

BEFORE THE  
Federal Communications Commission

WASHINGTON, D.C.

RECEIVED

RECEIVED  
JUN 25 1992

JUN 24 1992

DOMESTIC FACILITIES DIVISION  
SATELLITE RADIO BRANCH

Federal Communications Commission  
Office of the Secretary

In re Applications of	)	
AMSC SUBSIDIARY CORPORATION	)	File Nos. 15-DSS-MP-91
	)	16-DSS-MP-91
CONSTELLATION COMMUNICATIONS, INC.	)	File Nos. 17-DSS-P-91(48)
	)	CSS-91-013
ELLIPSAT CORPORATION	)	File No. <del>11-DSS-P-91(6)</del>
	)	File No. 18-DSS-P-91(18)
LORAL QUALCOMM SATELLITE SERVICES, INC.	)	File Nos. 19-DSS-P-91(48)
	)	CSS-91-014
MOTOROLA SATELLITE COMMUNICATIONS, INC.	)	File Nos. 9-DSS-P-91(87)
	)	CSS-91-010
TRW INC.	)	File Nos. 20-DSS-P-91(12)
	)	CSS-91-015
For Satellite Systems to Operate in the RDSS Bands	)	

OPPOSITION TO PETITION FOR EXPEDITED ACTION

AMSC Subsidiary Corporation ("AMSC"), by its attorneys, hereby opposes the Petition for Expedited Action ("Petition") filed by Motorola Satellite Communications, Inc. ("MSCI") on June 9, 1992.<sup>1/</sup> MSCI's Petition deals with the above-referenced

<sup>1/</sup> AMSC is the licensee of the U.S. Mobile Satellite Service ("MSS") system. See Final Decision on Remand, Gen. Docket No. 84-1234, 7 FCC Rcd 266 (1992). AMSC has filed an application to integrate frequencies from the RDSS uplink band into its system, and has opposed the applications for non-geostationary MSS systems to operate in one or both of the RDSS bands.

(continued...)

mutually-exclusive applications to use certain frequencies currently assigned to the Radiodetermination Satellite Service ("RDSS"). The "expedited action" sought by MSCCI is the grant of MSCCI's own application precisely as filed and the assignment of new, heretofore unproposed spectrum to all of the other applicants except AMSC, to be used on a shared basis. Thus, effectively, the Petition requests the modification of the other applicants' proposals and the dismissal of AMSC's application.

AMSC agrees with MSCCI that the Commission should move expeditiously to resolve this proceeding. AMSC obviously disagrees, however, with this particular proposal for "expedited action." First, as AMSC has demonstrated previously, the public interest is served best by the use of the RDSS band to supplement the existing Mobile Satellite Service ("MSS") allocation, rather than to attempt to provide spectrum for a new satellite system. Second, there appear to be significant problems with the use by the other applicants of the new frequencies proposed by MSCCI.

As AMSC has discussed previously, the most expeditious resolution of this proceeding in the public interest would be the grant of AMSC's application and the adoption of a Notice of Proposed Rulemaking to allocate additional spectrum in the 1850-

---

1/(...continued)

This Opposition is being filed pursuant to Section 1.45 of the Commission's Rules, which provides only ten days for the preparation of a response to a petition, plus an additional three business days since the Petition was served by mail.

2200 MHz range to MSS, some of which could be assigned to non-geostationary systems.

### Background

AMSC's application proposes to integrate frequencies from the 1616.5-1626.5 MHz band into the U.S. MSS system. AMSC has shown beyond any question that there is a shortage of spectrum in the existing MSS bands.<sup>2/</sup> Since the RDSS band frequencies are proximate to the MSS spectrum, the addition of the RDSS band frequencies would enable AMSC to add up to several thousand additional channels to its system, at a cost of no more than between \$1 million and \$10 million per satellite.

