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BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of	)	
	)	
Amendment of Section 2.106 of the Commission's Rules to Allocate the 1610-1626.5 MHz and the 2483.5-2500 MHz Bands for Use by the Mobile-Satellite Service, Including Non-Geostationary Satellites	)	ET Docket No. 92-28 RM-7771 PP-29 PP-32 RM-7773 PP-30 PP-33 RM-7805 PP-31 RM-7806

REPLY COMMENTS OF AMSC SUBSIDIARY CORPORATION

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SUMMARY

AMSC reiterates its support for the Commission's proposal to allocate additional spectrum to MSS, and urges the Commission to ensure that at least a portion of these new MSS bands is available for the U.S. MSS system. As AMSC has shown, the 1616.5-1626.5 MHz band is uniquely suited to providing much-needed spectrum for AMSC's system because it is near AMSC's currently-assigned frequencies and can be added to AMSC's system at low cost. The comments of Comsat and the American Petroleum Institute, parties that do not have competing applications for use of the new bands on file, support the availability of the bands for both geostationary and non-geostationary MSS systems.

The five applicants for non-geostationary MSS systems provide no evidence in their comments to assuage the serious concerns that exist as to whether sufficient spectrum will be available in the new MSS bands to support one, let alone all, of the proposed non-geostationary systems. Four of these five applicants continue to maintain that their systems can operate simultaneously in the available spectrum using CDMA modulation techniques. None of these applicants, however, addresses the technical proof that such sharing would reduce the capacity of each system substantially.

The public interest would be served best by assigning the 1616.5-1626.5 MHz band to AMSC for integration into the developing U.S. MSS system. AMSC can use all or a portion of this spectrum without causing harmful interference to existing users, and its flexible proposal represents by far the most realistic solution for use of the new MSS bands. While the non-geostationary system applicants rehash arguments why AMSC should

be denied access to this spectrum, AMSC previously has shown each of their claims to be without merit.

AMSC is willing to work with other parties and continue exploring ways by which all of the proposed MSS systems might share the available spectrum should the Commission adopt a policy of licensing multiple systems in the new MSS bands. Nothing in the nature of geostationary systems makes them intrinsically unable to share spectrum with non-geostationary systems.

The Commission also should uphold its denial of MSCI's Pioneer's Preference request. MSCI presents nothing to alter the Commission's carefully considered finding that MSCI's system involves no technological innovations.

TABLE OF CONTENTS

SUMMARY ii

Background 1

The Applications 1
The Notice 3
AMSC's Comments 3
Comments of Other Parties 6

Discussion 10

I. The Commission Should Assign AMSC Spectrum in the Proposed New MSS Bands 10

II. The Non-Geostationary System Proponents Have Not Adequately Addressed the Potential of Their Systems to Cause Harmful Interference to Other Users of the Bands 13

III. The Record in This Proceeding Shows That AMSC Can Share the 1610-1626.5/2483.5-2500 MHz Bands With the Proposed Non-Geostationary Systems Should the Commission Adopt a Policy of Multiple Entry . . 16

IV. MSCI Is Not Entitled to a Pioneer's Preference . . . 17

Conclusion 17

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REPLY COMMENTS OF AMSC SUBSIDIARY CORPORATION

AMSC Subsidiary Corporation ("AMSC"), by its attorneys, hereby submits its Reply Comments on the Notice of Proposed Rule Making and Tentative Decision in the above-referenced proceeding, 7 FCC Rcd 6414 (1992) ("Notice"). As set forth below, the Commission should adopt the allocation proposed in the Notice and ensure that at least a portion of this spectrum is made available for the full development of the U.S. Mobile Satellite Service ("MSS") system.

