

MAY - 7 1998

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

Federal Communications Commission
Office of Secretary

In the Matter of)
)
Petition for Rulemaking) RM-9257
To Amend 47 C.F.R. § 101.603 and)
Related Rules — To Allow the Use of)
12 GHz OFS Frequencies for the)
Delivery of Video Programming)
Material)

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

COMMENTS

Pursuant to Section 1.405 of the Commission's Rules,¹ Alcatel Network Systems, Inc. ("Alcatel"), Harris Corporation-Farion Division ("Harris"), and Digital Microwave Corporation ("DMC") (collectively the "Joint Commenters"),² hereby comment on the above-captioned Petition for Rulemaking ("Petition") and on an associated Petition for Waiver of Section 101.603 of the Commission's Rules ("Waiver Petition") filed by OpTel, Inc. ("OpTel").³

In the Petition, OpTel requests that the Commission amend Section 101.603 so that wireless cable operators and other multichannel video program distribution ("MVPD") service providers can use the 12.7-13.25 GHz band ("12 GHz Band") to deliver video programming

¹47 C.F.R. § 1.405 (1998).

²Alcatel, Harris, and DMC are major manufacturers of terrestrial fixed point-to-point microwave radio service ("FS") equipment.

³The Petition appeared on the Commission's April 8, 1998, Public Notice, Rep. No. 2267. The Waiver Petition, which is referenced in the Petition (Petition at 2 n.1), has not yet appeared on Public Notice. However the issues raised therein are related to the rule changes OpTel requests in the Petition. Thus, it is appropriate to address the Waiver Petition herein. The Joint Commenters also intend to comment on the Waiver Petition when it appears on Public Notice.

OpTel

material over FS facilities.⁴ Further, in the Waiver Petition, OpTel seeks permission under Section 101.603 of the Commission's Rules to use 10.7-11.7 GHz band ("11 GHz Band") FS frequencies for transmission of video entertainment programming on a private carriage basis.⁵

As discussed below, the Joint Commenters generally support grant of the Petition so that video programming could be transmitted over 12 GHz Band FS frequencies. However, they have serious concerns about the Waiver Petition because it is unclear how the 11 GHz Band would be used to provide the intended wireless cable or MVPD services.

**THE PETITION SHOULD BE GRANTED SO
THAT MVPD SERVICES CAN BE PROVIDED
ON THE 12 GHz BAND**

OpTel requests that the Commission: (i) amend Section 101.603(a)(2) "to add the 12 GHz frequency band to those listed in which licensees may deliver any of their own products and services;" and (ii) amend Section 101.603(b)(3) "to include the 12 GHz frequency band among those that may be used to provide the final RF link in the chain of transmission of program material" to various MVPD systems.⁶ OpTel made this request because the 18.142-18.580 GHz band ("18 GHz Band"), where microwave distribution networks typically operate, no longer is appropriate for such services. Decreased availability of frequencies due to co-primary satellite operations and technical factors that limit system expansion are making the 18 GHz Band less attractive for MVPD applications.⁷

⁴Petition at 1. The 12 GHz Band is shared by FS and the Cable Television Relay Service ("CARS"). Part 78 of the Commission's Rules channelizes the 12 GHz Band into 6 MHz channels for video distribution to cable television headends. The CARS systems are very similar to OpTel's proposed system. Other similar services also should be able to share the same frequency bands.

⁵Waiver Petition at 1.

⁶Petition at 1.

⁷Id. at 4-6.

The Joint Commenters support the development of MVPD systems, such as those provided by OpTel and other wireless cable operators. These systems benefit the public because, as OpTel states, they "encourage more robust competition" in the local exchange and video distribution marketplaces.⁸

OpTel's concerns regarding availability of the 18 GHz Band are well-founded. The 18 GHz Band is employed by incumbent terrestrial users for a broad range of fixed point-to-point and point-to-multipoint applications. Over 40,000 licensed 18 GHz Band FS systems provide public safety and public utility services, promote deployment of wireless network interconnection, support distribution of broadcast auxiliary services and facilitate provision of wireless cable television services. In addition, FS users rely upon the 18 GHz Band as replacement spectrum for the 2, 4, 6 and 11 GHz bands that have become unavailable due to congestion or required relocation. Emerging technologies, such as urban cell/hub interconnections and HDTV, also rely upon the 18 GHz Band.