MSCI and the other applicants, Constellation Communications, Inc. ("Constellation"), Ellipsat Corporation ("Ellipsat"), Loral Qualcomm Satellite Services, Inc. ("Loral") and TRW Inc. ("TRW"), propose to construct and operate non-geostationary MSS systems in the RDSS bands, systems that would range in cost from hundreds of millions of dollars to several billion dollars. While AMSC does not oppose the development of non-geostationary MSS systems, it has shown that, in light of the severe harmful interference these systems would cause to existing and planned users of the RDSS bands and the resulting impact on the systems' capacity, there is

---

<sup>2/</sup> See Comments of AMSC, ET Docket No. 92-9 (June 8, 1992), at 3-4; Comments of AMSC, Gen. Docket No. 89-554 (December 3, 1990).

not enough spectrum for any of the proposed systems to operate viably.<sup>3/</sup>

AMSC has demonstrated that the proposed non-geostationary MSS systems, including that of MSC1, would be accommodated better in other bands, and that the public interest would be served better by allowing AMSC to integrate the available RDSS frequencies into the U.S. MSS system. For example, the Commission has proposed to reallocate the 1930-1990 MHz band, the 2120-2150 MHz band, and the 2160-2200 MHz bands for new

---

<sup>3/</sup> See Petition of AMSC, RM-7806 (June 3, 1991); Response of AMSC, File Nos. 11-DSS-P-91(6), 9-DSS-P-91(87), CSS-91-010 (August 5, 1991); Petition to Deny of AMSC, File Nos. 17-DSS-P-91(48), CSS-91-013 et al. (December 18, 1991); Consolidated Reply of AMSC, File Nos. 17-DSS-P-91(48), CSS-91-013 et al. (March 27, 1992).

The other users of the 1610-1626.5 MHz band include radio astronomy observatories, the rapidly developing Glonass radionavigation system, and systems in the fixed service.

MSC1's system design is unique in its proposal to use the upper 10.5 MHz portion of the RDSS uplink band (1616-1626.5 MHz) in both the Earth-to-space direction and the space-to-Earth direction. This bidirectional design exacerbates the interference its system will cause to existing users of the RDSS uplink band. See Consolidated Opposition of AMSC to Requests for Pioneer's Preference, ET Docket No. 92-28 (April 8, 1992); see also Opposition of Constellation to Pioneer's Preference Request of MSC1, ET Docket No. 92-28 (April 8, 1992); Opposition of Ellipsat to Pioneer's Preference Request of MSC1, ET Docket No. 92-28 (April 8, 1992); Opposition of Loral to MSC1's Request for Pioneer's Preference, ET Docket No. 92-28 (April 8, 1992); Opposition of TRW to Pioneer's Preference Request of MSC1, ET Docket No. 92-28 (April 8, 1992). While a portion of the RDSS uplink band is allocated internationally for space-to-Earth MSS transmissions, this allocation is on only a secondary basis.

communications technologies, including Mobile Satellite Service.<sup>4/</sup> The 1992 World Administrative Radio Conference adopted this position, which was advocated and supported by the non-geostationary system applicants, including MSCSI.<sup>5/</sup>

Now, under the guise of a "Petition for Expedited Action," MSCSI advances two alternative spectrum allocation proposals that have not been addressed in this proceeding. Under either approach, the Commission would grant MSCSI exclusive access to the entire 1616-1626.5 MHz band and AMSC would receive no spectrum at all.<sup>6/</sup> Constellation, Ellipsat, Loral and TRW would be assigned the 1610-1616 MHz band and, under Option 1, 10.5 MHz of spectrum from the 1675-1710 MHz band, or, under Option 2, the 1599.5-1610 MHz band.

#### Discussion

##### I. The Public Interest Is Served Best By Assigning Additional Spectrum to the U.S. MSS System

MSCSI's proposal would deny vital spectrum to the U.S. MSS system, which is in immediate need of additional spectrum for its

---

<sup>4/</sup> See Notice of Proposed Rule Making, ET Docket No. 92-9, 7 FCC Rcd 1542 (1992). These bands will become available in the U.S. in 1996.

<sup>5/</sup> AMSC has urged the Commission to allocate these bands, which have been allocated internationally to MSS, to MSS domestically. See Comments of AMSC, ET Docket No. 92-9 (June 8, 1992), at 7-8. MSCSI's Petition does not discuss the possible use of these bands by the proposed non-geostationary MSS systems.

