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

In the Matter of	)	
	)	
Sixteenth Annual Report on the State of Competition in Mobile Wireless, including Commercial Mobile Radio Services	)	WT Docket No. 11-186

COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association ("SIA") submits the following comments in the above-captioned proceeding regarding the state of mobile wireless competition, including information on role of mobile satellite service (MSS) providers in the mobile wireless services industry. In particular, the Commission sought comments on the extent to which mobile wireless services provided by MSS are a substitute for or a complement to terrestrial mobile wireless services.[1] As discussed below, satellites play an increasingly important role in meeting the communications needs of public safety entities, energy and enterprise customers, and consumers. However, because of certain inherent differences between mobile satellite and terrestrial mobile wireless platforms, traditional mobile satellite service providers offering mobile voice and data services today focus on a different segment of the market and target different users than terrestrial mobile wireless providers.[2]

SIA is a U.S.-based trade association providing worldwide representation of the leading satellite operators, service providers, manufacturers, launch services providers, and ground equipment suppliers. Since its creation fifteen years ago, SIA has become the unified voice of

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[1] *See "Wireless Telecommunications Bureau Seeks Comment on the State of Mobile Wireless Competition*," Public Notice, DA 11-1856, WT Docket No. 11-186, at p. 3-4 (November 3, 2011) ("*Public Notice"*). Consistent with the *Public Notice*, SIA addresses in these comments only satellite-based mobile voice and data services that compete with terrestrial mobile wireless services.

[2] These comments are limited to traditional service offerings by mobile satellite service providers. SIA takes no position concerning mobile satellite systems that offer services that include an ancillary terrestrial component.

the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite business.[3]

Discussion

Satellites play a vital role in meeting the communications needs of public safety entities, energy and enterprise customers, and consumers. Satellites are located hundreds or thousands of miles above the earth, rendering satellite networks substantially less susceptible to natural disasters or terrorist attacks than terrestrial networks, and therefore are able to provide instant infrastructure when terrestrial wireless, wireline, and other forms of communication fail. Given their extensive coverage areas, satellites are also particularly effective in providing mobile voice and data communications to the country's most rural and remote areas.[4] MSS carriers play a particularly important role as providers of mobile communications services in areas where terrestrial networks may not extend or provide reliable coverage. Even where there is terrestrial wireless coverage, some possible subscribers may remain unreachable with terrestrial wireless applications due to interference, terrain, or distance. MSS providers have the capacity to reach all possible users in the United States to provide voice and data services.

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[3] SIA Executive Members include: Artel; The Boeing Company; DBSD North America, Inc.;The DIRECTV Group; EchoStar Satellite Services L.L.C.; Harris CapRock Communications; Hughes Network Systems, LLC; Integral Systems, Inc.; Intelsat, S.A.; Iridium Communications Inc.; LightSquared; Lockheed Martin Corporation.; Northrop Grumman Corporation; Rockwell Collins Government Systems; SES S.A.; Space Systems/Loral; and TerreStar Networks, Inc. SIA Associate Members include: Arqiva Satellite and Media; ATK Inc.; Cisco; Cobham SATCOM Land Systems; Comtech EF Data Corp.; DRS Technologies, Inc.; Eutelsat, Inc.; GE Satellite; Globecomm Systems, Inc.; Glowlink Communications Technology, Inc.; iDirect Government Technologies; Inmarsat, Inc.; Marshall Communications Corporation; Orbital Sciences Corporation; Panasonic Avionics Corporation; Segovia, Inc.; Spacecom, Ltd.; Spacenet Inc.; Stratos Global Corporation; TeleCommunication Systems, Inc.; Telesat Canada; Trace Systems, Inc.; Ultisat, Inc.; and ViaSat, Inc. Additional information about SIA can be found at http://www.sia.org.

[4] *See SIA Comments, In the Matter of Improving Communications Services for Native Nations*, CG Docket No. 11-41 (filed June. 20, 2011) (describing use of satellites to provide communications services in predominantly rural and thinly populated Tribal lands).

The Commission has repeatedly recognized that satellites are uniquely suited to serving rural portions of the United States.[5] In a number of areas in the United States, satellites are still the only source of broadband service.[6] In some rural and remote areas, mobile satellite service providers offer what often is the only means by which customers can obtain mobile voice, data, broadband, and other wireless services. Indeed, because of simple economic forces, terrestrial mobile wireless service providers to date often have failed to serve such areas, and so without mobile satellite services, vast areas of the nation would remain unserved or underserved. Today, customers in rural and remote areas are able to directly access satellites with their terminals from any point with a clear line-of-sight to a satellite, without the need for costly terrestrial infrastructure.

