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

In the Matter of	)	
	)	
General Dynamics Corporation Petition for Rulemaking	)	
to Amend Parts 2 and 25 of the Commission's Rules to	)	RM No. 11336
Allocate Spectrum in the Ku- and Extended Ku-Bands	)	
to the Vehicle Mounted Earth Station Satellite Service	)	
("VMES") on a Shared Primary Basis and to Adopt	)	
Licensing and Service Rules for VMES Operations in	)	
the Ku- and Extended Ku-Bands	)	

To: The Commission

COMMENTS OF SES AMERICOM, INC.
AND AMERICOM GOVERNMENT SERVICES

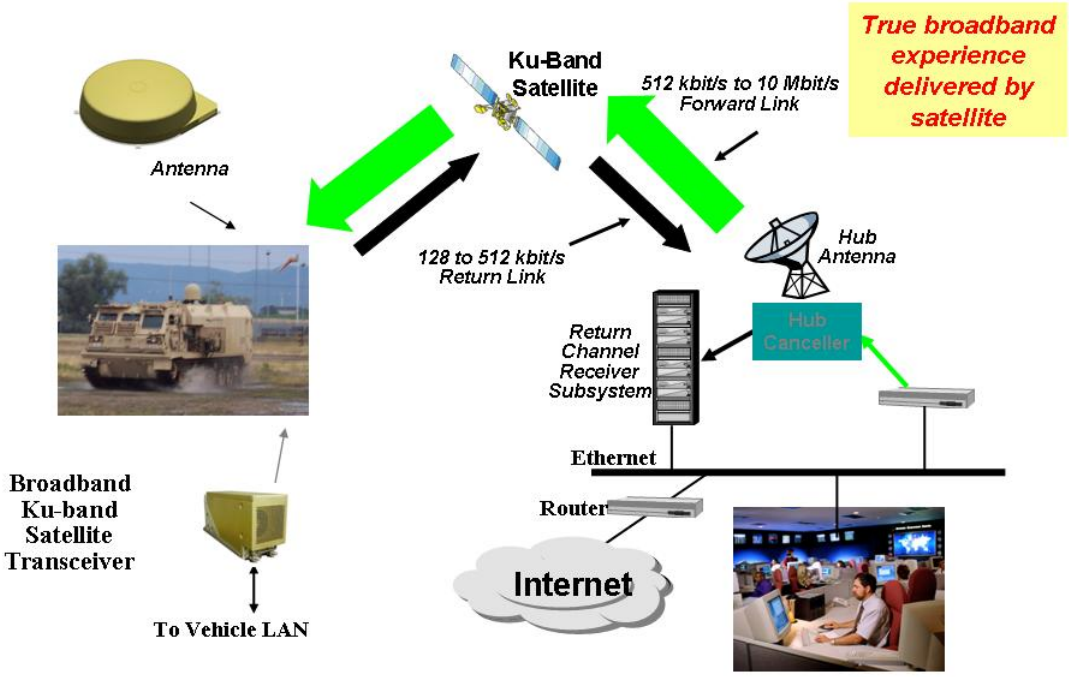
SES Americom, Inc. ("SES Americom") and Americom Government Services ("AGS") (collectively referred to herein as "Americom"), by their attorneys and pursuant to Section 1.405 of the Commission's Rules, hereby submit comments in support of the above-captioned Petition for Rulemaking of General Dynamics, filed May 24, 2006 ("Petition"). Americom urges the Commission to commence a rulemaking to facilitate the licensing of terrestrial mobile terminals under the framework that has already been established for earth stations on vessels ("ESVs").

I. NEW VMES RULES WILL FACILITATE DEPLOYMENT OF SATELLITE-BASED MOBILE BROADBAND SERVICES

Americom strongly supports initiation of a proceeding to adopt rules for land-mobile terminals -- which General Dynamics dubs Vehicle Mounted Earth Stations (VMESs) -- based on the rules already in place today for Ku-band ESV terminals. These rules will open the door to new satellite-based mobile broadband services to meet critical government service, public safety, and disaster recovery needs.

Americom and AGS are particularly well-suited to speak to this question. AGS has sponsored the development of a new antenna system designed for deployment on vehicles, and can confirm that there is strong interest in this new offering, particularly from military users. AGS will soon be deploying this technology in military applications, and will also be in a position to bring it to other key governmental and civilian customers in the near future.

Specifically, the AGS land mobile service, which will use SES Americom satellite capacity for service to the United States, will permit users to have mobile broadband satellite access at speeds comparable to cable modem service, supporting a full range of IP applications. The system will provide a two-way, broadband communications link between multiple mobile terminals and the Internet, via one or more hub ground stations. The service is targeted to vehicles that are not served by other data communications systems and will allow users high speed access to e-mail, the World Wide Web, and government virtual private networks (VPN). A pictorial representation of how the network will operate is shown below.