Background

The Applications. On June 3, 1991, AMSC filed an application and accompanying petition for rulemaking requesting that the Commission allocate the 1616.5-1626.5 MHz band to MSS and assign those frequencies to AMSC so they could be integrated into the U.S. MSS system that AMSC is developing.[1/] This spectrum is needed because of the severe international shortage

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1/ See File Nos. 15/16-DSS-MP-91 and RM-7806 (June 3, 1991).

of spectrum that has constrained the development of MSS domestically. More than 30 different MSS systems worldwide operate or plan to operate in the 28 MHz of spectrum presently assigned to AMSC, and AMSC's experience in the international coordination process indicates that sufficient spectrum presently cannot be coordinated to permit full development of its system. AMSC demonstrated that the 1616.5-1626.5 MHz band is uniquely suited for integration into AMSC's system, as these frequencies are proximate to AMSC's presently assigned frequencies and can be added to AMSC's system, along with suitable downlink frequencies, at a cost of no more than $10 million per satellite. Addition of these frequencies will permit AMSC to add several thousand channels to the U.S. MSS system.

Five other entities -- Constellation Communications, Inc. ("Constellation"), Ellipsat Corporation ("Ellipsat"), Loral Qualcomm Satellite Services, Inc. ("Loral"), Motorola Satellite Communications, Inc. ("MSCI"), and TRW Inc. ("TRW") -- also submitted applications to operate satellite systems in all, or portions of, the 1610-1626.5 MHz bands using constellations of satellites in non-geostationary orbit. The applicants' estimated costs of these systems range from $230 million to more than $3 billion. Four of the non-geostationary applicants -- Constellation, Ellipsat, Loral and TRW -- advocate a policy of multiple entry in the 1610-1626.5/2483.5-2500 MHz bands, and state that their systems can share this spectrum using FDMA and CDMA techniques. The fifth non-geostationary system applicant, MSCI, requests that the 1616-1626.5 MHz band be assigned for its

exclusive use and proposes to operate both its uplinks and downlinks in this band.

The Notice. The Commission's Notice proposes to allocate the 1610-1626.5 MHz and 2483.5-2500 MHz bands for both geostationary and non-geostationary MSS. The Notice tentatively concludes that sharing of these bands by multiple MSS systems would serve the public interest best, and solicits comment on the ability of various access methods to permit sharing of the spectrum by multiple systems. The Notice requests comment on the feasibility of sharing between geostationary and non-geostationary systems. The Notice also seeks comment on requiring MSS systems in the 2483.5-2500 MHz band to comply with international power flux density ("PFD") limits and on the feasibility of bidirectional operation in the 1610-1626.5 MHz band. Finally, the Notice denies each of the Pioneer's Preference requests submitted by the non-geostationary MSS applicants.

AMSC's Comments. In its Comments on the Notice, AMSC supported the proposed allocation of the 1610-1626.5/2483.5-2500 MHz bands for MSS. AMSC cited the urgent need for additional spectrum for the full development of MSS domestically, as well as the unique value of spectrum in the 1610-1626.5 MHz band to AMSC's system. AMSC is not opposed to competition from the proposed non-geostationary MSS systems; however, given the substantial competition that the U.S. MSS system will face from other satellite and terrestrial service providers, the Commission would best serve the interest of consumers by ensuring the availability of sufficient spectrum for the full development of

the already-authorized U.S. MSS system before allocating spectrum for the extremely speculative and expensive non-geostationary MSS systems. AMSC needs the full 10 MHz of spectrum it requests and believes much of this spectrum can be coordinated successfully, but AMSC -- unlike the proposed non-geostationary systems -- can add whatever frequencies in the 1616.5-1626.5 MHz band are available to increase the capacity of the U.S. MSS system.

AMSC demonstrated that the availability of spectrum for MSS in the 1610-1626.5/2483.5-2500 MHz bands is severely constricted by the need to prevent interference to existing and planned users of these frequencies, thus making AMSC's more flexible proposal by far the most realistic of all the applicants. In the 1610-1626.5 MHz uplink band, existing and planned users include Radio Astronomy Service ("RAS") facilities, the rapidly-developing Russian Glonass aeronautical radionavigation system, and fixed service facilities which in many countries operate on a primary basis in the band. MSCI's proposal to operate bidirectionally in this band would exacerbate the interference problems. By contrast, AMSC does not present these interference concerns. AMSC's system will operate uplinks only in North America and therefore will not concern countries with substantial interests in protecting fixed services and other operations within their borders. Moreover, because AMSC does not propose to operate in or near the 1610-1613.8 MHz band, it will cause no interference to RAS. Likewise, AMSC will not operate below 1616.5 MHz in order to protect Glonass.

