

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

In the Matter of)	
)	
Redesignation of the 17.7-19.7 GHz)	
Frequency Band, Blanket Licensing of)	
Satellite Earth Stations in the 17.7-20.2 GHz)	IB Docket No. 98-172
and 27.5-30.0 GHz Frequency Bands, and the)	RM-9005
Allocation of Additional Spectrum in the)	RM-9118
17.3-17.8 GHz and 24.75-25.25 GHz)	
Frequency Bands for Broadcast Satellite-)	
Service Use)	

COMMENTS IN SUPPORT OF AND IN OPPOSITION TO PETITIONS FOR
RECONSIDERATION

The Satellite Industry Association (“SIA”)¹ hereby files these comments (i) in support of the Hughes Electronics Corporation petition for reconsideration in this proceeding, and (ii) in opposition to the Winstar Communications, Inc. petition for reconsideration in this proceeding.

I. Hughes Electronics Petition.

In its Petition, Hughes raises a number of issues of importance to the satellite industry in general. These issues warrant reconsideration as they affect many of the next-generation, Ka band satellite systems that are currently under development.

¹ SIA is a national trade association representing the leading U.S. satellite manufacturers, service providers, and launch service companies. SIA serves as an advocate for the U.S. commercial satellite industry on regulatory and policy issues common to its members. With member companies providing a broad range of manufactured products and services, SIA represents the unified voice of the U.S. commercial satellite industry. SIA’s members include: Boeing Commercial Space Company; Ellipso Inc.; Final Analysis Inc.; GE American Communications, Inc.; Globalstar, L.P.; Hughes Electronics Corp.; Lockheed Martin Global Telecommunications; Loral Space & Communications Ltd.; Motient Corp.; Motorola Inc.; Orbital Sciences Corporation; PanAmSat Corporation; TRW Inc.; and Williams Vyvx Services.

A. Legacy List.

SIA agrees with Hughes that the Commission's "Legacy List" policy departs from current Commission rules and was adopted without the notice and comment procedures mandated by the APA. This new policy requires satellite licensees using 18.3 - 18.8 GHz to pay to alleviate any interference that a terrestrial fixed licensee receives from satellite transmissions even when the *terrestrial fixed licensee's receiver* is pointed within 2 degrees of the geostationary arc. The 18 GHz Order adopts this policy in the face of a 20-year old pfd limit that was adopted to "pre-coordinate" spacecraft transmissions and terrestrial fixed service receivers in the Ka band, regardless of the elevation angle and azimuth of the terrestrial receiver.

SIA agrees with Hughes that terrestrial operators who have implemented their systems without regard to this existing pfd rule have assumed the interference risk. The Commission's terrestrial licensing rules make clear that the band is shared with satellite systems.² Furthermore, terrestrial users were placed on clear notice of the impending satellite use of the 18 GHz band in 1995 when the Commission placed over a dozen Ka band satellite applications on public notice.

Thus, the Legacy List policy bestows a windfall on terrestrial licensees who deployed systems that were not designed to operate under long-established terrestrial/satellite sharing rules. Moreover, it imposes an unwarranted penalty on the satellite users of the 18.3 - 18.8 GHz band, who have reasonably relied on the Commission's existing rules and past precedent in designing and implementing their Ka band satellite systems.

² 47 C.F.R. § 101.101 (1999).

B. Streamlined Licensing in Shared Bands.

SIA also shares Hughes's concerns that the Commission, in the 18 GHz Order, takes no action either (i) with respect to blanket licensing of GSO/FSS earth stations in the satellite-only band of 29.25 - 29.5 GHz, or (ii) with respect to streamlined licensing or registration of earth stations that would receive signals at 18.3 - 18.58 GHz.

Blanket or streamlined licensing procedures are critical to the satellite industry. In particular, they facilitate the prompt provision of service to the public by reducing the delay and expense that is otherwise involved in licensing earth station terminals on a site-by-site basis. These reduced regulatory burdens are particularly relevant to the types of Ka band broadband satellite systems that the industry is now in the process of deploying.

Thus, blanket or streamlined licensing procedures should be developed and used wherever possible for Ka band satellite systems.³ Of course, the 29.25-29.5 GHz band is shared between multiple types of satellite systems, and any blanket licensed terminals there must comply with the currently existing rules that are designed to facilitate GSO FSS and NGSO MSS feeder link sharing.⁴ In the case of the 18.3-18.58 band, streamlined licensing of earth stations does not burden terrestrial users who share the band because those earth stations (which receive and do not transmit at 18.3-18.58 GHz) do not pose any interference threat to terrestrial users.

³ SIA acknowledges that the Commission has instituted a separate proceeding to address a variety of earth station licensing matters. *See Notice of Proposed Rulemaking*, FCC 00-369, IB Docket No. 00-203, RM-9649, SAT-PDR-19990910-00091 (released October 24, 2000). Comments are not yet due in that proceeding.

