECs are, and are expected to remain, the dominant local service providers. Because of their dominant position in the local market,

it would be anti-competitive to allow LECs and cable TV operators to hold LMDS licenses within their service areas. If LECs and cable TV operators are allowed to obtain LMDS licenses within their service areas, they would be able to stifle the introduction of competition.

Emc[3] urges the Commission to restrict the eligibility of LECs and cable TV operators from holding the 212.5 MHz LMDS licenses within their service areas. LECs and cable TV operators would still be eligible to hold a single 50 MHz license, but should not be permitted to hold more than one 50 MHz license. 50 MHz of spectrum for the LECs and cable TV operators would allow them to supplement their existing video distribution systems with interactive capability or other features. Such a restriction on dominant local service providers is consistent with past decisions by the Commission. Cable TV operators are prohibited from holding MMDS licenses within their franchise areas. Cellular providers are largely prohibited from holding PCS licenses within their service areas. These rules are designed to foster competition in the local market by restricting dominant service providers from using their market power to inhibit competition. Similarly, LMDS will only develop into a competitive local service if LECs and cable TV operators are prohibited from holding LMDS licenses within their service areas.

CONCLUSION

Emc^3 respectfully urges the Commission to encourage competition in LMDS by (i) awarding multiple licenses within a geographical area and (ii) restricting incumbent local service providers from holding LMDS licenses.

Respectfully Submitted,

Entertainment Made Convenient ("Emc^3") U.S.A., Inc.

William A. Graven
Chairman
Entertainment Made Convenient ("Emc^3") U.S.A., Inc.
8180 Greensboro Drive - Suite 1000
McLean, VA 22102
703-356-4242 (tel)
703-356-1285 (fax)

Dated: September 7, 1995