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**Testimony of Jennifer A. Manner**  
**Chairman, Satellite Industry Association**  
**Before the Federal Communications Commission**  
**En Banc Hearing on Public Safety Interoperable**  
**Communications and the 700 MHz D Block Proceedings**  
**Brooklyn, New York**  
**July 30, 2008**



Chairman Martin and Members of the Commission, thank you for inviting me to speak today on Public Safety Interoperable Communications, the 700 MHz D Block, and the role of satellite. My name is Jennifer Manner and I am here as the Chairman of the Satellite Industry Association. I am the Vice President of Regulatory Affairs for Mobile Satellite Ventures, one of SIA's members. SIA appreciates the chance to speak before the Commission, which understands the important role that satellite communications play in public safety communications. The Commission has been supportive of the valuable role satellite service can play in public safety, saying as recently as last year that it wants "to strongly encourage and facilitate the incorporation of satellite-based communications capability into public safety networks."

The Satellite Industry Association (SIA) is a Washington D.C. based trade association representing the leading global satellite operators, service providers, manufacturers, launch services providers, 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.<sup>1</sup>

SIA believes that satellite services should be an essential and easily accessible component of any public safety communications network. SIA urges the Commission to continue "to strongly encourage and facilitate the incorporation of satellite-based communications capability into public safety networks." The satellite industry provides many innovative services, including broadband communications to public safety; including emergency responders and other

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<sup>1</sup> SIA Executive Members include: Arrowhead Global Solutions Inc.; Artel Inc.; The Boeing Company; DataPath, Inc.; The DIRECTV Group; Hughes Network Systems LLC; ICO Global Communications; Integral Systems, Inc.; Intelsat, Ltd.; Iridium Satellite LLC; Lockheed Martin Corp.; Loral Space & Communications Inc.; Mobile Satellite Ventures LP; Northrop Grumman Corporation; SES Americom, Inc.; and TerreStar Networks Inc. Associate Members include: ATK Inc.; Comtech EF Data Corp.; EchoStar Corporation; EMC Inc.; Eutelsat Inc.; Inmarsat Inc.; Marshall Communications Corp.; New Skies Satellites, Inc.; Spacecom Ltd.; Spacenet Inc.; Stratos Global Corp; SWE-DISH Space Corp; Telesat and WildBlue Communications, Inc. Additional information can be found at [www.sia.org](http://www.sia.org).



American consumers at cost-effective rates, and does so using equipment that continues to decline in size and price, along with a decline in the cost of service.

While the satellite industry has not taken a position as to whether the Commission should maintain the public/private partnership condition as a requirement of the D Block license, we at SIA urge the Commission to: 1) maintain its requirement that the D Block licensee make available to public safety users at least one handset that includes a seamlessly integrated satellite solution; and 2) grant the D Block licensee flexibility in meeting license obligations, such as build-out and "hardening" requirements, if the licensee integrates a satellite component, as an additional network layer, with the shared 700 MHz public/private communications infrastructure.

Satellites offer unique characteristics that meet the critical needs of public safety and emergency response providers. Unlike any other communications technology, satellites are capable of providing truly ubiquitous coverage, from the most rural areas to the densest urban cores. Further, satellite operators are increasingly adding broadband data services to their standard service offerings. As a component of a public safety communications network, this capability would ensure that all geographic areas (including skies and waterways), no matter how remote, have available communications infrastructure at all times. Satellite services provide immediately available, additional communications capacity in such areas to the benefit of public safety users, who would otherwise have to wait potentially years for the build-out of the public safety communications network and in many places can be done more cost-effectively than any terrestrial technology. In addition, due to their nationwide footprint, satellites are the most effective technology for providing point-to-multipoint services, such as dispatch service, over a wide area.



One of the big benefits of satellite networks is their relative immunity to the kinds of natural and man-made disasters that affect terrestrial infrastructure. A satellite service is highly reliable and many satellite operators also have in-orbit spares in the event of a satellite failure and deploy their ground stations in geographically diverse locations to avoid a single point of failure. Thus, satellites are typically not impacted by failures in the power grid or damage to underground cables or terrestrial microwave towers. When disaster strikes, satellite infrastructure that has been integrated into a public safety network can be relied upon to bridge the dangerous gaps in communications caused by damaged and destroyed terrestrial infrastructure by providing an immediately available communications path, and assisting in restoral of the terrestrial network through backhaul of wireless systems. For example, when local wireline, wireless, and broadcast terrestrial-based communications systems were impacted by Hurricane Katrina, satellite systems were still able to provide critical communications capabilities.

