

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)
)
Comprehensive Review of Licensing and) IB Docket No. 12-267
Operating Rules for Satellite Services)

To: The Commission

REPLY COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association (“SIA”) hereby replies to the comments filed in response to the above-captioned Notice of Proposed Rule Making (“NPRM”) addressing the Commission’s proposals to modernize the Part 25 rules governing satellite services.¹

I. INTRODUCTION.

Numerous parties with varying interests in the Commission’s rules governing satellite services filed comments in this proceeding. Without exception, these parties support the Commission’s efforts to update and streamline the Part 25 rules – an effort deemed both welcome and overdue.² SIA likewise strongly supports the Commission’s efforts in this regard and provided an extensive set of comments on the questions asked and proposals made in the NPRM.³ SIA also included as part of its Comments a Rules Appendix setting out requested

¹ *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Notice of Proposed Rulemaking, 27 FCC Rcd 11619 (2012). The deadline for reply comments on the NPRM was extended to February 13, 2013 by *Order*, DA 12-2046 (IB, rel. Dec. 19, 2012).

² *See, e.g.*, Comments of EchoStar Corporation, IB Docket No. 12-267, at 3 (filed Jan. 14, 2013) (“EchoStar Comments”); Comments of Intelsat License LLC, IB Docket No. 12-267, at 2 (filed Jan. 14, 2013) (“Intelsat Comments”); Comments of Iridium Constellation LLC, IB Docket No. 12-267, at 1 (filed Jan. 14, 2013).

³ Comments of the Satellite Industry Association, IB Docket No. 12-267 (filed Jan. 14, 2013) (“SIA Comments”).

revisions to specific rule parts. The SIA Comments and Rules Appendix together provide the most comprehensive consideration of the many and varied proposals made in the NPRM.

In these Reply Comments, SIA addresses several issues that were raised in the comments filed by other parties in this proceeding.

II. DISCUSSION.

A. EIBASS's Requests for Heightened Protection of BAS Are Misplaced, Unsupported and Unwarranted.

In its comments, Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (“EIBASS”) urges the Commission to “revisit” the alleged “super-priority” given to receiving earth stations at the expense of Broadcast Auxiliary Service (“BAS”) operations.⁴ The specific proposals EIBASS puts forth to address this claimed inequity all share a common characteristic – each has already been fully considered and rejected as unnecessary by the Commission. Moreover, EIBASS offers no meaningful justification to reconsider those proposals here.

In the first section of its comments, EIBASS makes two suggestions that were advanced unsuccessfully by the Society of Broadcast Engineers (“SBE”) in a proceeding relating to sharing between geostationary satellite orbit and non-geostationary satellite orbit (“NGSO”) fixed satellite service (“FSS”) and BAS/Cable Television Relay Service (“CARS”) operations in the 7 and 13 GHz bands. Specifically, EIBASS requests that the Commission establish “keep away zones” to protect BAS networks in bands shared with FSS operations and then attacks the Commission’s policy of permitting earth stations to be licensed on a “full-spectrum, full-arc” basis in those bands.⁵ In doing so, EIBASS interposes an untimely and repetitive challenge to

⁴ Comments of EIBASS, IB Docket No. 12-267, at 3 (filed Jan. 14, 2013) (“EIBASS Comments”).

⁵ *See id.* at 1-3.

the coordination plan adopted by the Commission in 2010 to facilitate efficient use of the 7 and 13 GHz spectrum.⁶

The Commission should not revisit its decision on either of these issues here. The 2010 coordination plan struck a reasonable compromise between FSS and BAS/CARS spectrum users in the 7 and 13 GHz bands, and is now a final decision. When the Commission adopted the plan, it expressly declined to implement the very “keep away” protection scheme advocated by SBE and now being repeated by EIBASS.⁷ The Commission’s reasoning three years ago applies with equal force today: “[T]he overall record generated in this proceeding offers no compelling reason for deviating from a ‘notice and response’ coordination approach.”⁸ EIBASS likewise fails to provide any “compelling reason” for a revised method of coordination.⁹

Similarly, the *FSS/BAS Coordination Order* expressly rejected the suggestion that limitations should be placed on the spectrum or look angles that could be licensed for FSS networks, noting that “such matters have been fully considered and addressed in prior proceedings” and there was “no need to revisit them.”¹⁰ The proposal to restrict earth station licensing flexibility dates back to a request filed more than a decade ago by the Fixed Wireless

⁶ See *Amendment of Parts 25, 74, 78 and 101 of the Rules regarding Coordination between the Non-Geostationary and Geostationary Satellite Orbit Fixed-Satellite Service and Fixed, Broadcast Auxiliary and Cable Television Relay Services in the 7 GHz, 10 GHz and 13 GHz Frequency Bands*, Report and Order, 25 FCC Rcd 622 (2010) (“*FSS/BAS Coordination Order*”).

