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

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In the Matter of	)	
	)	
Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems	)	ET Docket No. 00-258
	)	
Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Implementation of WRC-2000: Review of Spectrum and Regulatory Requirements for IMT-2000	)	RM-9920
	)	
Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/ 2670-2690 MHz Frequency Bands for the Mobile Satellite Service	)	RM-9911

OPPOSITION TO PETITION FOR RECONSIDERATION

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EXECUTIVE SUMMARY

The Petition for Reconsideration filed by the Satellite Industry Association ("SIA") is yet another attempt by the mobile satellite ("MSS") industry to seize the 2500-2520 MHz and 2670-2690 MHz bands for MSS-provided mobile telephone service, with no meaningful consideration of the fact that the spectrum is already heavily encumbered by Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") licensees who are aggressively deploying the 2500-2690 MHz (the "2.5 GHz") band for commercial and educational fixed wireless broadband service to residential, commercial and educational users. Indeed, a substantial portion of SIA's Petition for Reconsideration is merely a rehash of SIA's April 28, 2000 Petition for Rulemaking, which the Commission denied in its *Order* released January 5, 2001, and events since the filing of SIA's Petition for Rulemaking have reaffirmed the wisdom of the Commission's decision. For these reasons alone, SIA's Petition for Reconsideration provides no justification for the Commission to now reverse field and cripple the ongoing deployment of MDS/ITFS broadband service solely to provide additional spectrum for the financially shipwrecked MSS industry.

While SIA now contends that MDS/ITFS incumbents and MSS operators may share the 2500-2520 MHz and 2670-2690 MHz bands, it says nothing about how this could actually be accomplished. In fact, SIA's Petition for Reconsideration is absolutely barren of any technical studies or other evidence which supports its contention that MSS systems may share spectrum with ubiquitous two-way point-to-multipoint MDS/ITFS broadband systems without creating harmful interference between the two services. Instead, SIA relies on an October 1999 Telecommunications Industry Association Joint Working Group Report that merely addresses sharing between traditional fixed point-to-point stations in the 2165-2200 MHz band and thus is completely irrelevant to sharing between MSS and ubiquitously-deployed two-way point-to-multipoint MDS/ITFS systems.

SIA's position is fundamentally flawed by its reliance on the mistaken assumption that MDS/ITFS broadband systems will be deployed "mainly in urban areas" and thus will be geographically distant from MSS operations in less densely populated regions of the country. The Commission has already found that MDS/ITFS systems may be the *only* provider of broadband service in rural and other underserved areas, and both large and small MDS/ITFS operators alike are in the midst of deploying that service in rural, smaller and mid-sized markets. Accordingly, SIA's unsupported contention that MDS/ITFS broadband systems will be geographically distant to rural MSS operations is wrong and should be dismissed as such.

Finally, SIA suggests, with no supporting citations whatsoever, that the International Telecommunications Union ("ITU") addressed the MSS/MDS/ITFS sharing issue "over the 1994-1996 time period." Regardless of which ITU-R Recommendations SIA is talking about, SIA is wrong. Any ITU-R Recommendations adopted between 1994 and 1996 necessarily predate the Commission's 1998 adoption of rules and policies permitting for the first time the routine licensing of MDS and ITFS spectrum in the 2.5 GHz band for ubiquitous two-way point-to-multipoint broadband services.

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OPPOSITION TO PETITION FOR RECONSIDERATION

The Wireless Communications Association International, Inc. ("WCA"), pursuant to Section 1.429(f) of the Commission's Rules, hereby submits its opposition to the Petition for Reconsideration filed by the Satellite Industry Association ("SIA") with respect to the Commission's January 5, 2001 *Order* in the above-captioned proceeding.[1/]

[1/] *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, ET Docket 00-258 *et al.*, FCC 00-455, ¶¶ 70-73 (rel. Jan. 5, 2001) [hereinafter cited as "*Order*"].