In the 2483.5-2500 MHz downlink band, international regulations impose power flux density ("PFD") thresholds for

coordination of MSS operation with the numerous countries operating fixed, mobile and radiolocation systems in this band. The non-geostationary MSS systems pose far greater problems in exceeding these thresholds than does AMSC's system because non-geostationary satellites would repeatedly pass through the mainbeams of all fixed, mobile and radiolocation systems. While the international PFD thresholds serve as coordination triggers for geostationary MSS systems operating in the 2483.5-2500 MHz band, they must be treated as absolute limits to the interference that may be caused by non-geostationary systems because higher PFD levels would result in unacceptable interference.

AMSC also demonstrated that CDMA is not a panacea for multiple entry by MSS systems in the proposed new bands. Each of the four spread spectrum non-geostationary systems would have very little capacity due to the interference among multiple CDMA users of the bands and the measures needed to prevent interference to other users of the bands. AMSC proposed that the non-geostationary systems should be accommodated in other bands allocated internationally to MSS, such as 1980-2010/2170-2200 MHz.

AMSC also restated its position that the Commission can and should assign the 1515-1525 MHz band to AMSC, conditioned on AMSC's formulating a solution for sharing with aeronautical telemetry. Alternatively, other downlink spectrum allocated internationally to MSS can be made available to the U.S. MSS system.

Should the Commission adopt a policy of licensing multiple CDMA MSS systems in the 1610-1626.5/2483.5-2500 MHz bands, AMSC

intends to work with other interested parties toward exploring ways by which all of the proposed MSS systems can share the available spectrum in the new bands.[2/] AMSC is willing to modify its proposal for its second and third satellites accordingly, including sharing of the bands through the use of CDMA. AMSC submitted a technical analysis showing that the operation of a geostationary satellite system in the proposed new bands does not preclude sharing of the spectrum. AMSC can operate using CDMA in conformance with pertinent technical regulations.

Comments of Other Parties. Communications Satellite Corporation ("Comsat") and the American Petroleum Institute filed comments on the Notice supporting the proposed allocation for use by both geostationary and non-geostationary systems.[3/] Comsat, however, states its concern that MSS systems might cause harmful interference to Glonass operations in the 1610-1626.5 MHz band.[4/] The National Academy of Sciences' Committee on Radio Frequencies ("CORF") filed comments stating its concern with the

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2/ The Commission has established a Negotiated Rulemaking Committee to discuss pertinent issues and formulate proposed service rules concerning MSS in the new bands. The initial meeting of the Committee is being held today. AMSC is represented on the Committee, and restates its intention to work with the other participants toward developing the best possible technical solutions for sharing.

3/ Comsat also urges the Commission to allocate the 1970-2010/2160-2200 MHz bands domestically to MSS. These bands were allocated to MSS on a primary basis at WARC-92. AMSC supports Comsat's recommendation, as these bands could provide additional spectrum for the U.S. MSS system and accommodate the proposed non-geostationary systems.

4/ Comments of CORF (December 8, 1992); Comments of Comsat (December 4, 1992), at 2-4.

potential of MSS systems in this band to interfere with RAS facilities.