To date, demonstrations of the capabilities of the system have focused on prospective customers in the military and national security areas. The service will meet critical military requirements for real-time, on-the-move communications capabilities. However, the AGS system will also be attractive to other public service users. In particular, the network can be used for emergency response and business continuity in the event of a natural or man-made disaster.

SES Americom has significant experience with terrestrial mobile satellite services. For many years we have provided capacity used by Qualcomm for its OMNITRACs service, a Ku-band vehicle-based service offered on a non-interference basis pursuant to a waiver of the

Commission's table of allocations.[1] To SES Americom's knowledge, there have been no complaints of harmful interference resulting from Qualcomm's operations.

Furthermore, in addition to supplying the space segment for the AGS land mobile system, SES Americom has been approached by other prospective providers of new terrestrial-based mobile satellite services. Thus, SES Americom's experience confirms the observation of General Dynamics that strong and growing interest exists in the provision of terrestrial mobile communications using fixed-satellite spectrum. These customers recognize that satellite-based broadband service to vehicles can meet important communications requirements. For example, satellites can supply mobile broadband service immediately to the public safety community in a time of crisis when terrestrial service may not be available. SES Americom recognizes that satellites are not likely to be an efficient solution where terrestrial mobile broadband is available. But, consistent with the country's national policy of ubiquitous broadband deployment, the Commission should ensure that mobile service is available to governmental and commercial users where terrestrial service cannot reasonably be deployed, or where such service is temporarily unavailable due to natural disaster, terrorist attack, or other catastrophic event.

In short, prompt commencement of a rulemaking proceeding to establish a framework for licensing of land mobile terminals in FSS spectrum will strongly serve the public interest. Americom agrees with General Dynamics that the proposed rulemaking will promote efficient use of spectrum and advance important Commission objectives concerning enhanced broadband deployment. *See* Petition at 1-2.

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[1] *See Qualcomm, Inc., Application for Blanket Authority to Construct and Operate a Network of 12/14 GHz Transmit/Receive Mobile and Transportable Earth Stations and a Hub Earth Station,* Memorandum Opinion, Order and Authorization, 4 FCC Rcd 1543 (1989).

II. WITH LIMITED EXCEPTIONS, THE ESV RULES REPRESENT AN APPROPRIATE FRAMEWORK FOR VMES LICENSING

Americom also agrees that the ESV rules are the logical framework to apply to land mobile terminals in Ku-band FSS spectrum. Section 25.222 of the Commission's rules sets forth in detail the technical requirements for Ku-band ESVs. Using this rule as the template for VMES licensing makes sense because of the operational similarities between land mobile and maritime mobile systems. By extending the ESV rules as proposed, the Commission can move efficiently to bring new services to the public as rapidly as possible.

Some exceptions are warranted, however. Americom supports General Dynamics' request that the Commission not apply the ESV location recording requirements to VMES operations. Petition at 12-13. Military applications for the proposed terrestrial mobile service are likely to predominate, and data regarding terminal location could therefore be extremely sensitive from a national security standpoint.

In addition, Americom believes that departure from the ESV pointing accuracy requirements may be warranted for VMES systems in some circumstances, such as applications which utilize low-power CDMA or similar technologies for network transmission. Sections 25.222(a)(6) and (7) specify the accuracy with which ESVs must be pointed and require transmissions to terminate within 100 ms if the specified limits are exceeded. In Americom's view, it may be difficult for VMES operators to comply with these rules because of terrain variations that will be encountered by vehicles, particularly those operating "off-road." However, an applicant may be able to show that such momentary deviations from the nominal antenna pointing by a VMES with very low transmit power would not cause harmful interference to adjacent satellites. Accordingly, Americom suggests that the Commission consider establishing an exception to the application of these subsections to VMES operations if the applicant satisfies

two conditions. First, the applicant should demonstrate that its proposed system complies with the off-axis EIRP density mask in Section 25.222(a) notwithstanding its failure to comply with the specified pointing accuracy. Second, the applicant should obtain and submit affidavits from potentially affected adjacent satellite operators agreeing to the proposed operations. With these conditions, the Commission can ensure that unacceptable interference will not result from VMES mobile terminals that do not meet the ESV pointing accuracy specifications.

III. CONCLUSION

For the foregoing reasons, SES Americom and AGS urge the Commission to expeditiously initiate a proceeding to establish rules for the operation of VMESs in Ku-band FSS spectrum consistent with the recommendations herein.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Cecelia Burnett, hereby certify that a copy of the foregoing Comments of SES Americom, Inc. and Americom Government Services was sent by first-class mail, this 21st day of August, 2006, to the following:

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