I. INTRODUCTION.

SIA's Petition for Reconsideration is the latest chapter in the mobile satellite industry's ongoing effort to appropriate the 2500-2520/2670-2690 MHz bands so that mobile satellite services ("MSS") operators may have even more spectrum for mobile telephone service. In the *Order*, the Commission found that SIA's April 28, 2000 Petition for Rulemaking[2] lacked the minimum public interest showing necessary to justify the issuance of a *Notice of Proposed Rule Making*, much less displace incumbent Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") licensees in the 2500-2690 MHz (the "2.5 GHz") band and cripple the ongoing nationwide rollout of commercial and educational MDS/ITFS broadband service. Indeed, with no equivocation whatsoever, the Commission found that "reallocation of the 2.5 GHz band to the MSS is unwarranted," since "[s]haring between terrestrial and satellite systems would present substantial technical challenges in that band and MSS already has access to a significant amount of spectrum below 3 GHz to meet its needs in the foreseeable future."[3] The Commission further found that SIA had not otherwise "present[ed] sufficient reasons to justify institution of a rulemaking proceeding," and thus denied SIA's Petition for Rulemaking.[4]

SIA's Petition for Reconsideration suffers from the same deficiencies that led the Commission to deny its Petition for Rulemaking. For the most part, SIA merely repeats arguments that the Commission has already rejected in the *Order*. Moreover, while SIA now argues that

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[2] Petition for Rulemaking of the Satellite Industry Association, RM-9911 (filed April 28, 2000) [hereinafter cited as "SIA Petition for Rulemaking"].

[3] *Id.* at ¶ 73.

[4] *Id.*

MDS/ITFS incumbents and MSS operators may share the same spectrum, *SIA's Petition for Reconsideration includes no technical studies or any other evidence whatsoever which indicates that it is possible for mobile satellite services to share the 2500-2520 MHz and 2670-2690 MHz bands with ubiquitous two-way point-to-multipoint MDS/ITFS broadband systems without creating harmful interference.* Indeed, the only specific "evidence" SIA offers in support of its sharing argument is an October 1999 Telecommunications Industry Association ("TIA") working group study which does not even address sharing with ubiquitously-deployed point-to-multipoint services. SIA's sharing argument also is based on the entirely false assumption that MDS/ITFS broadband service will not be deployed in rural areas and thus will be geographically distant from MSS operations. Finally, SIA claims that the sharing issue has been addressed by certain unidentified ITU-R Recommendations which SIA concedes were adopted before the advent of ubiquitous two-way point-to-multipoint MDS/ITFS broadband systems.

In sum, SIA's Petition for Reconsideration, like SIA's Petition for Rulemaking, provides no basis for the Commission to subject MDS/ITFS incumbents, consumers, educators and their students to the devastating impact any reallocation of the 2.5 GHz band for MSS would have on the deployment of MDS/ITFS broadband service across the United States. SIA's Petition for Reconsideration should be denied.

II. DISCUSSION.

A. SIA'S PETITION FOR RECONSIDERATION REPEATS ARGUMENTS THAT THE COMMISSION HAS ALREADY REJECTED IN THE *ORDER*.

In its Petition for Rulemaking, SIA sought to convince the Commission that (1) the MSS industry generally is well positioned to deliver broadband service to rural areas in a cost-effective

fashion, (2) the MSS industry needs additional spectrum with which to provide such service, and (3) reallocation of the 2500-2520 and 2670-2690 MHz bands for MSS will provide that additional spectrum and facilitate global roaming.[5] In response, the MDS/ITFS industry (including commercial fixed wireless operators, MDS/ITFS licensees, educational institutions and other interested parties) submitted voluminous comments voicing strong opposition to SIA's proposal, highlighting the insufficiency of SIA's public interest showing and advising the Commission of the harm that would befall commercial and educational MDS/ITFS broadband service if the Commission were to reallocate the 2500-2520 MHz and 2670-2690 MHz bands for MSS.[6] Upon review of this

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[5] Petition for Reconsideration of the Satellite Industry Association, RM-9911, at 3 (filed February 22, 2001) (discussing arguments raised in SIA's Petition for Rulemaking) [hereinafter cited as "SIA Petition for Reconsideration"].

