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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

April 15, 1993

Ms. Donna R. Searcy
Office of the Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

92-297

Re: In the Matter of Amendment of Part 1 and Part 21 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band and to Establish Rules and Policies for LMDS

Dear Secretary Searcy,

Enclosed herewith is one (1) original, and five (5) copies of our reply comments in above referenced proceding.

Sincerely,

COMSEARCH

Douglass R. Hall

Douglass R. Hall
Vice President
Transmission Planning Services

Enclosures

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List A B C D E

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	CC Docket No 92-297
	)	RM-~~7022~~; RM-7722
Rule Making to Amend Part 1 and Part 21 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band and to Establish Rules and Policies for		7872

compatibility with the existing environment prior to filing for licenses. In addition to the standard bands now subject to coordination, other bands are being considered as candidates for a coordination process to assist in promoting spectrum sharing. A few of the new technology systems considering other bands include low-earth-orbit system feeder links of Loral-Qualcomm Satellite Services, Inc., Ellipsat, Constellation (frequencies in 5 GHz and 6 GHz), DBS and AMSC.

Frequency coordination is currently in use or is being considered in the following frequency bands.

Uplink Frequencies (GHz)	Downlink Frequency (GHz)	Comments
5.85 - 6.425	3.625 - 4.200	
14.0 - 14.5	10.95 - 11.2; 11.45 - 11.7	
27.5 - 30.0	17.7 - 20.2	
13.0 - 13.5; 13.2 - 13.25	10.75 - 10.95	AMSC
17.3 - 17.8	12.2 - 12.7	DBS

The key element to the success of spectrum sharing and effective frequency coordination is the establishment of realistic interference objectives.

In the frequency band from 17.7 to 20.2 GHz, Comsearch believes

Part 21 of the Rules, with appropriate modifications, can be used to clear downlink frequencies for the Fixed Satellite Services (FSS). The fact that frequency sharing and coordination occurs in the 3700 - 4200 GHz, 10.95 - 11.2 GHz and 11.45 - 11.7 GHz bands between point-to-point and fixed satellite systems suggests that is also possible in the 17.7 to 20.2 GHz band. Frequency offset solutions, realistic interference objectives, and proper site selection for RF isolation can be used to the advantage of the FSS systems.

As an example of compatibility in a seemingly hostile RF environment, there are a number of systems operating in the 10.95 to 11.2 GHz and 11.45 to 11.7 GHz bands where receive earth stations are located at the base of or in close proximity to towers with 11 GHz microwave paths operating on the same frequencies. Although this is not common in the 4 and 6 GHz bands it might suggest that at higher frequencies it is easier to share common or close by facilities.

Comsearch agrees that it will be much more difficult to share the 27.5 to 30.0 GHz band between point-to-multipoint systems and the Fixed-Satellite Service. Studies to determine interference criteria, systems compatibility and frequency coordination procedures for the portions of the 27.5 to 30.0 GHz band proposed for sharing are necessary steps before a proper conclusion can be reached.

Comsearch agrees with the Commission's intent to provide adequate allocations for development of new services and technologies while protecting the interests of incumbent spectrum users. We are also aware of the burden this places on the Commission staff to thoroughly investigate and understand all of the issues involved during tough economic times and budget constraints. A great deal of expertise on these issues resides in private industry and industry organizations. It is in the best interest of the public and the industry that the Commission should take advantage of this expertise and work as closely as possible with these groups during their investigations of the issues. This would help motivate the industry to work together to solve areas of disagreement prior to NPRM's or other official regulatory processes. We believe this could reduce the amount of disagreement among commenters and expedite any necessary rule making processes.

Respectfully submitted.