Before The
Federal Communications Commission
Washington, D.C.

In the Matter of	)	
	)	
Amendment of Parts 2 and 25 to Implement	)	IB Docket No. 99-67
the Global Mobile Personal Communications	)	
by Satellite (GMPCS) Memorandum of	)	
Understanding and Arrangements	)	
	)	
Petition of the National Telecommunications)	RM No. 9165	
And Information Administration to Amend	)	
Part 25 of the Commission's Rules to	)	
Establish Emissions Limits for Mobile and	)	
Portable Earth Stations Operating in the	)	
1610-1660.5 MHz Band	)	

To: The Commission

REPLY COMMENTS OF
THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association ("SIA") hereby respectfully submits its Reply Comments in response to the Notice of Proposed Rule Making ("*NPRM*"), FCC 99-37, released March 5, 1999, in the above-referenced proceeding.[1]

SIA is a national trade association representing the leading U.S. satellite manufacturers, service providers and launch service companies in the commercial satellite arena.[2] SIA submitted

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[1] In the Matter of the Application of Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements Petition of the National Telecommunications and Information Administration to Amend Part 25 of the Commission's Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660.5 MHz Band, Notice of Proposed Rule Making *("NPRM")*, 64 Fed. Reg. 16687 (Apr. 6, 1999).

Comments in this proceeding on June 21, 1999, as did a number of its constituent members, supporting in large measure the Commission's efforts to expeditiously implement the Memorandum of Understanding ("MoU") and Arrangements for Global Mobile Personal Communications by Satellite (GMPCS) systems, adopted under the auspices of the International Telecommunication Union (ITU), to promote the transborder circulation of GMPCS user terminals.

In these Reply Comments, SIA continues to support the Commission's efforts to implement the GMPCS-MoU and Arrangements in the United States. SIA also supports the Comments expressing agreement with the Commission's proposal not to require submission of traffic data. Finally, together with all of the commenting GMPCS operators and service providers in this proceeding, SIA continues to urge the Commission not to impose geolocation and E911 requirements on GMPCS systems in this proceeding.

I. The SIA Supports the Commission's Expeditious Action to Implement the GMPCS-MoU and Arrangements

As it stated in its initial Comments, SIA believes that the *NPRM* is a significant step in the Commission's full implementation of the GMPCS-MoU and in the recognition of the GMPCS-MoU ITU Registry mark, which is placed on satellite user terminals that meet the conditions in the GMPCS-MoU Arrangements. The Commenters in this proceeding resoundingly echo this conclusion.

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[2] The SIA is an operating entity of the Satellite Broadcasting and Communications Ass'n and represents the United States commercial satellite industry. SIA's executive members are: American Mobile Satellite Corporation, Boeing Commercial Space Co., COMSAT Corp., Ellipso Inc., GE American Communications Inc., Globalstar LP, Hughes Communications Inc., Iridium LLC, Lockheed Martin Corp., Loral Orion Network Services Inc., Loral Space & Communications Ltd., Motorola, Inc., Orbital Sciences, Corp. PanAmSat Corp., Teledesic Corp., TRW Inc. and Williams Vyvx Services.

SIA also supports Comments expressing agreement with the Commission's proposal to refrain from requiring submission of traffic data by GMPCS operators and service providers.[3]

II. The Commission Should Not Impose Geolocation or E911Capabilities on GMPCS Providers in this Proceeding

In their Comments, several government entities and public safety organizations argue that the Commission should impose specific emergency service obligations (E911) upon GMPCS service providers,[4] including the Phase II 125 meter position location standard adopted for terrestrial wireless systems.[5] In contrast, the satellite interests that responded on this issue, including SIA, unanimously oppose the imposition of E911 and specific position location requirements.[6] There are many valid reasons identified for not adopting E911 and position location requirements for GMPCS systems. SIA strongly urges the Commission to follow the recommendations of the satellite industry and not impose specific emergency calling requirements on GMPCS systems in this proceeding.

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[3] *See* Comments of Comsat Corp. ("Comsat Comments"), at 11; Comments of Constellation Communications, Inc. ("Constellation Comments"), at 11; Comments of Inmarsat Ltd. ("Inmarsat Comments"), at 4; Comments of Iridium LLC ("Iridium Comments"), at 10; Comments of Skybridge L.L.C. ("Skybridge Comments"), at 6.

[4] *See* Comments of the National Search & Rescue Committee ("NSARC Comments") at 2; Comments of the Ass'n of Public-Safety Communications Officials-Int'l, Inc. ("APCO Comments"), at 2-3; Comments of the U.S. Coast Guard ('USCG Comments"), at 5-8; Comments of the Nat'l Telecommunications & Information Admin. ("NTIA Comments"), at 26; Comments of the National Emergency Number Ass'n ("NENA Comments"), at 2-3.

[5] 47 C.F.R. § 20.18(e).

[6] *See* Comments of AMSC Subsidiary Corp. ("AMSC Comments'), at 16-17; Comsat Comments, at 12-16; Constellation Comments, at 13-15; Joint Comments of L/Q Licensee, Inc., Globalstar, L.P. & AirTouch Satellite Services U.S., Inc. ("Globalstar Comments"), at 26-29: Comments of ICO Global Communications (Holdings) Limited ("ICO Comments"), at 6-7; Inmarsat Comments, at 10; Iridium Comments, at 12; Comments of Motorola, Inc. ("Motorola Comments"), at 18-19; Comments of Orbital Communications Corp. ("Orbcomm Comments"), at 11-16; Comments of Teledesic LLC ("Teledesic Comments"), at 11-12.