[6] *See, e.g.,* Opposition to Petition for Rulemaking of The Wireless Communications Association International, Inc., RM-9911 (filed Aug. 28, 2000) [hereinafter cited as "WCA Opposition"]; Opposition of WorldCom, Inc., RM-9911 (filed Aug. 28, 2000) [hereinafter cited as "WorldCom Opposition"]; Sprint Corporation Comments on Petitions for Rulemaking, RM-9911 and RM-9920 (filed Aug. 28, 2000) [hereinafter cited as "Sprint Comments"]; Comments of Nucentrix Broadband Networks, Inc., RM-9911 (filed Aug. 28, 2000) [hereinafter cited as "Nucentrix Comments"]; Opposition by Wireless One of North Carolina, L.L.C., RM-9911 (filed Aug. 28, 2000); Opposition of Digital Broadcast Corporation, RM-9911 and RM-9920 (filed Aug. 25, 2000); Opposition of the National ITFS Association, RM-9911 (filed Aug. 28, 2000); Opposition of Hispanic Information and Telecommunications Network, Inc., RM-9911 (filed Aug. 28, 2000); Opposition of Mississippi Board of Trustees of State Institutions of Higher Learning, RM-9911 (filed Aug. 24, 2000); Opposition of the Mississippi Department of Education, RM-9911 (filed Aug. 24, 2000); Opposition of Mississippi EdNet Institute, Inc., RM-9911 (filed Aug. 24, 2000); Opposition of the Mississippi State Board for Community & Junior Colleges, RM-9911 (filed Aug. 24, 2000); Comments of South Piedmont Community College, RM-9911 (filed Aug. 22, 2000); Comments of Randolph Community College, RM-9911 (filed Aug. 22, 2000); Opposition of the University of Minnesota, RM-9911 (filed Aug. 28, 2000); Consolidated Opposition of the Instructional Telecommunications Foundation, Inc., RM-9911 and RM-9920 (filed Aug. 28, 2000); Joint Opposition of the Archdiocese of Los Angeles Education and Welfare Corporation, Caritas Telecommunications Corp., the Catholic Bishop of Chicago, Catholic Television Network, the Colorado State Board of Agriculture, Counterpoint Communications, Inc., the Macomb Intermediate School District, Dioceses of the San Francisco Bay Area, the National Conference on Citizenship, Oakland Schools, the Office of Radio and Television of the Archdiocese of Hartford, the Roman Catholic Archbishop of the Archdiocese of Detroit, the Roman Catholic Communications Corp., the Roman Catholic Diocese of Dallas, the Roman Catholic Diocese of Orange, Stanford University, and the University of Colorado, RM-9911 (filed Aug. 28, 2000); Comments of the San Bernardino Community College District, RM-9911 (filed Aug. 28, 2000); Comments of The Association for Telecommunications

record, the Commission determined in the *Order* that SIA's proposal merited no further consideration, and thus the Commission refused to propose reallocation of the 2500-2520 and 2670-2690 MHz bands for MSS.[7]

At the outset, it must be emphasized that a substantial portion of SIA's Petition for Reconsideration merely rehashes SIA's Petition for Rulemaking and the comments filed in support thereof by a handful of MSS proponents, and thus cannot be a basis for reconsideration of the *Order*.[8] Indeed, developments since the filing of SIA's Petition for Rulemaking confirm that the Commission was correct in refusing to propose reallocation of the 2500-2520 and 2670-2690 MHz bands for MSS. For example, as demonstrated at length by WCA and others who opposed SIA's Petition for Rulemaking, the calamitous financial condition of the MSS industry undermines SIA's claim that MSS operators will be a viable source of broadband service in rural areas.[9] The point has

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Professionals in Higher Education, RM-9911 (filed Aug. 28, 2000); Opposition of the Arizona Board of Regents for Arizona State University, Boston Catholic Television Center, Inc., Butler County Community College, California State University - Northridge, Charlotte-Mecklenburg Public Broadcasting Authority, Connecticut Public Broadcasting, Inc., Diocese of Youngstown, Ohio, Dutchess Community College, Educational Television Association of Metropolitan Cleveland, Friends University, Hampton Roads Educational Telecommunications Association, Inc., Hartness Community College District, Jefferson County Board of Education, Monterey County Superintendent of Schools, New Jersey Public Broadcasting Authority, Newman University, San Jose State University, Santa Clara County Board of Education, Santa Cruz County Superintendent of Schools, University of North Carolina, WHYY, Inc., Wichita Public Schools-USD#259 and Wichita State University, RM-9911 (filed Aug. 28, 2000); Comments of Pikes Peak Community College, RM-9911 (filed Aug. 28, 2000).

