

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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Routine Licensing of Large Numbers)
of Small Antenna Earth Stations)
Operating in the Ka-Band)

RM-9005

DOCKET FILE COPY ORIGINAL

To: The Commission

OPPOSITION

In the above-captioned Petition for Rulemaking ("Petition"),¹ several geostationary orbit ("GSO") Fixed-Satellite Service ("FSS") licensees² requested that the Commission revise Part 25 to establish earth station blanket licensing procedures for FSS operations in the 17.7-18.8 GHz downlink band (the "18 GHz Band"). The 18 GHz Band is allocated to terrestrial fixed point-to-point microwave service ("FS") users on a co-primary basis with FSS users.

Petitioners' proposal regarding earth station blanket licensing in the 18 GHz Band clearly will impact existing and potential FS users because of their inability to share spectrum with FSS users without experiencing harmful interference and because of their intrinsic difficulty coordinating FSS earth stations sited at unreported locations. Thus, pursuant to Section 1.405 of the Commission's

¹The Petition initially appeared on Public Notice in January 1997. Public Notice, Rep. No. 2173 (Mimeo No. 71766, January 16, 1997). Since only a single party filed comments, the Commission recently requested further comments. Public Notice, Commission Requests Comment to Refresh Record on Proposals For Blanket Licensing of Satellite Earth Stations Operating In The 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands and Sharing Between Fixed Terrestrial and Satellite Services in the 17.7-19.7 GHz Frequency Bands, IN Rep. No. 97-27 (released September 5, 1997).

²The petitioners are Lockheed Martin Corporation, AT&T Corp., Loral Space & Communications, Ltd., and GE American Communications, Inc. (collectively, the "Petitioners").

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Rules,³ Alcatel Network Systems, Inc. ("Alcatel"),⁴ by its attorney, hereby opposes grant of the Petition with respect to the proposed 18 GHz Band FSS/FS sharing and FSS earth station blanket licensing.

In its Opposition filed contemporaneously herewith, the Fixed Point-to-Point Communications Section, Network Equipment Division, of the Telecommunications Industry Association (the "Section"), sets forth the following specific reasons for denying the Petition:

- FS/FSS sharing will not work -- No evidence exists that sharing the 18 GHz band between FS and FSS users is achievable. Industry efforts to develop sharing criteria have been unavailing and there is no indication that a solution can be attained. FSS downlinks will interfere with existing and new FS operations, which is dangerous given the fact that available spectrum to support FS is decreasing while demand is increasing. Current Part 25 interference protection criteria for FS systems in FS/FSS shared bands are not based upon FS needs. In fact, the Commission requires that 18 GHz Band FSS users employ Part 101 standards to ensure that co-primary FS users are protected adequately.⁵ Unless FSS earth station deployment involves only a limited number of facilities, or unless such deployment is strictly limited to rural areas, it is highly unlikely that FS will be able to co-exist with the proposed FSS in the 18 GHz Band. Any FSS operation in this band (and up to 19.7 GHz) must be delayed until sharing with existing and potential FS is proven feasible. Until such requisite viable criteria are adopted, if FSS/FS

³47 C.F.R. §1.405 (1997).

⁴Alcatel is a wholly-owned subsidiary of Alcatel Alsthom, one of the world's largest corporations (with annual sales in excess of \$30 billion) and the world's largest manufacturer and supplier of telecommunications equipment. In particular, Alcatel Alsthom is the world's largest independent manufacturer and supplier of microwave radios. Formerly Collins Radio and Rockwell International, Alcatel, with over \$1 billion in annual sales, is a world leader in manufacturing microwave and light wave transmission systems. Alcatel's equipment is used for a wide range of services, including short, medium and long-haul voice, video and data transmission. Its microwave customers include all the Bell Operating Companies, most major independent telephone companies, cellular operators, power and other utility companies, oil companies, railroads, industrial companies, and state and local government agencies.