Less than two years ago, the Commission stated that the commercial Mobile-Satellite Service ("MSS") has not yet developed sufficiently to warrant imposition of E911 standards, and that the Commission would not consider imposing such requirements until the MSS industry has developed "into a mobile public telephone service like cellular or broadband PCS."[7] Clearly, that has not yet happened, and MSS services are far from being "interchangeable" with cellular or broadband PCS.

As several parties point out in their Comments, technological advances necessary for implementing E911 requirements for satellite systems have not occurred since the Commission's orders on E911 services in 1996 and 1997.[8] Moreover, it is clear in the Comments from the satellite industry that the technology for global satellite systems is still in a developing stage.[9] Several satellite companies confirm that the current technical capabilities of GMPCS satellite systems are not sufficiently like those of terrestrial wireless systems to simply impose the same technical requirements.[10] For example, some GMPCS systems can locate a terminal only within a large area, *e.g.*, 10 kilometers, for billing and caller registration purposes.[11] To implement terrestrial-like capabilities, the modifications to satellite system architecture, earth stations and

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[7] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Services ("E911 Recon. Order"), 12 FCC Rcd 22665, at ¶ 87 (1997)

[8] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Services, 11 FCC Rcd 18676, 18718 (1996), on recon. 12 FCC Rcd 22665 (1997); *see* Iridium Comments, at 12.

[9] *See* ICO Comments, at 6-7; Motorola Comments, at 19.

[10] *See* 47 C.F.R. § 20.18 (E911 requirements for CMRS systems).

[11] *See* Constellation Comments, at 14; Globalstar Comments, at 26 n.66; *see also* Orbcomm Comments, at 12-13. In contradistinction to the USCG Comments, currently operating or soon-to-operate GMPCS systems do not have capabilities consistent with the terrestrial Phase II standard.

switches necessary to improve terminal location identification and implement other E911 requirements could cost hundreds of millions of dollars.[12]

Moreover, adding Global Positioning System ("GPS") receivers to GMPCS terminals to obtain more accurate position location does not provide an easy solution. The addition of GPS to GMPCS user terminals, among other things, "increases the cost of the user terminal, may require the addition of a GPS receiving antenna or complicate the design of an L-band transmit/receive antenna, and substantially reduces the battery life of a user terminal."[13] Notably, a GMPCS terminal may be able to operate where GPS does not,[14] suggesting that it may be necessary to develop a satellite system technology for position location beyond GPS.

Furthermore, in the E911 rulemaking proceeding noted above, the Commission recognized that "emergency service requirements for global MSS systems should be developed in an international forum to take into account compatibility and consistency with international standards, and to avoid burdening United States MSS licensees with a patchwork of different requirements."[15] As several Commenters noted, an international forum continues to be the appropriate place to deal with emergency calling services for global satellite systems.[16]

The organizations seeking imposition of E911 requirements fail to take these technical and cost factors into account. Rather, these commenters simply assume, without a technical basis, that GMPCS systems can achieve the same capabilities as terrestrial cellular systems.[17] This is

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[12] *See* AMSC Comments, at 16; Comsat Comments, at 14-15.

[13] Constellation Comments, at 14; Orbcomm Comments, at 13-14.

[14] Motorola Comments, at 19.

[15] E911 Recon. Order, at ¶ 89.

[16] *See* Comsat Comments, at 14-15; ICO Comments, at 6-7; Globalstar Comments, at 28; Orbcomm Comments, at 16. *See also* Comments of the Ministry & Posts Telecommunications of Japan.

[17] *See* NSARC Comments, at 2 (arguing that because MSS phones will be used by persons in remote areas, a position location requirement should be imposed to route the call to the proper

clearly an erroneous premise for such an onerous rule, as the Commission recognized in the E911 proceeding. The mere suggestion that E911 service by GMPCS systems would be desirable cannot provide a rational basis for imposition of such a requirement.[18]

While GMPCS systems are unable at this time to meet the E911 requirements adopted for terrestrial wireless services, satellite systems are providing and will offer significant advantages in emergency services, including, for example, search and rescue missions.[19] The Commission already has in place rules on cooperating with distress and safety organizations.[20]

Finally, several commenters note that this examination is inappropriate within the confines of the instant proceeding on implementing the GMPCS-MoU and Arrangements and can only further delay implementation of the GMPCS-MoU and Arrangements.

Accordingly, the Commission should not impose specific requirements for providing emergency services on GMPCS networks, including geolocation, at this time. Such requirements would burden and could impair the development of GMPCS systems. Instead, the Commission should encourage the GMPCS industry to work with the international community to establish global emergency calling standards.

III. CONCLUSION

For the reasons set forth above, the Satellite Industry Association supports the Commission's proposals to implement the GMPCS-MoU and Arrangements but urges the

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response agency); NTIA Comments, at 26 ("a user in need of emergency assistance should receive help independent of which type of wireless device that person is using").

[18] While APCO speculates that the necessary technology will be available when GMPCS terminals are commercially available, if E911 is to be implemented, the technology should at least be available prior to a system's in-service date. APCO Comments at 2-3.

[19] *See* AMSC Comments, at 17; Orbcomm Comments, at 15-16.

[20] *See, e.g.*, 47 C.F.R. § 25.143(f).

Commission not to impose position location capability and emergency calling requirements on GMPCS providers.

Respectfully submitted,

The Satellite Industry Association

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