The five non-geostationary MSS system applicants filed comments supporting the proposed allocation for non-geostationary systems. Loral and TRW assert that the CDMA non-geostationary systems can share with RAS and that their operations can be coordinated with Glonass.[5/] Constellation argues that the international Radio Regulations mandating the protection of other primary services in the 1610-1626.5 MHz band from interference not be adopted domestically.[6/] Constellation, Ellipsat, Loral and TRW, however, all agree with AMSC that MSCI's proposed bidirectional operation in the uplink band is seriously problematic from an interference standpoint.[7/] Indeed, Loral has formally withdrawn its alternative proposal to operate both uplinks and downlinks in this band.[8/] With respect to the 2483.5-2500 MHz downlink band, Loral and TRW support the adoption of the international PFD thresholds governing the band, but only as "triggers" for coordination.[9/] Constellation similarly states that non-geostationary MSS systems should not have to comply with the international thresholds, but that any

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5/ Comments of Loral (December 4, 1992); at 9, 17; Comments of TRW (December 4, 1992), at 23-24.

6/ Comments of Constellation (December 4, 1992), at 8.

7/ Comments of Constellation at 5-6; Comments of Ellipsat (December 4, 1992), at 11-12; Comments of Loral at 12-14; Comments of TRW at 13-16.

8/ See Comments of Loral at 5-6 n.12.

9/ Comments of Loral at 8; Comments of TRW at 20-21.

systems exceeding these limits should be subject to Resolution 46 coordination procedures.[10/]

Constellation, Ellipsat, Loral and TRW continue to advocate a policy of multiple entry in the proposed new MSS bands, using CDMA access techniques.[11/] MSCI disagrees that sharing of the bands through CDMA is feasible, and continues to advocate a band segmentation approach by which MSCI would receive exclusive access to the entire 1616-1626.5 MHz band.[12/]

All of the non-geostationary applicants, however, urge that AMSC be excluded from using the bands.[13/] The applicants reassert a number of time-worn, meritless attacks on AMSC. They argue that AMSC has enough spectrum for its system,[14/] that

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10/ Comments of Constellation at 7-8. Ellipsat's position on this issue is unclear: while Ellipsat "fully supports the adoption domestically of international [PFD] limits and coordination procedures that were adopted at WARC-92," it states that systems that fail to comply with "the PFD requirements" should "be excluded." Comments of Ellipsat at 9-10. The PFD thresholds, however, were adopted at WARC-92 not as absolute limits, but as coordination triggers. Thus, under the WARC-92 requirements that Ellipsat supports, systems not complying with the thresholds would not be excluded, but would be required to coordinate internationally their operation in the bands.

11/ Comments of Constellation at 3; Comments of Ellipsat at 10-11; Comments of Loral at 9-12; Comments of TRW at 9-13.

12/ Comments of MSCI (December 4, 1992), at 13-16.

13/ Celsat, Inc., the proponent of a hybrid geostationary and satellite and terrestrial communications service whose petition to utilize the proposed new MSS bands was dismissed in the Notice, also filed comments. Celsat states that its contemplated system is "more characteristic of today's" geostationary satellite technology than AMSC's. Comments of Celsat (November 27, 1992), at 6. There is no basis for this vague claim, as Celsat has never filed an application detailing its proposal.

14/ Comments of Constellation at 3-4; Comments of Ellipsat at 6; Comments of Loral at 15; Comments of MSCI at 9.

the proposed new MSS spectrum will not aid in coordinating sufficient spectrum for AMSC,[15/] that AMSC's proposal is incompatible with the other MSS proposals and with international regulations,[16/] that AMSC is a monopoly and the status of its license is questionable,[17/] that AMSC cannot serve handheld users,[18/] that AMSC will not provide "true RDSS,"[19/] and that AMSC cannot gain access to matching downlink spectrum.[20/]

Loral claims that AMSC should not receive access to these bands even if AMSC modifies its proposal to utilize CDMA.[21/] MSCI claims, without any technical support, that sharing by geostationary and non-geostationary systems would cause unacceptable interference and reduced system capacity.[22/] Ellipsat urges that the Commission not even explore the feasibility of sharing between geostationary and non-geostationary systems, but that in any event such sharing would reduce system capacity.[23/] Ellipsat also states that the 1992 World Administrative Radio Conference intended the use of the

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15/ Comments of Constellation at 4.