⁷ *FSS/BAS Coordination Order* at 627.

⁸ *Id.* at 627. The Commission also agreed with parties commenting in the proceeding that SBE’s proposal “would make the coordination process potentially more burdensome and complex with minimal benefit in return.” *Id.* (citation omitted).

⁹ As an additional point, there clearly was no notice of the action EIBASS seeks in the NPRM, meaning that any affirmative action by the Commission in the forthcoming Report and Order is precluded by principles of administrative law.

¹⁰ *FSS/BAS Coordination Order* at 627.

Communications Coalition (“FWCC”).¹¹ The Commission flatly denied FWCC’s original request in 2002 as unsupported, citing in particular “the absence of evidence of the extent to which our current rules have resulted in injury to the terrestrial fixed service community.”¹² Like FWCC before it, EIBASS presents no evidence in its comments to support the suggestion that terrestrial operations are unfairly disadvantaged in spectrum shared with satellite services.

In sum, the Commission acted properly in denying the relief originally sought by SBE and FWCC. The Commission should summarily dismiss EIBASS’s completely unsupported plea to revisit these settled decisions.

The EIBASS Comments also include a request for increased protection of electronic news gathering receive-only (“ENG-RO”) sites, suggesting that Part 25 rules on siting of earth stations are inadequate and putting forth a proposed specific protection criteria.¹³ Once again, however, EIBASS fails to provide any meaningful support for its proposals. EIBASS cites only two examples in its attempt to justify a change in Part 25. One example is clearly irrelevant to this proceeding because it involves an experimental license application filed under Part 5, not Part 25.¹⁴ The other example – involving an application for an uplink facility in Georgia using the 2 GHz space operations band – seems, paradoxically, to confirm that the present rules

¹¹ A more detailed history of the proceeding in response to FWCC’s request and the overwhelming opposition to FWCC’s proposals is found in the Reply Comments of the Satellite Industry Association, WT Docket No. 10-153, at 4-18 (filed Nov. 22, 2010).

¹² *FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service That Share Terrestrial Spectrum*, Second Report and Order, 17 FCC Rcd 2002, 2007 (2002). The Commission’s determination that FSS licensing does not pose a material obstacle to successful coordination of terrestrial systems has been reconfirmed as recently as three months ago. *See Deployment of 11 GHz, 18 GHz, and 23 GHz Microwave Bands – Report Pursuant to Section 6412 of the Middle Class Tax Relief and Job Creation Act of 2012*, Report to Congress, 27 FCC Rcd 14482, 14491-92 (WTB, rel. Nov. 20, 2012) (concluding that “the frequency coordination process has successfully allowed applicants and licensees to work together to resolve potential interference issues” in spectrum including the 11 and 18 GHz bands shared with FSS and estimating that the “rejection rate” for requests for coordination in those bands is “well under one percent”).

¹³ *See* EIBASS Comments at 4-6.

¹⁴ *See id.* at 4.

worked as envisioned.¹⁵ No harmful interference to ENG-RO sites resulted in either case, and certainly neither example illustrates an “abusive scenario” as EIBASS would have the Commission believe.

In any event, EIBASS’s suggestion that Part 25 does not require earth station applicants in shared spectrum to accommodate other services is simply wrong.¹⁶ To the contrary, Section 25.203(a) expressly mandates that sites and frequencies for earth stations in bands shared with terrestrial services “be selected, to the extent practicable, in areas where the surrounding terrain and existing frequency usage are such as to minimize the possibility of harmful interference between the sharing services.”¹⁷

Furthermore, the Commission has already considered and rejected the EIBASS suggestion that the Commission should impose a specific limit on degradation to an ENG-RO noise threshold instead of relying on standard coordination procedures to prevent interference.¹⁸ The Commission explained that “in lieu of mandating specific interference criteria in our rules, we expect applicants and licensees to work out interference issues in the frequency coordination process.”¹⁹ EIBASS provides no reason for the Commission to depart from that approach here.

¹⁵ *See id.*

¹⁶ *See id.* at 5 (alleging that the Commission relies on unenforceable expectations with respect to siting of earth stations in shared spectrum, and that Part 25 needs to be updated to preclude abuses).

¹⁷ 47 C.F.R. § 25.203(a).