⁵Rulemaking 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, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC Rcd 19005, 19037-038 (1996).

sharing in the 18 GHz Band is permitted, as proposed, existing FS users will not be able to provide reliable service and will not be able to implement new systems needed to meet emerging demand. This restriction would impact current FS users in the 18 GHz Band, including cellular and PCS cell interconnects, telephone system emergency restoration, temporary video links for broadcasters, entrance links into urban areas, and campus telecommunication interconnects. Most of these users are in urban areas, which are exactly the same areas "requiring" 18 GHz Band FSS earth terminals. These FSS earth terminals, as explained below, would retard deployment of necessary FS expansion in the 18 GHz Band because they would "freeze" any future terrestrial expansion out of the band.

- Sharing will impede FS expansion significantly -- The FS users must be allowed to continue expanding systems in the same general area as FSS earth stations. Historically (e.g., in the 4 GHz band), when an earth station is located in a particular area, its high interference reduction requirements freeze the band from further development of FS in the same geographical area. Due to these system characteristics, without appropriate safeguards, huge "holes" or "exclusion zones" would be created, and FS facilities would be forced to be located outside such zones. If FS users are required to navigate around these large "exclusion zones," the potential areas for expanding, especially in urban areas, is reduced significantly and associated services will become unavailable where demand is greatest.
- FSS users must share the burden -- Alcatel and other equipment manufacturers, along with the Section, will continue their efforts at developing effective sharing criteria. Nevertheless, it is absolutely incumbent upon the Commission to force FSS user concessions as well. At a minimum, FSS users must be required to implement measures for protecting themselves from FS interference. They must prove actual need for the spectrum and they must employ minimum spectral efficiency standards. It no longer is appropriate or equitable for FS users to have the entire burden of protecting FSS users.
- Blanket licensing is unacceptable -- Implementation of blanket licensing in shared bands is totally unacceptable. To share spectrum, careful frequency coordination between licensees from different services (i.e., FS and FSS) must be completed. Such inter-service coordination is impossible if one of the services can have its facilities authorized under a blanket licensing procedure where specific locations are not identified. Sharing of earth stations in the same urban area is difficult at best when the locations of both are known. It is impossible if one of the users is unknown, which would be the case if FSS earth stations were to be authorized under a blanket license. If the earth terminal must be protected and its location is unknown, then the entire blanket area must be avoided, as well as an additional buffer zone outside that blanket area. The buffer zone (including the blanket area) could be over a hundred miles deep depending upon the characteristics of the earth terminals and the

terrestrial systems. With the magnitude of anticipated 18 GHz Band FSS earth station facilities, especially under a blanket licensing scheme, FS users would be discriminated against because they would have great difficulty locating their facilities. Fairness dictates that the Commission subject FSS users to the same prior coordination requirements imposed upon FS users. Indeed, given their serious reservations concerning the feasibility of FSS/FS sharing, it is uncertain if Petitioners even want a rulemaking at this time to institute blanket licensing in the 18 GHz Band.

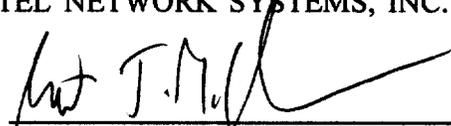
- Grant of the Petition is premature and contrary to the public interest -- For the reasons set forth above, the Petition clearly does not warrant any further action. Denial of the Petition would be consistent with applicable Commission precedent, which requires such action if the record does not support institution of a rulemaking or if serious technical issues exist that require further study before rules could be proposed.⁶

Alcatel concurs completely with the Section. The Commission should listen to the Petitioners and follow their initial approach -- the issues of 18 GHz Band sharing and FSS blanket licensing must be deferred until proof is provided that such licensing will work without compromising FS users. Thus, Alcatel urges the Commission to reject the Petition with respect to 18 GHz Band FS/FSS sharing and FSS earth station blanket licensing.

Respectfully submitted,

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⁶47 C.F.R. §§0.251 and 1.407 (1997). See also Amendment of C-Band Satellite Orbital Spacing Policies to Increase Satellite Video Service to the Home, 7 FCC Rcd 456, 461 (1992); Signal Carriage Rules-STV, 77 F.C.C.2d 523 (1980).

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Opposition was sent via first class mail, postage prepaid, to the following parties on the 23rd day of September, 1997.

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