Satellites also play an essential role in disaster recovery and remote connectivity for first responders and other emergency service providers.[7] This fact was made evident in the aftermath of Hurricane Katrina in 2005, Hurricane Ike in 2008, the 2010 earthquake in Haiti, and Hurricane Irene in 2011, when mobile satellite systems remained intact and served as one of the primary, if not the only, communications link operating in the affected regions.[8] The growing recognition of

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5 *See, e.g.*, *Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, Report and Order*, 15 FCC Rcd 16127, ¶ 35 (2000) ("[W]e believe satellites are an excellent technology for delivering basic and advanced telecommunication services to unserved, rural, insular or economically isolated areas[.]"); *Extending Wireless Telecommunications Services To Tribal Lands, Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 11794, ¶ 13 (2000) (noting that satellites "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").

6 *See In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Wireless, Including Commercial Mobile Services,* WT Docket No. 09-66, FCC 10-81, at Appendix D Map D-29 to 30 (2010).

7 *See SIA Comments, In the Matter of Rapidly Deployable Aerial Telecommunications Architecture Capable of Providing Immediate Communications to Disaster Areas,* PS Docket No. 11-15 (filed Feb. 28, 2011) (describing use of satellites in disaster recovery).

8 *See, e.g.*, Haiti Update, Federal Communications Commission Open Meeting, International Bureau and Public Safety and Homeland Secruity Bureau (February 18, 2010), at 21 (reporting that utilization of mobile satellite

the value of satellite systems is in part due to the fact that such systems are unaffected by disasters that disrupt terrestrial communications because they rely on satellites that are positioned hundreds or thousands of miles above the earth's surface. This makes satellite systems an excellent means of ensuring redundant, reliable, ubiquitous communications capability during times when terrestrial wireless and wireline networks fail. In addition, mobile satellite systems offer ubiquitous coverage using satellite capacity that can be dynamically reassigned to facilitate communications in geographic areas impacted by a disaster. Mobile satellite services thus have been embraced by first responders, emergency service providers, the military, and many other federal, state, and local agencies as a necessary component of their communications systems on a day-to-day basis and during times of emergency.

However, because of certain inherent differences between mobile satellite and terrestrial wireless platforms, traditional mobile satellite service providers offering mobile voice and data services today have been unable to develop the critical mass of customers necessary to reduce per-customer rates, equipment costs, and handset sizes to levels that are fully competitive with terrestrial mobile wireless service providers. For example, satellite systems cannot provide the same coverage as terrestrial providers in urban and other areas in which satellite signals may be blocked by buildings and other man-made structures, such that satellite services are unavailable much of the time. Indeed, as the Committee on Homeland Security and Government Affairs has recognized, one of the primary impediments to the full utilization of satellite phones by first responders on the scene of natural disasters and other emergencies in urban areas has been the fact that buildings and other structures can block the satellite signal.[9] Also, despite satellite

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facilities in Haiti "skyrocketed" and that one FCC-licensed MSS provider had an "18,000%" increase in utilization), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296380A1.pdf (last visited December 5, 2011).

[9] *See* "Hurricane Katrina: A Nation Still Unprepared," Report of the Committee on Homeland Security and Governmental Affairs, United States Senate, Washington, DC, at 329 (2006) *available at*

providers' continued efforts to adopt innovative technologies to make their equipment more user friendly and cost effective, the current mobile satellite services and products are, nevertheless, harder to use and more expensive than those offered by terrestrial mobile wireless providers. For these reasons, the current mobile wireless offerings of mobile satellite service providers typically focus on different market segments than terrestrial mobile wireless service providers.

Conclusion

Satellites play a vital role in meeting the communications needs of the U.S. military, public safety entities, energy and enterprise customers, and consumers. However, because of certain inherent differences between mobile satellite and terrestrial wireless platforms, traditional mobile satellite service providers offering mobile services today are not substitutes for one another and target different users than terrestrial mobile wireless service providers.

Respectfully submitted,

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http://www.gpoaccess.gov/serialset/creports/katrinanation.html. ("The problems with satellite phones [used in the aftermath of the storm] do not appear to have been caused by the phones themselves or the satellite networks; rather, a combination of user error *and buildings or other objects obstructing satellite signals are the more likely culprits*.") (emphasis added).