16/ Comments of Ellipsat at 6; Comments of MSCI at 10; Comments of TRW at 16-17.

17/ Comments of TRW at 17-18.

18/ Comments of Constellation at 3; Comments of Loral at 15 n.21; Comments of MSCI at 10; Comments of TRW at 17-18.

19/ Comments of MSCI at 10-11 n.18.

20/ Comments of TRW at 5.

21/ Comments of Loral at 15.

22/ Comments of MSCI at 9 n.14.

23/ Comments of Ellipsat at 7.

1610-1626.5/2483.5-2500 MHz bands to be limited to non-geostationary systems.[24] MSCI asserts that these bands are particularly well-suited for international systems such as those proposed by the non-geostationary applicants.[25]

Ellipsat and TRW support the Commission's decision not to award a Pioneer's Preference in this proceeding.[26] Constellation and Loral appear similarly to be abandoning their requests.[27] MSCI, however, continues to argue that it is entitled to a Pioneer's Preference.[28]

Discussion

I. The Commission Should Assign AMSC Spectrum in the Proposed New MSS Bands

The non-geostationary system applicants have offered no valid reason for excluding AMSC from utilizing spectrum in the proposed new MSS bands. AMSC submitted a timely application to provide MSS in these bands. Moreover, AMSC can use frequencies in the new MSS bands much more cost-efficiently than the proposed non-geostationary systems. Though AMSC needs all of the uplink spectrum it has requested, it can add whatever spectrum is available incrementally at low cost. This is not true of the proposed non-geostationary applicants, which propose to expend

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24/ Comments of Ellipsat (December 4, 1992), at 6.

25/ Comments of MSCI (December 4, 1992), at 10.

26/ Comments of Ellipsat at 13; Comments of TRW at 30.

27/ See Comments of Constellation at 2 n.3; Comments of Loral at 1 n.2.

28/ Comments of MSCI at 23-33.

from hundreds of millions to billions of dollars to support entire systems that, because of the severe constraints on available spectrum in the 1610-1626.5/2483.5-2500 MHz bands, will have very little capacity. The public interest clearly would be disserved by assigning the proposed new MSS bands to very costly and speculative non-geostationary systems while denying this much-needed spectrum to AMSC's very real and far more cost-efficient system.

In addition, as AMSC showed in its Comments, AMSC's system will pose far fewer interference problems with respect to other users of the bands than will the proposed non-geostationary systems. Because AMSC does not propose to use the lower 6.5 MHz of the 1610-1626.5 MHz uplink band, AMSC will create no interference to RAS or Glonass. Moreover, because AMSC's system is regional, it will be easier for AMSC to coordinate its use of the spectrum with foreign administrations than it will be for the non-geostationary applicants, which can be expected to have great difficulty in coordinating their global systems with administrations interested in protecting Glonass, fixed and other operations within their borders or in international waters. The far better global allocation for the proposed non-geostationary systems is the one just adopted by WARC-92 at 1980-2010/2170-2200 MHz.

Moreover, Ellipsat is wrong that WARC-92 intended this allocation to be exclusively for non-geostationary MSS systems. The international allocation contains no such limit, in contrast

to the allocation for the "little LEOs" below 1 GHz.[29/] In addition, Inmarsat already has Advance Published proposals for geostationary satellites in these bands. AMSC's system will provide virtually all the beneficial services proposed by the non-geostationary system applicants. AMSC will provide high quality, dependable mobile voice and data services, along with a position location service that is more accurate than that proposed by the non-geostationary systems. AMSC's first-generation service to vehicular and transportable mobile terminals will amply meet the immediate demand for MSS by industry and health and safety users, and AMSC's second generation of satellites will offer service to handheld terminals.