⁴ 47 C.F.R. § 25.250 (1999).

The Commission should reconsider its decision and permit blanket or streamlined licensing in the 29.25 - 29.5 GHz and 18.3-18.58 GHz bands.⁵

C. Blanket Licensing Rules.

SIA also agrees with Hughes' request that the Commission reconsider or correct several technical aspects of the Ka band blanket licensing rules. These technical matters present important policy issues, and the current form of the rules in question adversely impacts the use of parts of the Ka band.

1. Downlink Power Limit Changes

As Hughes notes, the 18 GHz Order replaces current rule Section 25.208(c) with an amended Section 25.208(c) and adds new Sections 25.208(d), (e) and (f). These changes are of concern because of the limitations that they impose on satellite operations in the bands in question. Namely, new Section 25.208(d) applies a more stringent pfd limit at certain angles of arrival than the prior rule with respect to GSO/FSS operations at 18.3 - 18.8 GHz.

New Section 25.208(d) precludes the ability to coordinate inter-satellite operations at downlink power levels in excess of the thresholds set forth in Section 25.138(a) over certain ranges of elevation angles. The ability to coordinate such higher-powered satellite operations is fundamental to the approach taken by both the Commission⁶ and the

⁵ With respect to blanket licensing for earth stations in the 29.25-29.5 GHz band, Final Analysis does not join in the comments of the SIA. However, Final Analysis fully supports all other aspects of this submission.

⁶ *See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, FCC 00-212 (rel. June 22, 2000) (the "18 GHz Order") at Appendix A, Rule Section 25.138(b). Section 25.138(b) allows the Commission to grant, upon an inter-satellite coordination showing, an application for a blanket earth station license that proposes to receive downlinks from a satellite in excess of the -118 dBW/m²/MHz threshold set forth in Section 25.138(a)(6).

recommendations of the Blanket Licensing Working Group.⁷ Yet, the Commission's new Section 25.208(d) would prohibit these coordinated higher-power operations from many orbital positions over a range of angles of arrival. The pfd limit in this rule should be restored to its original value. Otherwise, the Commission would unduly limit satellite operations in the 18.3-18.8 GHz band.

2. The Section 138(a)(6) Limit Should Apply in all Blanket License Bands

The text of the 18 GHz Order makes clear that the blanket licensing procedure for GSO/FSS earth stations applies to the 18.58-18.8 GHz band, in addition to the 19.7 - 20.2 GHz, 28.35 - 28.6 GHz, and 29.5 - 30.0 GHz bands.⁸ However, rule Section 25.138(a)(6), which lists the downlink power-flux density coordination threshold for routine processing of blanket license applications, omits the 18.58-18.8 GHz downlink band and lists only the 19.7 - 20.2 GHz downlink band. SIA agrees with Hughes that Section 25.138(a)(6) should apply to each GSO/FSS downlink band in which the Commission permits blanket earth station licensing. To allow, as would the current text of Section 25.138(a)(6), routine processing of a blanket license application that contemplates a higher downlink power-flux density in the 18.58 - 18.8 GHz band than -118 dBW/m²/MHz would disrupt the industry consensus reflected in the Blanket Licensing Working Group.

II. Winstar Petition for Reconsideration.

SIA urges the Commission to summarily reject the Petition for Reconsideration of Winstar. Winstar's primary complaint appears to be that the 18 GHz Order "ignores the explosive growth within [the terrestrial fixed] service and fails to provide adequate alternative

⁷ BL-IWG Second Report at 2.

spectrum” for use by FS licensees upon relocation from the 18.58-19.3 GHz band.⁹ Winstar also argues that the 2 GHz Microwave Relocation rules do not provide an appropriate basis for the 18 GHz relocation rules¹⁰ and that “alternative media,” such as fiber networks, will not provide an adequate replacement for 18 GHz spectrum.¹¹

Winstar does not ask the Commission to take any specific action on its central complaint. Thus, despite spending the majority of its pleading lamenting this “failure” of the Commission in the 18 GHz Order to account for fixed service growth at 18 GHz, Winstar fails in its Petition to “state with particularity the respects in which”¹² the 18 GHz Order should be changed to remedy this complaint. Therefore, the Commission must summarily disregard or dismiss Winstar’s arguments.

Moreover, Winstar's complaint that the 18 GHz Order fails to account for the anticipated growth of Winstar’s service is simply incorrect. As the Commission acknowledged in the 18 GHz Order, segmentation of the 18 GHz Band into separate terrestrial fixed and satellite uses benefits *both industries*.¹³ Each service will be able to make greater use of, and accomplish denser deployment in, its newly segmented band. In particular, the designation of the 17.7 - 18.3 GHz band for exclusive use by the terrestrial fixed service removes existing growth constraints for terrestrial services there.

⁸ 18 GHz Order at ¶ 87; 18 GHz Order at Appendix A (listing 18.58 - 18.8 GHz in the heading of Section 25.138 and in subsection 25.138 (a)).

