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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In re Applications of)	
)	
Mobile Communications)	
Holding, Inc.)	File Nos. 11-SAT-LA-94
)	12-SAT-AMEND-94
)	
Loral/Qualcomm Partnership, L.P.)	13-SAT-LA-94
)	14-SAT-AMEND-94
)	
Motorola Satellite Communications, Inc)	15-SAT-LA-94
)	16-SAT-AMEND-94
)	
TRW, Inc.)	17-SAT-LA-94
)	18-SAT-AMEND-94
)	
For Authority to Construct, Launch)	
and Operate a Mobile Satellite System)	
in the 1610- 1626.5 MHz and)	
2483.5 - 2500 MHz Bands)	

CONSOLIDATED COMMENTS

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December 22, 1994

SUMMARY

Constellation Communications, Inc. by counsel, hereby comments on the recently filed amendments of Mobile Communications Holdings, Inc. (MCHI), Loral Qualcomm Partnership, L.P. ("LQP"), Motorola Satellite Communications, Inc. ("Motorola") and TRW, Inc. ("TRW") to their pending applications to construct, launch and operate Mobile Satellites Service ("MSS") Above 1 GHz systems. In these comments, Constellation raises issues relating to the technical operations and the qualifications of these applicants.

Specifically, Constellation expects that each of the applicants' technical parameters will be subjected to future coordination and that any technical changes to MSS systems operating in the 1.6/2.4 GHz bands resulting from such coordination should be treated as a minor modification. Additionally, Constellation believes that if the Commission were to grant LQP's request for a waiver of the power flux density ("PFD") limitation in the 2483.5-2500 MHz band, that the waiver should be made applicable to all MSS licensees. Also, Constellation does not believe that any protection should be provided to the secondary space-to-earth transmissions in the FDMA/TDMA segment of the band.

With regard to feeder links, Constellation believes that careful coordination of power levels under active operating conditions will be required among all licensees sharing a feeder link to insure that unacceptable interference is not caused during the times when there is a direct coupling of the feeder link beams of more than one system. Also, Constellation believes that the LEO applicants who initially proposed to use C-band feeder links should be given priority in the assignment of C-band feeder link spectrum.

Finally, Constellation reviews the material provided by MCHI to demonstrate its financial qualifications and unfortunately concludes that MCHI has failed to demonstrate that it is financially qualified at this time.

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CONSOLIDATED COMMENTS

I. INTRODUCTION

Constellation Communications, Inc. ("Constellation"), by counsel, hereby comments on the recently filed amendments of Mobile Communications Holdings, Inc. ("MCHI"), Loral Qualcomm Partnership, L.P. ("LQP"), Motorola Satellite Communications, Inc. ("Motorola") and TRW, Inc. ("TRW") to their pending applications to construct, launch and operate Mobile Satellite Service ("MSS") Above 1 GHz systems. These amendments were filed pursuant to the Report and Order in CC Docket No. 92-

166, FCC 94-261, released October 14, 1994 ("Report and Order"). Like these parties, Constellation is also a pending applicant to construct, launch and operate an MSS Above 1 GHz system and filed an Amendment to its pending application on November 16, 1994. The following are Constellation's comments on issues raised in the November 16, 1994 amendments.

II. 1.6/2.4 GHz Band Coordination

Coordination among the four CDMA applicants will be required to insure that unacceptable interference does not result when the same frequencies are used by two or more MSS systems in the 1.6/2.4 GHz bands.¹ The Final Report of the Negotiating Rulemaking Committee addressed this matter in some detail.² Some of the methods that can be used in the course of such coordination are of an operational nature, such as control of aggregate power levels and operating frequency plans, while others may require a modification of system authorization, such as change of polarization. Constellation expects that any such modification applications reducing interference levels and would be treated as minor modifications.