[7] *See Order* at ¶¶ 70-73.

[8] *See* SIA Petition for Reconsideration at 3-5.

[9] *See, e.g.,* WCA Opposition at 12-14 (discussing bankruptcies of Iridium and ICO Global Communications, and financial difficulties suffered by Globalstar); WorldCom Opposition at 8-9. *Compare* SIA Petition for Reconsideration at 3 (citing Globalstar and ICO Global comments for the proposition that "MSS providers can provide broadband services to rural areas in a cost-effective fashion"); SIA Petition for Rulemaking at 3 (claiming that MSS is "the most likely candidate to ensure availability of Internet access to more of the global population than is currently served by landline systems").

since been reinforced by the ongoing travails of Globalstar, the most prominent MSS operator still standing - the company has lost its major investor and announced that it has indefinitely halted all debt repayments.[10] Iridium has fared no better: the company's assets were only recently sold out of bankruptcy, and the buyer has indicated that it intends to scale back Iridium's service drastically.[11] As noted in *Forbes*:

> With the Iridium flameout complete and Globalstar's imminent, there's a lesson to be learned: Technology is moving so fast that it can easily overtake even the best-laid plans. Services like Globalstar and Iridium may have seemed like good ideas years ago when the companies were born. Now they're nothing but continued bad news for investors.[12]

Similarly, SIA's Petition for Reconsideration offers nothing new that would justify reconsideration of the Commission's finding that MSS operators already have sufficient spectrum for the foreseeable future. While SIA states that the existing MSS allocation "is insufficient to offer

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[10] Bartash & Adamson, "Globalstar to Suspend Debt Payments," *at* http://cbs.marketwatch.com (last visited March 20, 2001); Pasztor, "Globalstar Halts Debt Repayment, Hires Bank to Pursue Alternatives," WALL ST. J., Jan. 17, 2001, at A-16; *see also id.* (stating that Globalstar's default has led analysts to predict that Globalstar "will find it virtually impossible to raise additional financing").

[11] Fordahl, "Virginia Company Acquires Iridium Assets," *AP State & Local Wire* (Dec. 13, 2000); *see also Communications Daily*, at 9 (March 7, 2001) (discussing bankruptcy of MSS provider Orbcomm).

[12] Hessedahl, "Disaster of the Day: Globalstar," *at* http://www.forbes.com/2001/01/17/0117disaster.html (last visited March 19, 2001). Overriding concerns about consumer demand for so-called third generation ("3G") service raise additional questions about the MSS industry's viability in the broadband marketplace. Just weeks ago, the *Wall Street Journal* reported that "[p]hone companies thought they had seen the future in a cellular technology dubbed '3G,' but now the picture has blurred." Pringle and Delaney, "Next Generation of Cellphones Becomes Murky," WALL ST. J., Feb. 21, 2001, at B4. The *Journal* quoted the Chairman of one of France's largest mobile service operators as stating that 3G "is no longer indispensable for mobile multimedia applications" and noted that upgraded second generation or "2G" networks are capable of handling 80% of all services people have identified for 3G (quoting a mobile phone specialist with Arthur D. Little). *Id.* Those sentiments were echoed by the Executive Vice President and Chief Technical Officer of Verizon Wireless, who is quoted as stating that "[u]pgraded 2G technology is 'exactly what we need to satisfy the customer.'" *Id.; see also* Lacey, "Negroponte: '3G will not see the light of day,'" *at* http://www.zdnet.co.uk/news/2000/36/ns-17861.html (last visited March 19, 2001).