Most of the attacks leveled on AMSC by the non-geostationary applicants have been stated before, and AMSC has already addressed them. While these applicants continue to claim that AMSC already has a sufficient amount of spectrum assigned to it, the Commission is aware of the numerous existing and planned MSS systems worldwide that make it unlikely that any more than a small portion of AMSC's present 28 MHz of assigned spectrum can be coordinated. This recognition was embodied in the U.S. proposals for substantial additional MSS allocations at WARC-92, and in the leading role of the U.S. in securing additional MSS spectrum at the conference. Constellation's argument that access to the MSS spectrum at issue in this proceeding will not aid in coordination is simply ludicrous; whatever MSS spectrum is

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29/ See RR 599B, Final Acts of the World Administrative Radio Conference (WARC-92) (Malaga-Torremolinos 1992), at 14.

assigned to AMSC will be of vital assistance in helping AMSC coordinate sufficient spectrum for the full development of its system.

The non-geostationary applicants' other arguments are equally without merit. The Commission has issued a Final Decision granting AMSC's license.[30/] AMSC is already offering interim MSS service, and the development of AMSC's dedicated system is well underway. Furthermore, AMSC has shown time and again that it is not opposed to competition; AMSC will face significant competition from both satellite and terrestrial service providers. The persistent claim of some applicants that AMSC will not provide "true RDSS" is disingenuous, particularly since the Commission has now proposed an MSS allocation. Finally, AMSC showed in its Comments that it will be able to obtain downlink spectrum to match the uplink frequencies it requests, using the 2483.5-2500 MHz band if necessary. Indeed, AMSC stands in no worse a position than those non-geostationary applicants that must eventually amend their applications to specify different bands for feeder links.

II. The Non-Geostationary System Proponents Have Not Adequately Addressed the Potential of Their Systems to Cause Harmful Interference to Other Users of the Bands

The non-geostationary system applicants provide no evidence to alleviate the serious concerns that exist about whether enough

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30/ See Final Decision on Remand, Gen. Docket No. 84-1234, 7 FCC Rcd 266 (1992), appeal pending sub nom. Aeronautical Radio, Inc. v. FCC, No. 92-1046 (D.C. Cir., oral argument held November 25, 1992).

spectrum is available in the 1610-1626.5/2483.5-2500 MHz bands to viably support even one, let alone multiple, non-geostationary MSS systems. Constellation, Ellipsat, Loral and TRW continue to urge that CDMA can be utilized to permit sharing between multiple non-geostationary systems, despite what has been shown to be severe constraints on available spectrum in the new MSS bands. This issue of limited capacity goes entirely unaddressed in the comments of Constellation, Ellipsat, Loral and TRW.

Loral and TRW state, without technical support, that the CDMA non-geostationary systems can share with RAS facilities and that the systems can successfully coordinate their operation in the uplink band with Glonass. As AMSC has shown previously, however, the non-geostationary system applicants have yet to show how they will avoid interfering with RAS operations if they operate in the RAS portion of the band.[31/] Moreover, none of the non-geostationary applicants has set forth a specific plan for sharing with Glonass, and AMSC has submitted several technical analyses showing that a Glonass-equipped aircraft would suffer interference from a non-geostationary MSS terminal located within

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31/ See Consolidated Reply of AMSC, File Nos. 17-DSS-P-91(48) et al. (March 27, 1992) ("AMSC Consolidated Reply"), Technical Appendix, at 4-9. TRW, the only non-geostationary applicant that even attempts to address in its comments possible means of sharing with RAS, states that interfering signals from TRW's mobile terminals could be automatically shifted to bands outside those used by RAS. Comments of TRW at 23 n.11. Alternate frequencies, however, could be unavailable in many cases, and so this approach could degrade TRW's system reliability. Moreover, while TRW cites the coordination arrangement between RAS and Geostar Corporation's now-defunct RDSS system, AMSC has demonstrated that Geostar's brief-burst RDSS transmissions created far less interference to RAS than would the continuous voice transmissions of a non-geostationary MSS system. AMSC Consolidated Reply, Technical Appendix, at 5-6 n.4.

thousands of square miles around the aircraft.[32/] Given this widespread interference, it is doubtful whether the non-geostationary applicants can successfully coordinate their use of the uplink spectrum with the numerous administrations with interests in protecting Glonass. The comments of CORF and Comsat support these interference concerns.