Constellation has some concern at this time regarding LQP's request for a waiver of the current power flux density ("PFD") limit in the 2483.5-2500 MHz band.³ The other CDMA applicants have generally indicated that they would operate their systems

¹ See Report and Order at paras. 60-61.

² See Final Report of the MSS Above 1 GHz Negotiated Rulemaking Committee, at Annex 1.

³ See LQP Amendment at 31-32.

at the PFD level currently specified in RR 2566 in order to avoid coordination with terrestrial services under the international coordination procedures of Resolution 46 (WARC-92). While Constellation is supportive of an increase in the PFD limit, particularly at elevation angles between 10° and 25°, it would not be prudent for the Commission to grant the requested waiver only to LQP. If LQP were to operate at a higher PFD level than other applicants on the same frequencies, the Globalstar system would cause unacceptable interference to the other systems. Thus, if such a waiver is granted, it should be granted to all CDMA applicants, subject to appropriate coordination.

The Commission also contemplates that coordination between the CDMA systems and Motorola's FDMA/TDMA system would be conducted with respect to out-of-band emissions.⁴ Such coordination should not have to take into account any protection to the secondary space-to-earth transmissions in the Motorola FDMA/TDMA segment of the band, and the Commission should explicitly condition any authorization to Motorola that it must immediately cease operation in the event that unacceptable interference is caused to any uplink transmission in the 1610-1626.5 MHz band. Moreover, Constellation believes that any coordination uplink transmissions should recognize that spectrum roll-off and practical filter characteristics are a function of the bandwidth of the emission. Thus, any coordination criteria should be based on the occupied bandwidth and not fixed frequency offsets.

⁴ See Report and Order at paras. 62-63.

III. Feeder Link Issues

All of the applicants have requested conditional feeder link authorizations,⁵ although a variety of different feeder link bands have been requested. Constellation is optimistic, based on the recent ITU-R TG-4/5 meeting, that an acceptable set of feeder link bands in the C, Ku and Ka-band portion of the spectrum will be identified at the 1995 World Radio Conference for LEO MSS feeder links. However, there are several points regarding the pending applications that Constellation wishes to make at this time.

The feeder link bands proposed by Constellation, i.e., 5050-5250 MHz (earth-to-space) and 6725-7025 MHz (space-to-earth), LQP, i.e., 5025-5225 MHz (earth-to-space) and 6875-7075 MHz (space-to-earth), and MCHI, i.e., 6725-7025 (space-to-earth)⁶ substantially overlap. If these systems are to share these bands, careful coordination of power levels under actual operating conditions will be required to insure that unacceptable interference is not caused during the times when there is a direct coupling of the feeder link beams of more than one system. Constellation does, however, believe

⁵ See Report and Order at paras. 163-169.

⁶ With respect to the MCHI application, Constellation is confused over the proposal to use the "6725 to 7025 MHz band (uplink) in the reverse band mode." (See MCHI Amendment at 14.) While the 6725-7025 MHz band is indicated as a downlink band elsewhere in the application, (e.g., Table 4 at 20), Constellation presumes that MCHI intends to use this band for its space-to-earth feederlinks. However, if MCHI intends to use the 6725-7025 MHz band for uplinks, the Commission should clarify that MCHI would have to accept any interference from Constellation downlinks if the 6725-7025 MHz band is allocated to for LEO MSS feeder links in space-to-earth direction.

that such coordination is feasible and will cooperate with LQP and MCHI in this regard.⁷

TRW states its expectation that it should be provided the opportunity to modify its system to use feeder link spectrum below 15 GHz.⁸ However, a substantial amount of analysis is still needed to verify in practice the feasibility of coordinating multiple CDMA systems operating on the same C-band feeder link frequencies and to establish the detailed operating parameters needed to limit the interference effects of feeder link antenna beam couplings to acceptable levels. Moreover, the maximum number of LEO systems that can share the same feeder link spectrum has yet been identified and the effectiveness of the available interference mitigation techniques have not yet been verified.⁹ For this reason, Constellation believes that the LEO applicants who initially proposed to use C-band feeder links should be given priority in the assignment of C-band feeder link spectrum. Hopefully, WRC-95 will identify sufficient feeder link spectrum to satisfy the requirements of all LEO MSS operators and moot TRW's concerns over access to feeder link spectrum below 15 GHz.

