Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Use of Portions of Returned 2 GHz	)	IB Docket No. 05-221
Mobile Satellite Service Frequencies	)	

COMMENTS OF
THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association ("SIA")[1] hereby files these comments concerning the Commission's plans for available spectrum allocated to the 2 GHz mobile satellite service ("MSS").[2] As discussed below, MSS networks are uniquely able to deliver sophisticated mobile communications services to traditionally underserved areas and meet the demand of the public safety community for ubiquitous and interoperable broadband communications networks. The availability and widespread deployment of these networks, however, depends upon providers' access to sufficient spectrum. Indeed, just two years ago, the Commission reallocated nearly half of the 2 GHz MSS spectrum to the benefit of the terrestrial wireless industry.[3] Further reallocations would jeopardize the development of next-generation

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[1] SIA is a U.S.-based trade association providing worldwide representation of the leading satellite operators, service providers, manufacturers, launch services providers, remote sensing operators, and ground equipment suppliers. SIA is the unified voice of the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite business.

[2] *See Commission Invites Comments Concerning Use of Portions of Returned 2 GHz Mobile Satellite Service Frequencies*, Public Notice, FCC 05-134, IB Docket No. 05-221 (rel. June 29, 2005) ("Second Redistribution Notice").

[3] *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*, 19 FCC Rcd. 20720, 20761 ¶ 96 (2003) ("AWS Order").

MSS networks. Accordingly, SIA urges the Commission to maintain the current allocation of 2 x 20 MHz for the 2 GHz mobile satellite service.[4]

First, mobile satellite services are an essential part of the national communications infrastructure during times of emergency.[5] Unlike any other communications technology, MSS networks equipped with an Ancillary Terrestrial Component ("ATC") are capable of providing truly ubiquitous coverage, from the most rural areas to the densest urban cores. This capability is critically important in remote areas that lack access to terrestrial mobile telecommunications services,[6] as public safety officials with MSS-equipped handsets have seamless communications capability even if an emergency is beyond the reach of terrestrial wireline or wireless networks.[7]

Moreover, because satellites are located thousands of miles above earth and thus are not impacted by ground-based disasters, MSS networks offer a particularly redundant communications option for first responders and other public safety officials. Satellites are generally not impacted by failures in the power grid or damage to underground telephone lines. When local wireline or wireless terrestrial-based communications systems are impacted by a

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[4] Specifically, the Commission has allocated 2000-2020 MHz for MSS uplinks and 2180-2200 MHz for MSS downlinks.

[5] *See* Comments of the Satellite Industry Association, WT Docket No. 05-157 (filed April 28, 2005).

[6] *See* Extending Wireless Telecommunications Services To Tribal Lands, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 11794, ¶ 13 (June 30, 2000) ("Satellites also provide communications opportunities for communities in geographically isolated areas, such as mountainous regions and deep valleys, where rugged and impassable terrain may make service via terrestrial wireless or wireline telephony economically impractical.").

[7] *See* Amy Hancok, The Disaster Relief Equation, Satellite Communications, July 1, 2000 (quoting director of administration for the American Red Cross as stating "With satellite technology, we're fairly confident that wherever we go, the phone is going to work. This gives us the confidence that when we go out to a disaster relief scene, we'll be able to communicate and help the people affected by the disaster.").

disaster, MSS networks are able to provide critical communications capabilities.[8] It is thus not surprising that after September 11, 2001, the National Communications System began distributing satellite phones to federal agencies to use in the event of an emergency. To ensure the widespread deployment of this potentially lifesaving technology, it is essential the Commission preserve the existing 2 GHz MSS allocation.