<sup>6/</sup> See Petition at 23 n.28.

full development. Moreover, neither of the options provides any solution to the problems that AMSC has identified with an assignment of RDSS band spectrum to the other applicants. All of the technical and financial problems identified by AMSC would remain. For instance, MSCSI's proposals do nothing to establish the ability of its system to share with Glonass users in the 1616-1626.5 MHz band, or the ability of the other applicants to share with Radio Astronomy and Glonass in the 1610-1616 MHz band. Moreover, MSCSI's proposals do not even attempt to resolve the sharing concerns with respect to the operation of the proposed non-geostationary systems in the RDSS downlink band (2483.5-2500 MHz). AMSC has noted that thousands of terrestrial fixed systems use this band around the world, and with such a significant potential for MSS systems to cause interference to and suffer interference from those systems, it is unlikely that the coordination mechanism provided for by the 1992 WARC will provide the proposed non-geostationary systems with access to this band in many areas.<sup>7/</sup>

II. The New Allocations Proposed by MSCSI Appear to Have Problems That At Least Require Further Study

Option 1 (1675-1710 MHz). The most obvious problem with the 1675-1710 MHz band is that it is allocated to MSS in Region 2 only. The non-geostationary MSS applicants, however, propose

---

<sup>7/</sup> See Consolidated Reply of AMSC, File Nos. 17-DSS-P-91(48), CSS-91-013 et al. (March 27, 1992), at 10-11.

ultimately to provide worldwide service. Thus, the band will not be able to accommodate their systems. MSCCI's petition does not address this issue of how the other applicants will be able to gain worldwide access to the band.

Option 2 (1599.5-1610 MHz). It is also questionable whether the non-geostationary MSS systems can use the 1599.5-1610 MHz band without causing harmful interference to Glonass, which uses frequencies throughout this band. MSCCI's only argument in support of this claim is that the other non-geostationary applicants have stated that they can avoid interference to Glonass. This contention, however, ignores AMSC's showing that these systems in fact will cause interference to Glonass and will be unable to coordinate the use of frequencies on which Glonass requires protection. MSCCI's proposal also ignores the other non-geostationary applicants' recognition of the sharing difficulties in the adjacent 1610-1616 MHz band.<sup>8/</sup>

AMSC also is concerned that emissions from MSS systems in the 1599.5-1616 MHz band would seriously degrade the sensitivity of Global Positioning System ("GPS") receivers, which receive signals in the frequencies between 1564 and 1584 MHz. AMSC plans to provide GPS-based position location service; therefore, any

---

<sup>8/</sup> See Reply Comments of Constellation, File Nos. 17-DSS-P-91(48), CSS-91-013 et al. (March 27, 1992), at 8; Response of Ellipsat, File Nos. 15/16-DSS-MP-91 et al. (March 27, 1992), at 9; Consolidated Reply Comments of Loral, File Nos. 15/16-DSS-MP-91 et al. (March 27, 1992), at 10-11.

degradation in GPS quality is a matter of serious concern to AMSC.

If the Commission does not dismiss MSCCI's Petition for the reasons stated above, it should afford AMSC and other interested parties sufficient notice and opportunity to conduct a full analysis of MSCCI's proposals.<sup>9/</sup> Far from being the mere procedural pleading that its title suggests, MSCCI's Petition clearly is a petition for rulemaking, as it requests for the first time new changes in the Commission's allocation table. To allow interested parties to conduct a meaningful evaluation of MSCCI's new proposals, and to comply with the Administrative Procedure Act's notice-and-comment rulemaking requirements, the Commission should place MSCCI's proposals on public notice and provide sufficient time for comprehensive public comment.

As AMSC has demonstrated previously, the best "alternative" spectrum for the non-geostationary MSS system applicants is in the 2 GHz range, which already is the focus of a concerted Commission effort to allocate additional frequencies for new technologies such as Mobile Satellite Service.