services compatible with third generation terrestrial systems," it offers no supporting analysis for this claim save for its bald assertion that MSS will need an "additional 10-15 MHz" of spectrum in each direction to offer competitive service.[13] SIA also laments the fact that Geostationary Orbit ("GSO") MSS providers (*e.g.*, Inmarsat) occupy most of the MSS spectrum allocation, and that "because there are currently seven to nine applicants for (the 1990-2025 MHz and 2165-2200 MHz bands), each licensee can expect to have primary access to at most 4.4 MHz of spectrum at 1990-2025 and 4.4 MHz of spectrum at 2165-2200 MHz."[14] Even if valid, these arguments merely suggest that there are inefficiencies within the MSS spectrum allocation that have nothing whatsoever to do with the MSS industry's purported need for the 2500-2520 and 2670-2690 MHz bands.[15] It therefore is absurd for SIA to suggest that the Commission should solve those problems at the expense of MDS/ITFS incumbents who are already deploying the 2.5 GHz band for broadband service to unserved and underserved areas.[16]

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[13] SIA Petition for Reconsideration at 8.

[14] *Id.* at 7-8. SIA incorrectly states that individual LEO MSS providers have access to only 11.35 MHz of uplink spectrum in the 1.6 GHz band. *Id.* at 7. In fact, as reflected in the *Order* and in the Commission's Table of Frequency Allocations, individual LEO MSS providers have been allocated 16.5 MHz of uplink spectrum at 1610-1626.5 MHz. *See Order* at ¶ 73 n.126; 47 C.F.R. § 2.106.

[15] WorldCom has already noted the spectral inefficiencies alluded to by SIA. *See* WorldCom Opposition at 11 ("Inmarsat 1 and 2 satellites use spectrum in an extremely inefficient manner, by providing very large regional beams to serve primarily large earth stations. With the retirement of these satellites and the launch of more spectrally efficient Inmarsat 3 satellites, Inmarsat should have more than enough spectrum to serve its relatively modest growth rates. There simply is no need for the allocation of more MSS spectrum in the United States.").

[16] SIA's complaint about the number of pending MSS applicants is particularly ironic: to the extent that there is an excess of pending MSS applicants before the Commission, it is attributable to the fact that MSS providers *have not been required to pay for their spectrum at auction*. By contrast, MDS incumbents in the 2.5 GHz band bought and paid for their spectrum at the Commission's 1996 nationwide auction of MDS Basic Trading Area ("BTA") authorizations. *See Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Fixed*

Furthermore, notwithstanding its admission that uniform global allocations for mobile service "are not always possible," SIA again contends that reallocation of the 2500-2520 and 2670-2690 MHz bands is essential to promote global harmonization and, therefore, global roaming.[17] Yet, as reflected in Appendix D to the Commission's *Notice of Proposed Rule Making* in ET Docket No. 00-258, it appears that even *regional* harmonization of MSS spectrum will not be possible: Canada and Brazil, for example, use the 2500-2520 and 2670-2690 MHz bands for terrestrial MDS service, not MSS.[18]

B. SIA OFFERS NO SUPPORT WHATSOEVER FOR ITS CONTENTION THAT MSS SYSTEMS MAY SHARE THE 2500-2520 MHZ AND 2670-2690 MHZ BANDS WITH MDS/ITFS INCUMBENTS WITHOUT CREATING HARMFUL INTERFERENCE.

In its Petition for Rulemaking, SIA completely ignored the fact that the 2500-2520 MHz and 2670-2690 MHz bands have long been and continue to be heavily occupied by incumbent MDS and ITFS licensees. Indeed, SIA gave the Commission no clue as to whether MSS operators intended to share the targeted spectrum with MDS/ITFS incumbents on a co-primary basis, share the spectrum but demote incumbent licensees to secondary status, or relocate MDS/ITFS out of the spectrum altogether. Nonetheless, several MDS/ITFS operators took pains to point out that it would not be