¹⁸ *See Amendment of Part 101 of the Commission’s Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Service and Operational Fixed Microwave Licensees*, Report and Order, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order, 26 FCC Rcd 11614, 11626 (2011) (declining to adopt the EIBASS proposal that a new fixed service station be prohibited from increasing the noise threshold of an existing ENG-RO site by more than 0.5 dB).

¹⁹ *Id.*

EIBASS's proposals for protection of ENG-RO sites in the 2.0, 2.5, and 6.5 GHz bands are unrealistic and unnecessary. The Commission should reject the proposals.²⁰

B. Any ATIS Standard that the Commission Adopts Should Be Applied to SNG Operations Only and Account for Evolving Industry Standards.

Several parties submitted comments addressing the Commission's proposals concerning the Automatic Transmitter Identification System ("ATIS").²¹ SIA also offered comments on ATIS, calling for a modest expansion of ATIS that would cover digital satellite news gathering ("SNG") operations but not extend to any other digital uplink services.²² As SIA explained in its comments, experience shows that SNG operations present a greater risk of interference due to the nature of their temporary operation and frequently hasty set up. In contrast, the risk of interference from other, more conventional types of FSS operations, including such things as Very Small Aperture Terminal ("VSAT") networks, Direct Broadcast Satellite links, 17/24 GHz Broadcasting Satellite Service ("BSS") feeder links, and other FSS earth stations transmitting digital broadband video signals, should be comparatively small. As the Commission notes in the NPRM, these operations change their parameters (including pointing) infrequently and are subject to routine quality control checks.²³ These uplinks also generally continuously track the

²⁰ EIBASS does not object to the proposal to allow a space station applicant to provide telemetry, tracking and command control point information after its requested license has been granted, provided the information becomes available on IBFS and is linked to the original application. EIBASS Comments at 7. SIA recognizes the importance of maintaining accurate control point information, and reiterates the position expressed in the SIA Comments that this need can best be met by allowing licensees to provide a satellite-operations-center point of contact, which would be updated annually through IBFS and publicly available. SIA Comments at 12.

²¹ See, e.g., Initial Comments of Comtech EF Data Corporation, IB Docket No. 12-267, at 6-14 (filed Jan. 14, 2013); Comments of Global VSAT Forum, IB Docket No. 12-267, at 2 (filed Jan. 14, 2013) ("GVF Comments"); Comments of the National Cable & Telecommunications Association, IB Docket No. 12-267, at 1-6 (filed Jan. 14, 2013) ("NCTA Comments"); Comments of National Public Radio, Inc., IB Docket No. 12-267, at 2-3 (filed Jan. 14, 2013) ("NPR Comments").

²² SIA Comments at 63-65.

²³ NPRM at ¶ 154.

target satellite in the case of larger antennas, or require an “enabling” tone before transmitting and operate with lower power than SNG uplinks in the case of VSATs.²⁴

Separate from the reach of the ATIS rule, a few commenters addressing ATIS maintain that it is premature for the Commission to codify specific technical parameters for digital ATIS, as proposed by the Commission.²⁵ SIA agrees. Such a codification is not flexible enough to take into account impending developments in industry standards for “carrier ID.” The better approach, as SIA explained in its comments, is to allow the Part 25 rules to stay current with industry advances by incorporating by reference the “latest version” of the carrier ID industry standard.²⁶ Adoption of the practical approach to Section 25.281 of the Commission’s rules requested by SIA will both provide clarity for operators and allow the ATIS rule to evolve as the industry standard itself evolves.

C. The Repositioning of NGSO Space Stations Without Prior Commission Approval Should Be Allowed under Specific Conditions.

SIA agrees in general with the comments that support allowing NGSO licensees to reposition space stations without prior authorization, but only under certain conditions.²⁷ Globalstar, Inc. (“Globalstar”), which first raised the proposal in a separate proceeding, maintains in its comments that prior authorization to reposition NGSO space stations is not required when the number of authorized operating space stations is not exceeded and the licensee certifies that those changes will not increase interference.²⁸ SIA agrees, with the caveat that it is

²⁴ See EchoStar Comments at 17.

²⁵ GVF Comments at 2; NCTA Comments at 5; EchoStar Comments at 16.

²⁶ SIA Comments at 64. It would be a mistake to include in the rules any proprietary standard for ATIS, even with the limited applicability to SNG transmissions.

²⁷ See *id.* at 35-36.