#### Conclusion

The proposals contained in MSCCI's Petition clearly are contrary to the public interest. Not only would they deprive

---

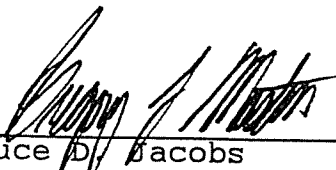
<sup>9/</sup> For example, MSCCI apparently did not serve a copy of its Petition on the National Oceanic and Atmospheric Administration, which operates meteorological systems in the 1765-1710 MHz band.

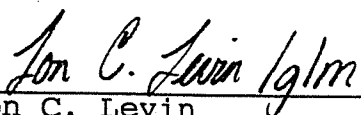


AMSC of spectrum necessary for full development of the U.S. MSS system and award over 10 MHz of spectrum on an exclusive basis to MSCI's technically and financially flawed system proposal, but there are significant questions about the alternative allocations MSCI is proposing. AMSC therefore urges the Commission to deny AMSC's Petition or, in the alternative, place MSCI's rulemaking proposals on public notice and provide interested parties with the opportunity to meaningfully address the numerous issues the proposals raise.

Respectfully submitted,

AMSC SUBSIDIARY CORPORATION

  
\_\_\_\_\_  
Bruce D. Jacobs  
Glenn S. Richards  
Gregory L. Masters  
Fisher, Wayland, Cooper & Leader  
1255 23rd Street, N.W.  
Suite 800  
Washington, D.C. 20037  
(202) 659-3494

  
\_\_\_\_\_  
Lon C. Levin  
Vice President and  
Regulatory Counsel  
American Mobile Satellite  
Corporation  
1150 Connecticut Avenue, N.W.  
Washington, D.C. 20036  
(202) 331-5858

Dated: June 24, 1992

CERTIFICATE OF SERVICE

I, Valerie A. Mack, a secretary in the law firm of Fisher, Wayland, Cooper and Leader, hereby certify that true copies of the foregoing "Opposition to Petition for Expedited Action" were sent this 24th day of June 1992, by first class United States mail, postage prepaid, to the following:

Robert A. Mazer  
Albert Shuldiner  
Nixon, Hargrave, Devans & Doyle  
Suite 800  
One Thomas Circle, N.W.  
Washington, D.C. 20005

Jill Abeshouse Stern  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, N.W.  
Washington, D.C. 20037

Linda K. Smith  
Robert M. Halperin  
Crowell & Moring  
1001 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004-2505

Leslie A. Taylor  
Leslie Taylor Associates  
6800 Carlynn Court  
Bethesda, MD 20817

Norman P. Leventhal  
Raul R. Rodriguez  
Stephen D. Baruch  
Leventhal, Senter & Lerman  
2000 K Street, N.W.  
Suite 600  
Washington, D.C. 20006

Jeffrey L. Sheldon  
General Counsel  
Utilities Telecommunications Council  
1140 Connecticut Avenue, N.W.  
Suite 1140  
Washington, D.C. 20036

William K. Keane  
Winston & Strawn  
1400 L Street, N.W.  
Washington, D.C. 20005

J. Geoffrey Bentley  
Birch, Horton, Bittner & Cherot  
1155 Connecticut Avenue, N.W.  
Suite 1200  
Washington, D.C. 20036

Veronica Haggert  
Robert Frieden  
Motorola, Inc.  
1350 I Street, N.W.  
Suite 400  
Washington, D.C. 20005

Philip L. Malet  
Steptoe & Johnson  
1330 Connecticut Avenue, N.W.  
Washington, D.C. 20036

James G. Ennis  
Fletcher, Heald & Hildreth  
1225 Connecticut Avenue, N.W.  
Suite 400  
Washington, D.C. 20036

Cheryl Lynn Schneider  
Communications Satellite Corporation  
950 L'Enfant Plaza, S.W.  
Washington, D.C. 20024

J. Ellis McSparran, President  
3S Navigation  
23141 Plaza Pointe Drive  
Laguna Hills, CA 92653

John L. Bartlett  
Wiley, Rein & Fielding  
1776 K Street, N.W.  
Washington, D.C. 20006

M. Worstell  
Vice President, Contracts  
Litton Aero Products  
6101 Condor Drive  
Moorpark, CA 93021

*Valerie A. Mack*  
\_\_\_\_\_  
Valerie A. Mack