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Television Service and Implementation of Section 309(j) of the Communications Act, 10 FCC Rcd 9589 (1995). Here it must be noted that BTA auction winners did not merely secure rights to the commercial MDS channels in the 2.5 GHz band (including MDS channel H3 at 2674-2680 MHz); they also purchased the sole right to construct and operate commercial stations on up to eight available ITFS channels in the 2.5 GHz band (including all or parts of ITFS channels A1-A2, B1-B2, and G3-G4 in the 2500-2520 and 2670-2690 MHz bands) within their respective BTAs. Against this backdrop, the inequity of nullifying the rights MDS/ITFS incumbents acquired at auction and reallocating the 2500-2520 and 2670-2690 MHz bands for the benefit of MSS becomes self-evident.

[17] SIA Petition for Reconsideration at 4, 5; SIA Petition for Rulemaking at 3, 8.

[18] *Order*, Appendix D.

feasible for MSS to share the 2500-2520 MHz and 2670-2690 MHz bands with MDS/ITFS, and that any attempt to impose such a sharing arrangement would have grave consequences for commercial and educational MDS/ITFS broadband service.[19] SIA never refuted those showings. The Commission agreed with the MDS/ITFS community, and concluded in the *Order* that "[s]haring between terrestrial and satellite systems would present substantial technical challenges in [the 2500-2520 and 2670-2690 MHz bands]."[20]

SIA belatedly breaks its silence on the issue in its Petition for Reconsideration, suggesting that MSS operators and MDS/ITFS incumbents could share the 2500-2520 and 2670-2690 MHz bands, apparently on a co-primary basis.[21] Significantly, however, *SIA offers no technical studies or any other evidence which supports its contention that MSS may share spectrum with ubiquitous, two-way point-to-multipoint MDS/ITFS broadband systems in the 2500-2520 MHz and 2670-2690 MHz bands without creating harmful interference between the two services.* Instead, SIA relies on a Telecommunications System Bulletin, TSB 86, released in October 1999 (*i.e.*, six months prior to

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[19] Sprint Corporation, for example, specifically noted that "[s]haring between MMDS/ITFS and terrestrial and satellite mobile services does not appear technically feasible," and that "were the MSS services to move into the . . . 2500-2690 bands, MMDS/ITFS providers would be put out of business and the public would be deprived of fixed wireless service." Sprint Comments at 7. Similarly, WorldCom noted the "serious interference concerns that typically arise from any proposed co-frequency operation of ubiquitous satellite and point-to-multipoint terrestrial wireless services," and observed that SIA's Petition for Rulemaking did not provide any studies to show that such operation is possible. WorldCom Opposition at 7-8; *see also* Nucentrix Comments at 6 ("The Commission has recognized that operating terrestrial wireless and mobile satellite services in the same band on a co-channel basis is 'not feasible,' because of the insurmountable interference concerns that such operation causes.") (footnote omitted).

[20] *Order* at ¶ 73.

[21] SIA Petition for Reconsideration at 6.

the filing of SIA's Petition for Rulemaking) by TIA Joint Working Group 14.11/TR34.2.[22] According to SIA, "[w]ith regard to sharing, interference between MMDS/ITFS and MSS was addressed in a TIA joint working group TR14.11/TR34.2, which developed TSB 86 on sharing between the MSS and the Fixed Services (including ITFS and MMDS) in the 2 GHz bands."[23] Even a cursory review of TSB 86, a copy of which is annexed as Attachment A for the convenience of the Commission, illustrates that SIA is grossly mischaracterizing the contents of that document.

Simply stated, TSB 86 does not address MDS or ITFS whatsoever, much less conclude that those services can share spectrum with MSS.[24] TSB 86 is entitled "Criteria and Methodology to Assess Interference Between Systems in the Fixed Service and the Mobile-Satellite Service in the Band 2165-2200 MHz." Nowhere in that document is MDS or ITFS even mentioned, which is not surprising given that there is no MDS or ITFS or other ubiquitous point-to-multipoint usage in the 2165-2200 MHz band. The closest such usage is MDS at 2150-2162 MHz and, as is made clear in Section 2.2 of TSB 86, the technical characteristics of MDS systems in that band were not considered.[25] Indeed, as the Preface to the document states, the working group that drafted TSB 86

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[22] "Criteria and Methodology to Assess Interference Between Systems in the Fixed Service and the Mobile-Satellite Service in the Band 2165-2200 MHz," TIA/EIA Telecommunications System Bulletin TSB86 (Oct. 1999) [hereinafter cited as "TSB 86"].