For all the benefits that satellite service has to offer, there have been problems. In the past, the ability of satellite providers to offer emergency service has been limited by not having been adequately included in pre-disaster planning. In the midst of the chaos that accompanies most emergencies, satellite equipment was sometimes not deployed as quickly or efficiently as it otherwise could have been due to a lack of appropriate network planning and configuration, and some users were unfamiliar with its operation. For each handset and terminal provided, many other equipment requests were unmet. These problems could have been averted if the same devices emergency responders were using had been capable of communicating with satellite networks when terrestrial service became unavailable. More widespread deployment of dual-mode devices to public safety agencies would ensure that first responders can communicate



anywhere, at any time. Moreover, it would enable first responders to have confidence that they could have an alternate means of communications in any remote or hard to reach area in routine conditions, not just when the terrestrial infrastructure is experiencing outages.

This proceeding presents a unique and wonderful opportunity to fix these problems. As the Commission recently concluded in this proceeding that “the availability of satellite-based communications capabilities would serve to bolster the availability, robustness, and survivability of public safety communications networks, particularly in circumstances of the direst nature where the safety and security of Americans are greatly at stake.” The Commission’s conclusions are still valid, and consistent with its recent order, that the Commission should continue “to strongly encourage and facilitate the incorporation of satellite-based communications capability into public safety networks.”

To help make satellite communications more available, SIA has two recommendations. The first is that you maintain your existing requirement that the D Block licensee make available to public safety users at least one handset that includes a seamlessly integrated satellite solution. The record shows that this can be accomplished at very little additional cost – no more than roughly \$5 in the cost of manufacturing a public safety radio. No party in the prior proceeding opposed the adoption of this requirement. Moreover, as the Commission recognized, the incremental cost of such a requirement is relatively small, and “[t]his obligation would provide incentives for competitive development of handsets with various types of seamlessly integrated satellite capabilities, and potentially lead to affordable equipment and service costs for the public safety community.” In contrast to the tiny additional costs, the benefits of having satellite capability for the public safety communications network, as discussed above, are enormous.



Our second recommendation is that the Commission grant the D Block licensee flexibility in meeting license obligations, such as build-out and “hardening” requirements, if the licensee integrates satellite service (offered outside the 700 MHz band) into the service that it provides in the shared 700 MHz public/private terrestrial network that it deploys. Such an option would make the D block conditions more flexible for potential licensees, while at the same time increasing the availability and robustness of the public safety communications network.

*Build-out.* SIA supports the proposal to delay or relax the D Block licensee’s obligation to meet its build-out requirements, to the extent the licensee ensures that dual-mode MSS/700 MHz devices are available in areas which have not been built-out with a terrestrial network, but are covered by the MSS provider’s satellite footprint. The degree of build-out flexibility granted the D Block licensee could be based on a showing by the D Block licensee of the robustness of the satellite offering and the substitutability of the satellite offering for the terrestrial services used by public safety entities. Such factors might include: the capabilities of the satellite component (e.g., voice, data, video, interoperability, and priority/preemption) and geographic coverage of the satellite service. The D Block licensee’s ability to exercise this option would alleviate some of the financial pressure associated with the high cost of an accelerated build-out requirement, make essential communications services available much sooner and to more public safety users, increase network reliability, robustness, and interoperability, and help generate economies of scale for the production of satellite only and dual-mode satellite/terrestrial equipment.

*Hardening.* The Commission could establish that a D Block licensee which integrates an MSS or FSS component with the shared 700 MHz public/private communications network, as an automatic back-up in the event of a terrestrial communications failure, satisfies a safe harbor for



meeting the Commission's "hardening" requirement. Having an additional network layer ensures that the public safety communications network will have sufficient reliability in times of need.

To conclude, SIA believes that the Commission should strongly encourage and facilitate the incorporation of satellite-based communications capability into public safety networks. To the extent the Commission continues to link the D Block to the public safety spectrum block, SIA urges the Commission to: 1) maintain its requirement that the D Block licensee make available to public safety users at least one handset that includes a seamlessly integrated satellite solution; and 2) grant the D Block licensee flexibility in meeting license obligations, such as build-out and "hardening" requirements, if the licensee integrates a satellite component, as an additional network layer, with the shared 700 MHz public/private communications infrastructure.

Mr. Chairman and Members of the Commission, thank you again for the opportunity to testify and for the privilege of being part of this important event.