IV. Qualifications

In the Report and Order the Commission established certain qualification standards for MSS Above 1 GHz applicants. Specifically, the Commission required applicants to meet the financial qualifications specified in §25.140(d) of the

⁷ See e.g., Constellation Reply Comments at 58.

⁸ See TRW Amendment at n.10.

⁹ See ITU-R Document 4-5/Temp/33-E, 28 November 1994.

Commission's Rules. Under this Rule, an applicant must demonstrate current financial ability to meet the costs of the proposed system. There are three options available to an applicant. Under the first option specified in §25.140(d)(1), the applicant itself must demonstrate that it has current assets and operating income in excess of the financial resources required to construct, launch and operate for one year the proposed satellite system. Additionally, there must be a "management commitment" to support the project. Under the second option also specified in §25.140(d)(1), an applicant's parent(s) must demonstrate current assets and operating income in excess of the financial resources required to construct, launch and operate for one year the proposed satellite system. There also must be a management commitment from the parent(s) to support the project. Under the third option, which is specified in §140(d)(2), if an applicant cannot meet either of the above options, it must provide detailed information about fully negotiated loans or credit arrangements. Unfortunately, a review of the MCHI amendment reveals that it has failed to demonstrate its financial qualifications. MCHI does not have current assets or operating income to demonstrate its financial qualifications. Moreover, none of its equity partners has provided the financial commitment required under the Rules. Finally, there are no firm credit or loan commitments for the approximately \$564 million necessary to finance the MCHI system. This conclusion is apparent after reviewing the MCHI financial information.

In an attempt to demonstrate its "current financial ability" under the rules, MCHI has proffered 10 documents which, together, purport to meet MCHI's \$564 million estimated construction, launch and first year operation costs for its system. Although

MCHI asserts¹⁰ that these costs will be met by a "combination of internal support by the applicant's shareholders, vendor financing, equity investments and other business arrangements" -- supposedly evidenced by the 10 documents -- these documents do not meet the financial qualifications requirements of §25.140(d).¹¹

In particular, the Westinghouse Electric Corporation ("Westinghouse") November 15, 1994 letter from Vice President Milton F. Borkowski does not contain adequate substance or specificity to satisfy the requirements of §25.140(d)(1) because the letter does not indicate that Westinghouse will make any financial commitment whatsoever but merely that it will help move the project forward.

Similarly, the Harris Corporation ("Harris") November 16, 1994 letter from its Director of Space Systems, Dr. Bill C. Tankersley, does not satisfy the requirements of §25.140(d)(1). At the outset, Dr. Tankersley does not appear to be a corporate officer of Harris and consequently does not appear to be in a position to commit the corporation. Moreover, Dr. Tankersley's letter fails to state what that present business agreement is or to otherwise express any commitment to MCHI.

Israel Aircraft Industries, Ltd. ("IAI") November 8, 1994 letter from its Vice President Finance, Shmuel Peretz, merely indicates that IAI will assist MCHI to raise the necessary funds in the financial market for the Ellipso system. Even if this were an

¹⁰ MCHI November 16, 1994 Amendment Exhibit 3 -- hereafter "Exhibit 3" -- at 1.

¹¹ It should be noted that some of the information in several of these letters is redacted pursuant to an MCHI request for confidentiality and a Commission ruling. See Mobile Communications Holdings, Inc., Order on Reconsideration, DA 94-1566, released December 21, 1994.

adequate commitment, no information is provided indicating IAI's current assets or operating income.

