The MSS/ATC Coalition

March 5, 2010

Via Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Written *ex parte* communication of the MSS/ATC Coalition
GN Docket Nos. 09-47, 09-51, 09-137

Dear Ms. Dortch:

The undersigned Mobile Satellite Service licensees, the "MSS/ATC Coalition," submit this letter in response to the February 12 Technology Policy Institute ("TPI") filing entitled "Increasing Spectrum for Broadband: What are the Options?" While the MSS/ATC Coalition agrees with TPI's recommendation that regulatory flexibility will drive spectrum used by MSS operators to its highest and best use, TPI's filing includes several mistaken assertions that need to be corrected on the record. Contrary to TPI's assertions:

- MSS operators have hundreds of thousands of current users, and have made billions of dollars of infrastructure investment;

- Newer MSS systems are able to provide speeds of up to 492 kbps, appropriate for Internet applications, including video, for public safety and other users, and are critically valuable to users in remote locations with no terrestrial option, while Ancillary Terrestrial Component (ATC) service will provide speeds as fast as any terrestrial mobile broadband network; and

- MSS user equipment that is as easy to use as a standard wireless handset is available.

MSS Has A Large User Base And Requires Substantial Investment

MSS is a unique service, providing features and functionality for which no substitutes exist. Within a MSS operator's service area – in some cases entire continents and in others, essentially the entire planet – any user with a line of sight to the satellite can communicate reliably using mobile equipment that requires no setup, regardless of conditions on the ground. The ubiquity and resiliency of MSS have made it an indispensible communications tool for critical industries from transportation to energy, and to governments and first responders. MSS is critical to Chairman Genachowski's vision of "a world where the Internet is available to

anyone, anywhere, anytime." MSS enables Internet access to rural school buses and ambulances, puts remote areas within reach of Smart Grid technologies, and gives first responders access to mission critical databases.

As MSS companies have stated on the record of this proceeding, we currently serve the needs of hundreds of thousands of users, from individual consumers, to federal, tribal, state and local agencies, to the military, public safety and homeland security, to energy, extraction and other vital industries.[1] Accordingly, it is simply incorrect for TPI to state at page 36 that reallocating MSS should be simpler than reallocating broadcast because "there are no over-the-air-viewers to take care of." There may be no over-the-air-viewers, but there are a huge number of users who rely on MSS for critical connectivity that would be displaced.

Moreover, it is incorrect for TPI, also on page 36, to equate "stranded assets" of broadcasters with those of MSS operators. While there is certainly physical infrastructure associated with broadcasting, an individual broadcaster's investment in these facilities is very small in comparison with the investment made by an individual MSS operator. To provide service, a MSS operator can spend well over $1 billion to create a simple two satellite network, and often much more for LEO networks utilizing multiple satellites. It is then impossible to change the bands within which the satellite operates until the end of the satellite's useful life. This investment is thus at least 100 times larger than the millions or even tens of millions of dollars of investment needed for a broadcaster to operate. There is thus no real comparison between an MSS operator and a broadcaster in terms of sunk investment.

MSS Spectrum Is Usable For Broadband

At page ii TPI states that the MSS bands "cannot be used efficiently" and at page 12 it states that "MSS spectrum is not able to be used efficiently for wireless broadband." TPI also fails to include MSS spectrum usable for ATC in its inventory of broadband spectrum (presumably so as not to confuse its argument), and states, at page 33, that "the world's most advanced [MSS] system can provide customers with data downloads of only 64 kbps." TPI is simply wrong on each of these assertions.

Taking the last assertion first, MSS systems today provide speeds well in excess of 64 kbps. Inmarsat today offers a symmetrical MSS data service that provides up to 492 kbps, and other MSS providers can and will also offer data services with speeds significantly greater than 64 kbps. For example, Globalstar's second generation system, which will be launched later this year, is designed as a 256 kbps system and is capable of providing higher downlink speeds.

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[1] *See Comments of MSS/ATC Coalition, NBP Public Notice #1,* GN Docket Nos. 09-47, 51 and 137 (filed August 31, 2009); *Comments of the Satellite Industry Association, Public Notice, NBP Public Notice #6,* GN Docket Nos. 09-47, 51 and 137 (filed October 23, 2009); *Comments of SkyTerrra Subsidiary LLC,* GN Dockets 09-47, 09-51, 09-137 (filed October 23, 2009); *Comments – NBP Public Notice # 8 Comments of SkyTerra Subsidiary LLC,* GN Dockets 09-47, 09-51, 09-137 (filed November 12, 2009); *Reply Comments of Inmarsat Inc.,* GN Docket Nos. 09-47, 51 and 137 (filed November 13, 2009); *Comments of Inmarsat,* GN Docket Nos. 09-47, 51 and 137 and WC Docket 02-60 (filed December 4, 2009).

Other next-generation MSS systems will provide data links faster than 64 kbps. TPI thus appears to have cherry-picked data and ignored readily available information regarding MSS systems.

TPI's other assertions about efficient use for broadband ignore the fact that ATC represents an exhaustively argued and well-established FCC policy to drive exactly that kind of efficiency. To facilitate more intense use of MSS spectrum, the FCC authorized MSS licensees to re-use portions of their licensed MSS spectrum for terrestrial operations that are carefully coordinated with their satellite operations. ATC operations can vastly increase spectrum efficiency without putting at risk the critical communications carried by MSS infrastructure.

Through technical innovation, MSS operators are able to provide both broadband terrestrial links and wide-area satellite links by re-using the same MSS spectrum bands. ATC services are being deployed now, and customers are already receiving WiMAX service provided via ATC links. Accordingly, it would have been entirely appropriate for TPI to include spectrum in which ATC has been authorized in its chart on page 12 listing bands available for broadband. Indeed, at least one study cited by TPI does so.[2]

MSS Services Are User Friendly

The TPI paper also states at page 33 that satellite phones "are more complicated to use than standard mobile phones." This statement is entirely backwards looking and ignores the substantial progress that has been made in the area of MSS terminals and next generation satellites. The only difference in operation between currently available second and third generation MSS devices, as compared to terrestrial devices, is that the MSS devices require a clear line of sight to the satellite. With the launch of next generation satellites that are substantially more powerful than the last generation, MSS operators will be able to reach handsets that have the same form factor and size as terrestrial-only devices. Indeed, Terrestar and DBSD can do so today. The user experience will thus be very similar to terrestrial-only phones, substantially increasing the appeal of the satellite service, and of course facilitating the use of ATC through the same handset.

Inaccurate and outdated concepts of MSS services and hybrid MSS/ATC networks will fade as experience with the new generation of MSS satellites grows and as hybrid MSS/ATC networks are deployed over the next few quarters. In the meantime, we are confident that the FCC commissioners and staff understand that reliable, "always and everywhere" MSS satellite communication links are indispensible elements of our nation's communications infrastructure, and that only hybrid MSS/ATC networks permit intensive, high-capacity spectrum use where it is needed while ensuring that highly reliable critical communications links are available whenever and wherever they are needed.

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[2] *See, The Need for Additional Spectrum for Wireless Broadband: The Economic Benefits and Costs of Reallocation*s, submitted with *Comments of the Consumer Electronics Association*, GN Dockets 09-47, 09-51, 09-137 (filed October 23, 2009). Other commenters have noted that MSS spectrum is or will be used for wireless broadband. *See, e.g., Comments – NBP Public Notice #6, The Association for Maximum Service Television, Inc. and the National Association of Broadcasters,* GN Dockets 09-47, 09-51, 09-137 (filed October 23, 2009).

Respectfully,

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