Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Procedures to Govern the Use of	)	IB Docket No. 02-10
Satellite Earth Stations on Board	)	
Vessels in Bands Shared With	)	
Terrestrial Fixed Service	)	

COMMENTS OF HUGHES NETWORK SYSTEMS, INC.

Hughes Network Systems, Inc. ("HNS") hereby comments on the Notice of Inquiry in the above-captioned proceeding.[1] HNS supports the Commission's development of a licensing regime for fixed satellite service ("FSS") earth stations on board vessels ("ESVs"). There is substantial customer interest in these types of applications, particularly from commercial and private broadband users. The development of these types of services will facilitate and speed the interchange of data and other communications services that are both vital and valuable to ships, crew and passengers, and which cannot be met in Mobile Satellite Service ("MSS") bands.

In the NOI, the Commission asks a number of questions on how ESV operations should be licensed. HNS limits its comments herein to the licensing of ESV operations in

[1] In the Matter of Procedures to Govern the Use of Satellite Earth Stations on Board Vessels in Bands Shared With Terrestrial Fixed Services, *Notice of Inquiry*, IB Docket No. 02-10 (Released on February 4, 2002), hereinafter, the "NOI".

the conventional Ku-band[2] because this is the band where HNS currently provides the vast amount of its VSAT networking and broadband satellite services.

I. The Commission Should Develop a Market-Responsive Policy for Licensing Ku-band ESVs

HNS is credited for developing the world's first VSAT technology, and has been in the business of providing enterprise-level VSAT networks and broadband services for decades. In addition, HNS introduced one-way (dial-return) consumer satellite broadband services in 1995 and pioneering two-way (satellite-return) broadband services in the year 2000. As FSS satellite systems improve their speeds, efficiencies and capabilities, and as satellite transceiver equipment becomes smaller, more sophisticated and more affordable for enterprise as well as consumer users, interest is increasing in using satellite services from environments other than traditional ground-mounted locations.

There are many types of services, most notably broadband, that can be provided faster, more comprehensively and more cost-effectively using FSS systems than MSS systems due to the greater amounts of bandwidth that are available in the FSS bands. It is incumbent upon the Commission to recognize that customers demand and value different services at different quality levels and prices, and that customers are today requesting the flexibility to choose among the different satellite offerings to satisfy their specific requirements. Allowing ESVs to access the Ku-band FSS offers a valuable competitive alternative to users in the maritime environment -- an environment that has historically offered very limited communications choices.

II. The Commission Should Treat Ku-band ESVs No Differently Under the Existing Earth Station Licensing Regime for Ku-band Earth Stations

HNS does believe that the time is ripe for the regularized licensing of ESV services[3] and in fact, the Commission already has in place the appropriate rules to license

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[2] The conventional Ku-band is 11.7-12.2 GHz downlink and 14.0-14.5 GHz uplink.

Ku-band FSS ESVs. There is no need, as the Commission has itself noted in the NOI, for imposing unusual restrictions of any kind on the use of Ku-band ESVs.[4] There is no need to limit use of these ESVs within a specified distance from shore, to the proximity to any seaport, or in connection with whether they are in motion or stationary. Authorizations for ESVs in the conventional Ku-band should be full term licenses just like other FSS earth station authorizations, and should be eligible for the very same authorization approaches as earth stations located on the ground, including blanket licensing and licensing as part of a VSAT network.

There is no harm to the Ku-band FSS or to any other users of the Ku band by allowing this regulatory flexibility. Except for the stabilization equipment associated with earth stations in the maritime environment (proven equipment that has been used successfully and effectively for decades in the marine industry), Ku-band ESVs operate identically to their brethren land-based earth stations, and should not be subjected to any different regulatory treatment. There is no need to impose any of the operational restrictions suggested in the NOI at 24 on Ku-band ESVs because the coordination concerns described there are not raised in the conventional Ku-band FSS bands. Finally, given the nature of this spectrum, Ku-band ESVs should enjoy the same protection from harmful interference that regular earth station authorizations are accorded in the conventional Ku-band, and not be pushed into unprotected licensing categories such "temporary-fixed" or some type of special restricted class of earth station authorizations.[5]

III. The Commission Does Not Need to Modify the US Domestic Table of Allocations for Maritime Applications in the FSS

The Commission has full domestic authority to allow the Ku-band FSS to be used for maritime applications and does not need to change the US Table of Allocations.

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[3] NOI at 14
[4] NOI at 10
[5] NOI at 21.

IV. The Commission Has the Necessary Enforcement Tools to Address Inteference Events from Ku-band ESVs

The Commission already possesses plenary enforcement authority against any licensed device that causes harmful interference. It is the responsibility of any licensees, including future Ku-band ESVs, to ensure that the transmitting equipment used in the maritime environment can maintain accurate pointing and operate without causing harmful interference to other users in conformance with the Commission's rules. The Commission does not require any additional enforcement authority for Ku-band FSS hub facilities licensed to serve ESVs.

V. CONCLUSION

HNS encourages the Commission to adopt regular policies that provide certainty to Ku-band FSS satellite operators and service providers, and competitive choice to potential ESV customers. For the reasons herein, HNS supports the efforts of the Commission through the cited NOI to develop a more flexible regime for the use of Ku-band fixed satellite services in the maritime environment which will open its benefits to maritime crew and passengers without increasing the risk of harmful interference.

Respectfully submitted,

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