Second, and also owing to the ubiquitous nature of satellite technology, mobile satellite services are of particular benefit to consumers in traditionally underserved areas. A robust MSS/ATC network can provide advanced mobile voice and data services from the moment it is launched in *all* parts of the United States. As the Commission is appropriately focused on the need to bring the next generation of mobile communications technology to all Americans, it cannot overlook the dramatic potential of mobile satellite services.[9] The broadband capabilities of MSS networks will be particularly vital to residents of areas corresponding to the five percent of U.S. zip codes with no access to advanced data services.[10] Maintaining a stable spectrum allocation in the 2 GHz band will honor the Commission's

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[8] *See* Tom D. Soumas Jr. and Dave Robertson, Satellite Communications for Public Safety, Mobile Radio Technology, Jan. 2000 ("The benefits of mobile satellite communications for rural areas is obvious, but important benefits exist for urban areas as well, where satellite systems can provide essential backup for existing terrestrial systems. In a metropolitan area, where there are multiple layers of excellent, modern communications facilities, there is still an inherent vulnerability to disruption from natural disasters, such as earthquakes in California, hurricanes in Florida, ice storms in Massachusetts and tornadoes in Kansas.").

[9] *See Public Invited to Review Draft Strategic Plan*, Public Notice, at 6 (rel. July 5, 2004) (emphasizing that the Commission "shall continue to encourage and promote broadband development, deployment, and availability, particularly to those in rural, low-income, or underserved areas.").

[10] *See High Speed Services for Internet Access: Status as of December 31, 2004*, Industry Analysis and Technology Division, Wireline Competition Bureau, FCC, at 4 (rel. July 7, 2005).

commitment to facilitate the availability of advanced telecommunications capability to all Americans.[11]

In contrast, reallocation of 2 GHz MSS spectrum for terrestrial uses, as suggested by some terrestrial wireless interests,[12] would substantially undermine the MSS industry's efforts to serve rural and homeland security interests. And this sacrifice would be in vain: terrestrial wireless providers are already allocated over 200 MHz of spectrum nationwide,[13] and the Commission will soon make some 175 MHz of *additional* spectrum available to terrestrial providers.[14] In light of the significant disparity between terrestrial and MSS allocations, there is no basis for further reallocation of MSS spectrum.

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[11] *See* Telecommunications Act of 1996 § 706, 47 U.S.C. § 157.

[12] *See, e.g.*, Comments of CTIA, IB Docket No. 05-220 (filed July 13, 2005).

[13] *See* 47 C.F.R. § 2.106.

[14] Specifically, the FCC has indicated its intent to auction 93 MHz of former federal government spectrum for commercial advanced wireless services ("AWS") in the 1.4, 1.7 and 2.1 GHz bands. *See FCC to Commence Spectrum Auction that Will Provide American Consumers New Wireless Broadband Services*, News Release (rel. Dec. 29, 2004) (announcing that the FCC formally notified the National Telecommunications and Information Administration that it intends to auction AWS licenses in the 1710-1755 MHz and 2110-2155 MHz bands as early as June 2006 and that it will auction spectrum at 1432-1435 MHz in July or August 2006). It also will auction 60 MHz of spectrum in the former UHF band which will be vacated by television broadcast licensees at the conclusion of the digital TV transition; it previously auctioned 24 MHz of former UHF spectrum in from 2000-2003. *See, e.g.*, Upper 700 MHz Band Plan, *available at http://wireless.fcc.gov/auctions/data/bandplans/700band.pdf* (last visited July 25, 2005); Lower 700 MHz Band Plan, *available at http://wireless.fcc.gov/auctions/data/bandplans/700lower.pdf* (last visited July 25, 2005). Moreover, 25 of the 30 MHz reallocated from the 2 GHz MSS band for commercial AWS has not yet been auctioned or otherwise allocated; the Commission has already licensed 5 MHz of the previously reallocated MSS spectrum to Nextel. *See Improving Public Safety Communications in the 800 MHz Band*, 19 FCC Rcd. 14969 (2004).

The Commission should ensure that MSS providers have the spectrum necessary to deliver the unique benefits of MSS/ATC services to consumers and public safety agencies throughout the Nation. Accordingly, SIA urges the Commission to maintain the existing 2 GHz MSS allocation.

Respectfully Submitted,

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