[23] SIA Petition for Rulemaking at 6 (discussing TSB 86).

[24] Indeed, TSB 86 warns that even with respect to the issue of sharing between MSS and point-to-point microwave, "the JWG makes no claims or conclusions about the extent to which the 2165-2200 MHz band can be shared between MSS and FS users." TSB 86 at iv. As such, it is disingenuous for SIA to imply that this document somehow supports its assertion that MSS can share the 2.5 GHz band with ubiquitously-deployed two-way point-to-multipoint MDS and ITFS.

[25] *See* TSB 86 at 7 (clarifying that only the characteristics of common carrier and private operational fixed service microwave links were considered).

was comprised of "representatives of the mobile satellite and *terrestrial fixed microwave point-to-point service industries*"[26] – representatives of the point-to-multipoint MDS and ITFS industries were not invited to participate (which is not surprising given that the focus of the effort was the 2165-2200 MHz band in which there are no MDS or ITFS stations).

SIA further contends that sharing is possible because MDS/ITFS broadband service will be provided "mainly in urban areas" and thus will be geographically distant from MSS operations.[27] SIA's assumption is patently false - the Commission itself has found that "in rural or otherwise underserved markets in the country, ITFS/MDS may be the sole provider of broadband service,"[28] and MDS/ITFS operators are in the process of deploying fixed wireless broadband service in rural areas across the United States. Indeed, the sheer geographic scope of the ongoing deployment of MDS/ITFS broadband service is striking, particularly when compared to the ongoing nondeployment of MSS.[29] Sprint, for example, holds MDS licenses covering a total of 30 million households in 83 markets, has already launched MDS/ITFS broadband service in a dozen markets and is adding 7,000 customers per month.[30] WorldCom's MDS licenses cover more than 31 million households in 160

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[26] *Id.* at iv (emphasis added).

[27] SIA Petition for Reconsideration at 6.

[28] "Interim Report - Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Mobile Systems," ET Docket No. 00-232, *FCC Staff Report*, at 22 (Nov. 15, 2000) [hereinafter cited as "*FCC Interim Report*"].

[29] According to one study recently cited by the Commission, there will be 1.2 million residential and 300,000 business MDS/ITFS broadband subscribers within two years. *Id.* at 21 n.26, *citing* Jarich and Mendelson, "U.S. Wireless Broadband: LMDS, MMDS and Unlicensed Spectrum," The Strategis Group, Inc. (Feb. 17, 2000).

[30] *See* Comments of The Wireless Communications Association International, Inc., ET Docket No. 00-258, at 23-24 (filed Feb. 22, 2001) [hereinafter cited as "WCA ET Docket 00-258 Comments"]; Reply Comments of The Wireless Communications Association International, Inc., ET Docket No. 00-258, at 3-4 (filed Mar.

markets, and the company plans to provide service in 30 markets by the end of this year, including some of the following mid-sized and smaller markets: Chattanooga, TN; Springfield, MA; Norfolk, VA; Buffalo, NY; Bakersfield, CA; and Charleston, WV.[31/] Nucentrix Broadband Networks, Inc. ("Nucentrix") holds MDS/ITFS spectrum rights in over 90 markets covering an estimated 9 million households throughout Texas and the Midwest; approximately two-thirds of Nucentrix's markets have less than 100,000 households.[32/] Also, there are a number of smaller, independent MDS/ITFS operators that are or will soon be offering MDS/ITFS broadband service in rural and smaller markets in, *inter alia*, Alabama, Louisiana, Colorado, Oregon, Wyoming, South Dakota, Utah, Alaska, Arizona, Iowa, Maine, Idaho and Montana.[33/] Accordingly, SIA's contention that MDS/ITFS broadband systems will be geographically distant to rural MSS operations is wrong and should be disregarded as such.