²⁸ Comments of Globalstar, Inc., IB Docket No. 12-267, at 1 (filed Jan. 14, 2013) (referencing a previous Globalstar proposal to amend Section 25.118(e) of the Commission’s rules) (“Globalstar Comments”).

equally important to guard against increased sensitivity to interference. SIA therefore recommends the additional condition that any NGSO repositioning not result in an increase in protection from interference from others.²⁹

Globalstar acknowledges that an NGSO constellation modification that involves a permanent departure from a space station's authorized altitude or orbital plane should not be covered by Section 25.118(e) of the Commission's rules.³⁰ In contrast, ORBCOMM Inc. believes that modifications without prior authorization should be permitted regardless of whether the change deviates from the altitude, orbit inclination, or the number and distribution of spacecraft per orbital plane.³¹ SIA supports the Globalstar approach, but with the proviso that both permanent and temporary departures require prior Commission approval. Permanent departures present a clear risk of increased interference. But temporary departures raise questions as well. As SIA explained in its comments, the characterization of a departure as temporary is rife with ambiguity, and begs the question what separates a "temporary" departure from a "permanent" one.³²

D. SIA Supports Specific Comments Submitted by DIRECTV, Boeing and Intelsat.

In addition to lending their support to the comprehensive SIA Comments, several SIA members submitted individual comments on the NPRM. In this section, SIA addresses specific issues raised by three of its members: DIRECTV, LLC ("DIRECTV"), The Boeing Company ("Boeing") and Intelsat License LLC ("Intelsat").

²⁹ SIA Comments at 35.

³⁰ Globalstar Comments at n.6.

³¹ Comments of ORBCOMM Inc., IB Docket No. 12-267, at 16 (filed Jan. 14, 2013).

³² SIA Comments at 35-36. As SIA explained in its Comments, temporary departures should continue to be conducted pursuant to special temporary authority consistent with current practice. *Id.*

In its comments, DIRECTV raised several points about the timing of certain predicted and measured data that must be submitted with respect to the off-axis gain characteristics of 17/24 GHz BSS satellite transmit antennas.³³ Because such data is unavoidably unreliable at the time Section 25.264 requires its submission, DIRECTV proposes instead that predicted transmitting antenna off-axis gain information and preliminary power flux density calculations be submitted within two years after grant of the 17/24 GHz BSS authorization.³⁴ DIRECTV also proposes that additional timing flexibility be afforded to 17/24 GHz BSS licensees regarding submission of the measured transmitting antenna off-axis data.³⁵ SIA agrees with DIRECTV's reasoning, and supports its proposals for modest revisions to Section 25.264 as a means of achieving more accurate and reliable data.

Boeing requests that the Commission narrow its evidentiary review of critical design review ("CDR") milestone showings to the original factors identified by the Commission when the milestone was first introduced.³⁶ SIA agrees with Boeing that the Commission's current treatment of demonstrations of compliance with the CDR milestone has strayed too far from its original purpose. As SIA stated in its comments, "[t]he Commission is currently seeking too much information from licensees at CDR on an ad hoc basis, and even seems to be relying on post-CDR activities, events or expenditures when determining whether a licensee has met the CDR milestone."³⁷ SIA supports Boeing's proposal to rely on the three original factors

³³ See Comments of DIRECTV, LLC, IB Docket No. 12-267, at 1-5 (filed Jan. 14, 2013).

³⁴ *Id.* at 4.

³⁵ *Id.*

³⁶ Comments of The Boeing Company, IB Docket No. 12-267, at 10 (filed Jan. 14, 2013). The original factors cited by Boeing were announced in *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760 (2003) ("*Space Station Licensing Reform Order*").

³⁷ SIA Comments at 14-15.

announced in the *Space Station Licensing Reform Order*. Specifically, the Commission should clarify that a declaration by a recognized vendor, or any other of the initial existing showings identified by the Commission for the CDR milestone showing, constitute sufficient evidence that the CDR milestone has been met.

Intelsat urges the Commission to consolidate two new reporting requirements proposed in the NPRM (new Section 25.173(b) and revised Section 25.164(f)) into the existing Section 25.121(d).³⁸ SIA addressed the Section 25.173(b) point in its Comments,³⁹ and agrees with Intelsat that it is appropriate as well to fold the now-duplicative showing under Section 25.164(f) into the revised Section 25.121(d) showing.

III. CONCLUSION.

With its Comments and these Reply Comments, SIA has set out its recommended approach to modernize and streamline Part 25 of the Commission's rules. SIA respectfully urges the Commission to adopt these industry-supported views and proposals, and stands prepared to provide the Commission with whatever assistance it may require as it continues the task of overhauling the rules governing satellite services.

Respectfully submitted,

SATELLITE INDUSTRY ASSOCIATION

By: 

Patricia Cooper
President
1200 18th Street, NW, Suite 1001
Washington, DC 20036
Tel. (202) 503-1561

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³⁸ Intelsat Comments at 3-4.

³⁹ See SIA Comments at 13.