⁹ Winstar Petition at 9.

¹⁰ Winstar Petition at 11.

¹¹ Winstar Petition at 12-13.

¹² 47 C.F.R. § 1.429(c) (1999).

¹³ 18 GHz Order at ¶ 17.

If existing terrestrial fixed service licensees at 18 GHz failed to take into account in their business plans the limits on growth opportunities that are necessarily a part of the existing *co-primary* FS allocation at 18 GHz, it is their own fault and not the fault of the Commission. Winstar's failure to adequately assess the co-primary nature of the 18 GHz band before Winstar rolled out its commercial service does not provide a basis for the Commission to revisit its segmentation or relocation decisions in the 18 GHz Order.

Likewise, Winstar's specific argument that the Commission should measure "throughput" of an FS system that is to be relocated by reference to the total capacity of the licensed facility, rather than the actual capacity in use,¹⁴ similarly ignores the benefits to the fixed service of the 18 GHz segmentation decision. The record is clear how the 18 GHz segmentation decision takes into account (i) the legitimate claims to the band of both the terrestrial and the satellite industries and (ii) the new growth opportunities that both industries will enjoy in their now-unshared bands. Under these circumstances, the 18 GHz Order provides a more than generous relocation regime for FS licensees that currently occupy the 18.58 - 19.3 GHz band.

Furthermore, the Commission's decision to permit relocation to "alternative media" also is correct. Alternative media, such as fiber, wireline or even satellite communications networks, will likely provide necessary flexibility in the relocation process. Foreclosing the option to relocate existing licensees to comparable facilities in alternative media, as Winstar suggests, would put the Commission in the untenable position of selecting between competing (but comparable) technologies. Moreover, as long as the alternative media facilities

¹⁴ Winstar Petition at 9.

are “comparable” under the 18 GHz relocation rules, relocated licensees should not have a basis for complaint.

SIA also urges the Commission to reject Winstar's requested changes to the 18 GHz relocation rules. First, Winstar argues that the Commission should establish a right in relocated FS licensees to return to their previous facilities at any time during a twelve-month trial period after relocation.¹⁵ Second, Winstar argues that the Commission should provide for a voluntary negotiation period in addition to the two-year mandatory negotiation period established in the 18 GHz Order.¹⁶ The Commission’s decision to reject these two provisions in the 18 GHz Order is correct.

Winstar argues that a twelve-month trial period and a “right of return” is necessary to ensure that replacement systems are in fact comparable under “real world” operating conditions.¹⁷ However, the Commission’s 18 GHz relocation rules clearly provide that involuntary relocation will occur only if a satellite licensee has built *and tested* a comparable facility for the relocated FS licensee *prior* to relocation of that licensee.¹⁸ The FS licensee has the ability to contest the comparability question if the satellite licensee has not conducted appropriate testing, and the Commission has reserved the right to order the satellite licensee to take additional measures to ensure comparability after the FS licensee has relocated. Moreover, as the Commission has noted,¹⁹ a trial period and a right of return would unduly complicate and delay the already burdensome relocation process for satellite licensees.

¹⁵ Winstar Petition at 17.

¹⁶ Winstar Petition at 18-19.

¹⁷ Winstar Petition at 17.

¹⁸ 47 C.F.R. 101.91(a)(3).

¹⁹ 18 GHz Order at ¶ 19.

Likewise, Winstar's request for a voluntary negotiation period in addition to the two-year mandatory negotiation period is unnecessary. Adding an additional time period on top of the two-year mandatory negotiation period simply increases the amount of time that terrestrial fixed service operators have to operate until they are subject to involuntary relocation. Moreover, contrary to Winstar's assertion that a voluntary negotiation period produces efficient and fair relocation,²⁰ the Commission's experience with the 2 GHz PCS relocation clearly demonstrates that a voluntary negotiation period allows existing licensees to refuse to negotiate unless the party seeking relocation offers a premium.²¹ The two-year mandatory negotiation period established by the 18 GHz Order provides more than sufficient notice to the existing FS licensee of the requirement to relocate and provides ample time to evaluate the FS facility to be relocated and come to an agreement on comparable facilities for relocation. The Commission should deny Winstar's request to lengthen and complicate the relocation process.

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²⁰ Winstar Petition at 19.

²¹ *See Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation*, 12 FCC Rcd 2705, ¶ 11 (1997); *Amendment To The Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation*, 11 FCC Rcd 8825, ¶¶ 11, 43 (1996).

For all of the foregoing reasons, the SIA respectfully requests (i) that the Commission reconsider certain decisions in the 18 GHz Order as proposed by Hughes to the extent discussed herein, and (ii) that the Commission deny Winstar's petition for reconsideration.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Comments in Support of and in Opposition to Petitions for Reconsideration of the Satellite Industry Association was deposited in the US Mail, first class, postage prepaid, this 13th day of November, 2000, addressed to each of the following:

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