Constellation argues that international footnotes 731X (mandating Resolution 46 coordination procedures in parts of the band where Glonass operates) and 733E (mandating protection of RAS from interference) should not be adopted domestically. There is no basis, however, for simply ignoring the provisions adopted by the international community (including the U.S.) at the recent WARC -- provisions that reflect the importance of protecting RAS and Glonass from interference.

With respect to the 2483.5-2500 MHz downlink band, Constellation, Loral and TRW urge that the international PFD thresholds serve merely as coordination triggers for non-geostationary MSS systems. None of the non-geostationary applicants, however, addresses the fact that since these thresholds were not designed to deal with constellations of non-geostationary satellites moving repeatedly through the mainbeams of terrestrial receiving antennas, a non-geostationary MSS system operating at the international threshold would cause far more interference than a geostationary system operating at the same level. Thus, while the international thresholds can serve as

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32/ See Comments of AMSC (December 4, 1992), Technical Appendix, at 2-6 and Table 1; AMSC Consolidated Reply, Technical Appendix, at 9-12.

coordination triggers for geostationary systems, only by treating these thresholds as absolute limits for non-geostationary systems can the Commission even begin to prevent harmful interference by those systems to terrestrial fixed systems throughout the world.

III. The Record in This Proceeding Shows That AMSC Can Share the 1610-1626.5/2483.5-2500 MHz Bands With the Proposed Non-Geostationary Systems Should the Commission Adopt a Policy of Multiple Entry

As AMSC explained in its Comments, should the Commission adopt a policy of licensing multiple CDMA MSS systems in the 1610-1626.5/2483.5-2500 MHz bands, AMSC intends to work with other interested parties toward exploring ways by which all of the proposed MSS systems can share the available spectrum in the new bands. AMSC is willing to modify its proposal accordingly.

The technical appendix submitted by Loral is consistent with AMSC's showing that geostationary and non-geostationary systems can share the proposed new MSS bands using CDMA. Furthermore, to the extent Ellipsat and MSCI suggest that sharing among geostationary and non-geostationary systems would reduce system capacity, the Technical Appendix to AMSC's Comments showed that this reduction would be due merely to another system sharing the bands, and not whether the systems operate in geostationary or non-geostationary orbits. In sum, the evidence in this proceeding shows that geostationary and non-geostationary systems using CDMA can co-exist in the new MSS bands.

IV. MSCI Is Not Entitled to a Pioneer's Preference

Though all of the non-geostationary MSS applicants originally requested and were denied a Pioneer's Preference for their respective proposals, only MSCI challenges the Commission's denial of its request. MSCI's argument in this regard is little more than a restatement of its original Pioneer's Preference request. MSCI offers nothing to undermine the Commission's finding that there is nothing "innovative" about its system; indeed, MSCI concedes that a number of the technologies MSCI claimed to have pioneered have been used in government satellite systems.[33/] Moreover, MSCI's challenge to the Commission's use of a non-public panel of experts to analyze MSCI's request is hypocritical: MSCI was permitted to have many of the materials it offered to support its request reviewed under an order protecting those materials from public disclosure.

Conclusion

AMSC continues to question the ability of the proposed new MSS bands to support multiple non-geostationary systems, and the comments of the non-geostationary applicants fail to assuage this concern. Nonetheless, AMSC is willing to cooperate with the non-geostationary system applicants toward formulating a solution by which all the pending MSS applicants can share the bands. Regardless of the policy the Commission ultimately adopts, there is no reason whatsoever to deny AMSC access to the available spectrum in the new bands. AMSC therefore urges the Commission

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33/ *See* MSCI Comments at 29.

to adopt its proposed allocation and ensure that at least a portion of the bands will be available for the U.S. MSS system.

Respectfully submitted,

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4231-013.K

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 "Reply Comments of AMSC Subsidiary Corporation" were sent this 6th day of January, 1993, by first class United States mail, postage prepaid, to the following:

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