Barclays de Zoete Wedd Limited ("Barclays") has submitted two letters, both signed by Barclays Director Trevor Nash. These letters indicate that Barclays will continue to act as "financial adviser" to MCHI and that it believes that "up to 20 per cent" of MCHI's financial requirements "should be obtainable through...public offerings and/or private placements of debt...and...strategic investments...." Since these statements do not represent "fully negotiated...placement of any equity," they do not comply with the requirements of §25.140(d)(2)(ii).

Spectrum Network Systems, Ltd. ("Spectrum") provides a November 16, 1994, letter signed by Executive Director David Archer. Mr. Archer's letter (at 1)(emphasis added) does not describe an existing funding plan, but rather an "intention of forming, prior to 31 January 1995, a group to be known as Spectrum Asia which will, in turn, invest" in the Ellipso™ system. Since the actual formation of Spectrum Asia has not occurred and its future emergence is speculative, Spectrum's letter describes either an equity placement which is not "fully negotiated" or a "contingent" financial arrangement -- neither of which meets the requirements of §25.140(d)(2)(ii) or (iii).

Cable & Wireless, plc ("C&W") provided a November 16, 1994 letter signed by John K. Keitt, Jr., Attorney-In-Fact. This letter does not indicate that Mr. Keitt is a part of management or has authority to make a commitment on behalf of C&W. Moreover, Mr. Keitt's letter describes only "an option to increase [C&W's] participation in MCHI and to participate in the operation of the ELLIPSO™ System in key markets." Its

proposal is either a tentative "form of ownership interest" which is not "fully negotiated" or a "contingent" financial arrangement -- neither of which meets the requirements of §25.140(d)(2)(ii) or (iii).

Arianespace submitted a November 16, 1994 letter from its President and CEO, Charles Bigot, asserting that Arianespace has agreed to provide 15% (\$45 million) of the \$300 million required for the Ellipso system launch services through the issuance of convertible debentures. This is a typical business arrangement in the launch services industry but it only speaks of \$45 million of the \$300 million launch costs. Moreover, it seems to be contingent on MCHI raising the remaining \$255 million request for launch services.

Able Engineering Company ("AEC") is described in Exhibit 3 (at 2) as a source of "vendor financing". Consistent with that description, AEC's November 16, 1994 letter from Dr. Allister F. Fraser, its Vice President, only undertakes to try to arrange further financing for the Ellipso™ system from "our banks". This undertaking looks to the future and its success is speculative.

Finally, Satellite Transmission Systems, Inc. ("STS") is also described in Exhibit 3 (at 2) as a source of "vendor financing". Consistent with that description, STS's November 15, 1994 letter from Senior Vice President Milton S. Goldstein purports (at 1)(emphasis added) to defer payments of \$10,000,000 resulting from the "to be negotiated STS Contract". Here, STS is not providing MCHI with any direct financial contribution but merely preferential payment schedules of which the details, and consequently, the impact on MCHI's overall financing is not yet known.

In sum, MCHI's submissions do not satisfy the requirements of §25.140(d), and MCHI has failed to demonstrate that it is financially qualified. Although MCHI has failed to meet its financial qualifications at this time, the Commission should provide MCHI the opportunity during the next twelve months to demonstrate its qualifications. If at anytime during this period MCHI meets the financial qualifications standards, it should be promptly provided a license.

V. CONCLUSION

For the reasons described above, Constellation requests that the Commission consider the comments herein.

Respectfully submitted,

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Dated: December 22, 1994

CERTIFICATE OF SERVICE

I, Robert A. Mazer, hereby certify that the foregoing "Consolidated Comments by Constellation Communications" was served by hand or first-class mail, postage prepaid, this 22th day of December, 1994, on the following persons:

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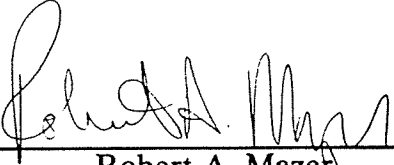
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