

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of)
)
Service Rules for the Point-to-Point)
Use of the 71.0-76.0 GHz and) RM-10288
81.0-86.0 GHz Bands)
)

**COMMENTS OF THE
FIXED WIRELESS COMMUNICATIONS COALITION**

October 29, 2001

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Pursuant to Section 1.405(a) of the Commission's Rules, the Fixed Wireless Communications Coalition (FWCC)¹ hereby submits these comments on the above-captioned Petition for Rulemaking filed by Loea Communications Corporation.²

INTRODUCTION

The FWCC strongly supports the Loea Petition, which seeks service rules for the 71.0-76.0 and 81.0-86.0 GHz bands.

These bands are capable of delivering high-speed data over several kilometers at relatively low cost. Such systems are ideal for broadband delivery in both suburban and rural areas, where

¹ The Fixed Wireless Communications Coalition is a coalition of equipment manufacturers and users interested in terrestrial fixed microwave communications. Its membership includes manufacturers of microwave equipment, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. Its membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, the broadcast industry, and/or their respective associations, telecommunications carriers, landline and wireless, local, and interexchange carriers, and others. A list of members is attached as Appendix A.

² Loea Communications Corporation, *Service Rules for the Point-to-Point Use of the 71.0-76.0 GHz and 81.0-86.0 GHz Bands*, RM-10288 (filed Sept. 10, 2001). Public notice appeared in Report No. 2504 (released Sept. 27, 2001).

population densities may be low to support fiber installation, and also in urban areas, where trenching costs run very high.

The high speed of these links makes them an effective alternative to fiber. They can deliver comparable performance at far lower cost, regardless of population density. The technology is ideal for providing needed capacity to a wide variety of users, including businesses, consumers, educators, and health care providers.

DISCUSSION

Loea proposes that point-to-point licensees be required to use very narrow "pencil beam" transmission, with a minimum antenna gain of 50 dBi and typical beamwidth of less than 0.5 degrees. Loea notes that these narrow beams eliminate any realistic probability of interference among users, even when links are densely deployed. As a result, a given geographic area can accommodate a very large number of users.

Loea's technical proposals obviate any need for conventional channelization, geographic licensing, and auctions. All of these are mechanisms for allocating scarce spectrum resources among competing users. At the high millimeter wavelengths, however, and assuming the Commission adopts Loea's proposals, the beams are so narrow that multiple users can operate very close together in the same area, without causing interference to one another. This makes resource-allocation measures superfluous. Worse, such measures add unnecessary costs and restrictions that impede efficient use.

The Commission should impose technical rules to ensure narrow beamwidth and to limit power, as Loea requested, and should require frequency coordination and licensing to provide users with a degree of certainty in the reliability of their communications. (We expect the

coordination process will rarely, if ever, turn up an interference case.) Licensing also makes it easier for the Commission to oversee compliance with the technical rules. The Commission should not, however, impose channelization or geographic licensing, or auction this spectrum.

CONCLUSION

The 71.0-76.0 and 81.0-86.0 GHz bands hold great promise for efficient broadband communications, at data speeds that are competitive with fiber, but at far lower cost. The highly directional properties at these wavelengths allow for dense, non-interfering deployment under simple and efficient licensing rules.

The Commission should expeditiously propose rules as Loea requested.

Respectfully submitted,

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October 29, 2001

APPENDIX A

FIXED WIRELESS COMMUNICATIONS COALITION

The Fixed Wireless Communications Coalition was formed by terrestrial fixed microwave users and suppliers to assure that adequate spectrum resources are available for current and future terrestrial fixed microwave communications. Such action is necessary because spectrum allocation and re-allocation actions currently under consideration at the FCC require fixed microwave interests to speak with a common voice. Additionally, the Coalition works for a regulatory climate both at the FCC and the ITU that permits the manufacture, operation, and use of terrestrial fixed microwave systems.

MEMBERS

USERS

Association of Public-Safety Communications Officials
UTC - The Telecommunications Association
National Association of Broadcasters
American Petroleum Institute
Wireless Communications Association International
Personal Communications Industry Association
Independent Multi-Family Communications Council
BellSouth
SBC Communications, Inc.
People's Choice TV
Association of American Railroads
WINSTAR Communications Inc.
DIVEO Broadband Networks
XO COMMUNICATIONS

MANUFACTURERS

Harris Corporation -- Microwave Communications Division
Alcatel Network Systems Inc.
DMC STRATEX Networks
Tadiran Microwave Networks
MOTOROLA Inc.
Nortel Networks
P-Com, Inc.
LUCENT Technologies
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CERTIFICATE OF SERVICE

I, Mitchell Lazarus, an attorney with the law firm of Fletcher, Heald & Hildreth, PLC, hereby state that a true copy of the foregoing Comments of the Fixed Wireless Communications Coalition was transmitted by email and first class mail this 29th day of October, 2001, to the following:

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