Unfortunately, available spectrum to support these services is being lost because of increased requirements for sharing to accommodate various satellite services. In particular, use of all FS frequencies in the 18 GHz Band is being jeopardized by a proliferation of proposed satellite-based systems, and many of these satellite systems are incompatible with current and future FS usage of this band. This acute shortage will evolve into complete band paralysis if generalized FS/satellite sharing (e.g., blanket satellite earth station licensing) in the 18 GHz Band is implemented as proposed by certain satellite operators.⁹ Thus, it is imperative that

⁸Id. at 1.

⁹See Petition for Rulemaking of Lockheed Martin Corporation, AT&T Corp., Loral Space & Communications, Ltd. and GE American Communications, Inc., filed December 23, 1996 (RM-9005).

MVPD providers, such as OpTel, be given the opportunity to use the 12 GHz Band as proposed in the Petition.¹⁰

**OPTEL MUST CLARIFY HOW THE
11 GHz BAND WOULD BE USED**

OpTel, in the Waiver Petition, seeks to supplement the ability of MVPD operators to access the 12 GHz Band by having Section 101.603 waived so they also can use the 11 GHz Band. However, OpTel does not provide any details concerning how the 11 GHz Band would be used for these services. Specifically, absent from the Waiver Petition is information on the amount of spectrum each point-to-point link would require, whether the traffic carried would be analog or digital video, whether multiple video channels would be transmitted on a single radiofrequency carrier,¹¹ and most importantly, whether operations would comply with Part 101 technical and operational standards.¹²

Assessment of OpTel's proposed use of the 11 GHz Band depends upon provision of this critical information. Availability of the 11 GHz Band for FS users is shrinking in the same manner as the 18 GHz Band. Wireless cable TV systems in the 18.14-18.58 GHz band typically use several hundred megahertz of spectrum on every point-to-point link. For example, a particular system may transmit 72 six MHz video channels on a single RF carrier

¹⁰OpTel also states that "there no longer is any reason to restrict the use of the frequencies below 21 GHz for video programming distribution." Petition at 7. Such "blanket" permission is inappropriate and must be rejected because OpTel could occupy all point-to-point frequency bands, including the 4 GHz (3.7-4.2 GHz), lower 6 GHz (5.925-6.425 GHz), upper 6 GHz (6.525-6.875 GHz), 10 GHz (10.55-10.68 GHz), and 11 GHz (10.7-11.7 GHz) frequency bands, with broadband video systems. Together these systems could occupy several hundred megahertz in each band, which would be an inefficient use of dwindling spectrum and thus would decrease available spectrum for FS users.

¹¹In the 18.14-18.58 GHz band, the CARS service transports multiple video channels on a single radiofrequency carrier.

¹²Part 101 of the Commission's Rules requires compliance with certain technical standards, such as antenna radiation patterns, spectrum efficiency, maximum EIRP, maximum channel bandwidth, and frequency channelization. OpTel has not indicated whether it will ask for additional waivers of these requirements in the future in order to operate in this band.

(72 x 6 = 432 MHz). Therefore, one of these systems could occupy most of the 11 GHz Band (the 11 GHz Band has 500 MHz of transmit and 500 MHz of receive frequencies), thereby jeopardizing other services.

Given this potential threat to spectrum availability for FS users, OpTel must clarify how MVPD systems would use the 11 GHz Band under its waiver request. While the Joint Commenters agree with OpTel that there is a need for increased spectrum to support MVPD services, the Commission must defer acting on the Waiver Petition until OpTel provides the data identified herein.

Respectfully submitted,

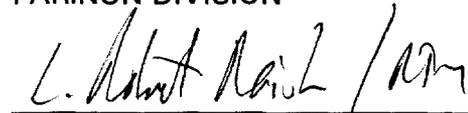
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May 6, 1998

CERTIFICATE OF SERVICE

I, Deborah Mashburn, hereby certify that a true and correct copy of the foregoing Comments was sent this 6th day of May, 1998, via first class mail, postage prepaid, to the following:

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May 6, 1998


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