S-Band Interference Issues

1. The Society of Broadcast Engineers, Inc. refers (*see* SBE Comments at 6) to Globalstar's GEMCOMS products and suggests that, because Globalstar has described them as being similar to cellular base stations they are likely to cause interference in areas where emergency terrestrial services are deployed. However, current GEMCOMS do not operate in the 1.6/2.5 GHz bands for terrestrial communications, but rather utilize 1800 MHz band cellular picocells. Future GEMCOMS products may contain picocells that operate in other bands, including Globalstar's currently authorized ATC band. If Globalstar's Petition were to be granted, then Globalstar would be obligated not to allow its GEMCOMS to cause interference in the 2496-2500 MHz portion of the ATC band.

2. In its opposition to Globalstar's Petition, Motorola states (*see* Motorola Comments at Attachment A, page A-3) that in order for MSS/ATC to operate without causing interference to BRS operations, there would need to be a 1000 km separation in order to achieve a 193.8 dB path loss between base stations, using free space loss. However, since terrestrial propagation loss is well-known to follow a fourth power roll-off with distance, the Hata model, for example, leads to an approximately 55 km separation, using the COST231-Hata model shown in the IEEE document "Channel Models for Fixed Wireless Applications" dated 7/17/2001, document number IEEE 802.16.3c-01/29r4. In addition, Motorola acknowledges that the ATC base station may in fact provide an additional 70 dB, in which case the necessary path loss becomes only 193.8-70 or 123.8 dB. Using the Hata model this requires a separation of under 1 km; this separation is much more reasonable than the 1000 km assumed by Motorola.

3. The analysis submitted by the WiMAX Forum (*see* WiMAX Forum Comments at A-4 - A-5) appears to apply the current (and proposed) ITU limits on MSS PFD to the case of terrestrial ATC base stations. It is inappropriate, however, to apply PFD limits, which are routinely used by the ITU as a means of limiting interference *from satellite systems into terrestrial systems*, to the case of potential interference between two terrestrial systems (such as MSS/ATC and BRS in this case). The ITU historically has imposed PFD limits on MSS operations because they are well suited to limiting potential radiation from MSS operations covering large geographic areas. However, there is no ITU or FCC recommendation that considers the issue of PFD limits in the context of two terrestrial systems, because such interference instead is very localized and varies rapidly with distance between the two interfering terrestrial operations. As a result, the entire concept of calculating PFD limits from an ATC base station is technically flawed. In addition, the method the WiMAX Forum has used to calculate PFD at a distance from the base station is inappropriate because it assumes line of sight propagation, which is suitable only for space-to-earth communications and not for terrestrial systems where, as discussed above, a fourth power propagation law applies, leading to much larger signal attenuation for any given separation.

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Josh L. Roland

September 12, 2006

Engineering Certification

I hereby certify under penalty of perjury that I am the technically qualified person responsible for preparation of the engineering information contained in the foregoing "Technical Appendix"; that I am familiar with the relevant sections of the FCC's rules and the information contained in the Technical Appendix; and that the information in the Technical Appendix is true and correct to the best of my knowledge and belief.

Signed this 12th day of September, 2006.

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EXHIBIT 1

CERTIFICATE OF SERVICE

I, Josh L. Roland, do hereby certify that I have on this 12th Day of September, 2006, caused to be served true and correct copies of the foregoing Reply of Globalstar, Inc. upon the following persons via hand delivery (indicated with an asterisk ("*")) or first-class, United States mail, postage prepaid:

Marlene H. Dortch, Secretary*
Federal Communications Commission
445 12th Street, S.W.
Room CY-B402
Washington, DC 20554

The Honorable Michael Copps
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

The Honorable Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

The Honorable Jonathan S. Adelstein
Commissioner
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The Honorable Deborah Taylor Tate
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HIGHWAYS, TRANSIT, AND PIPELINES
COAST GUARD AND MARITIME TRANSPORTATION

CHAIR
CONGRESSIONAL ASIAN PACIFIC
AMERICAN CAUCUS

Congress of the United States
House of Representatives

August 8, 2006

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, S.W.
Washington, D.C. 20554

Re: Report No. 2784 – In the Matter of Request by Globalstar, Inc. To Expand Its Ancillary Terrestrial Component ("ATC") Authority To Encompass Its Full Assigned Spectrum

Dear Ms. Dortch:

I am writing to express my strong support for Globalstar, Inc.'s pending Petition for Rulemaking seeking authority to use all of its Mobile Satellite Services ("MSS") spectrum to provide Ancillary Terrestrial Component ("ATC") services. Globalstar, located in Milpitas, CA in my Congressional District, provides invaluable services to first responders during times of emergency. The benefits of these services warrant action by the Commission to remove regulatory obstacles that prevent Globalstar from making the most efficient use of its assigned spectrum to meet the current and future needs of its public safety and other customers.

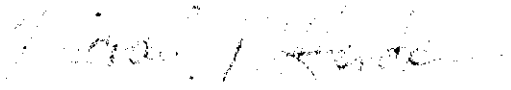
As Congress, the Commission, and the public learned in the aftermath of last summer's hurricanes in the Gulf Coast states, satellite services can provide invaluable communications capabilities for first response teams and other public safety and governmental officials during times of emergency. Were it not for the ability of Globalstar and other satellite providers to provide uninterrupted service following those storms — when land-based communications networks were rendered largely inoperable — many first responders would have been left with no means of communicating among themselves and with the rest of the country. I understand that, once fully deployed, Globalstar's MSS/ATC network will make Globalstar's services even more valuable in future natural disasters and other emergencies, by providing a variety of enhanced services to customers in rural and remote areas, as well as truly ubiquitous service to customers in urban areas and inside buildings, where satellite signals often are blocked.

Despite these substantial public benefits that Globalstar's MSS/ATC network will offer, I understand that the Commission's current ATC rules allow Globalstar to use only less than half of its assigned spectrum to provide ATC services. I understand that this limitation unfairly disadvantages Globalstar as compared to other MSS providers, which are allowed to deploy ATC services throughout their assigned spectrum should they choose to do so. I understand also that

Globalstar has committed that, if it is granted the authority to provide ATC services across all of its assigned spectrum, it will ensure that its operations will not cause harmful interference to other licensees. In light of these facts, I am not aware of any reason to retain this unnecessary restriction on Globalstar's ability to make full use of its assigned spectrum.

In light of the benefits that Globalstar's MSS/ATC services will provide to federal, state, and local public safety officials, I urge the Commission promptly to grant Globalstar's petition.

Sincerely,



Michael M. Honda
Member of Congress

cc: Chairman Kevin J. Martin
Commissioner Michael J. Copps
Commissioner Jonathan S. Adelstein
Commissioner Deborah Taylor Tate
Commissioner Robert J. McDowell