Finally, with no supporting citations whatsoever, SIA alleges that "[i]nterference from MSS spacecraft into MMDS/ITFS systems was also addressed by the ITU over the 1994-1996 time period," and generally refers to certain unidentified ITU-R Recommendations that allegedly limit space station Power Flux Density ("PFD") at the surface of the earth to protect Fixed Service

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9, 2001). The company plans to have service launched in additional markets by the end of this year. In the Commission's August 2000 MDS/ITFS two-way filing window, Sprint filed applications to offer two-way service in a total of 45 markets, which will enable it to deliver service to its first two million customers. WCA ET Docket 00-258 Comments at 24.

[31/] *See* WCA ET Docket 00-258 Comments at 24.

[32/] *See id.* Nucentrix already offers two-way MDS/ITFS broadband service in Austin and Sherman, TX, and is running a trial of the service in Amarillo, TX. *Id.* During the Commission's August 2000 MDS/ITFS two-way filing window, Nucentrix filed applications to offer two-way fixed wireless broadband service in a total of 70 markets. *Id.*

[33/] *FCC Interim Report*, Appendix 3.3 at A-42-43.

systems at 2500-2520 and 2670-2690 MHz.[34] Here SIA obviously pays no heed to the following finding in the Final Acts of WRC-2000 with respect to the MSS/MDS/ITFS sharing issue: "studies of potential sharing and coordination between . . . mobile-satellite service applications and other high density applications in other services such as point-to-multipoint communication/distribution systems in the bands 2500-2520 MHz and 2670-2690 MHz bands *are not finished*."[35] In any case, regardless of what ITU-R Recommendations SIA is referring to here, its claim cannot withstand scrutiny. Any ITU-R recommendations adopted between 1994 and 1996 necessarily predate the Commission's 1998 *Report and Order* in MM Docket No. 99-217 adopting rules and policies allowing for the first time the licensing of MDS and ITFS spectrum in the 2.5 GHz band for two-way services.[36] Accordingly, such Recommendations (whatever they may be) would not account for the fact that MDS/ITFS systems are now providing two-way broadband services in markets across the United States, and thus would not address any interference that would be caused as a result of any sharing of the 2500-2520 and 2670-2690 MHz bands by MSS and ubiquitous two-way point-to-multipoint MDS/ITFS broadband systems.[37]

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[34] SIA Petition for Reconsideration at 6-7.

[35] Final Acts of the World Radiocommunications Conference (WRC-2000), Resolution 225 at 1 (emphasis added).

[36] *See Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112 (1998).

[37] Also wrong is SIA's suggestion that PFD limits for MSS space stations vis-a-vis terrestrial incumbents in the 2.5 GHz band "have been incorporated into the ITU's Radio Regulations." SIA Petition for Reconsideration at 7. In fact, the relevant ITU Radio Regulation, RRS21.16, establishes PFD limits for space stations in the *fixed*-satellite service as against terrestrial incumbents at 2.5 GHz. See Radio Regulations of the International Telecommunication Union, 1998, art. 1, RRS21.16.

III. CONCLUSION.

In sum, SIA's Petition for Reconsideration does little more than repeat the same blunderbuss approach to spectrum allocation that led the Commission to deny SIA's Petition for Rulemaking. SIA has not provided the Commission with any meaningful analysis of how MSS and MDS/ITFS can co-exist in the 2500-2520 MHz and 2670-2690 MHz bands, and otherwise rehashes arguments that the Commission has already rejected.

WHEREFORE, for the reasons set forth above, WCA requests that the Commission deny the Petition for Reconsideration filed by SIA in the above-captioned proceeding.

Respectfully submitted,

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March 22, 2001

CERTIFICATE OF SERVICE

I, Candace J. Lamoree, hereby certify that on this 22nd day of March, 2001, copies of the foregoing "Opposition to Petition for Reconsideration" were sent via U.S. mail, first class, postage prepaid, upon the following:

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