

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

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JAN - 3 1995

In re Applications of:)

TRW INC.)

For Authority to Construct, Launch,)
and Operate a Low Earth Orbit)
Mobile Satellite System in the)
1610-1626.5 Mhz and 2483.5-2500)
Mhz Bands)

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

File Nos. 20-DSS-P-91(12)

CSS-91-015

17-SAT-LA-95

18-SAT-AMEND-95

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Satellite and Communications Division
Office of the Chief

CONSOLIDATED OPPOSITION TO PETITION TO DENY
AND REPLY COMMENTS OF TRW INC.

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SUMMARY

On December 22, 1994, Mobile Communications Holdings, Inc. ("MCHI") petitioned the Commission to deny the Amended Applications of four other "Big LEO" applicants, including TRW Inc. ("TRW"). On the same date, Hughes Communications Galaxy, Inc. ("Hughes") filed comments requesting that the Commission delay authorizing TRW for the feeder link spectrum that TRW has requested. The Commission should deny both of these requests.

In its petition, MCHI contorts the Commission's financial qualification rules into a self-serving, overly strict standard by implying that companies that rely on internal funds to demonstrate their ability to finance the space segment of their systems must commit to expending those same funds on the actual construction of the system. Having established its fantastical standard, MCHI then claims that TRW has failed to meet it.

MCHI's claims have no basis in reality. The Commission requires that Big LEO applicants demonstrate that they have internal assets sufficient to cover their proposed systems' space segment and associated launch and operating costs, and provide a commitment that management is prepared to expend the funds necessary to proceed with establishment of their systems --

nothing more. TRW has fully complied with this Commission standard. Accordingly, MCHI's petition must be denied.

To bring TRW's system proposal into conformity with the Commission's technical service requirements, TRW altered its system design in a way that requires an increase in the amount of needed feeder link spectrum. In its comments, Hughes requests that the Commission delay granting TRW's feeder link request until Hughes's interests in a separate and unrelated proceeding have been addressed by the Commission.

Hughes's request, however, is tardy and irrelevant. TRW's original application was subject to a cut-off for comments on December 18, 1991. Hughes did not file at that time any comments regarding TRW's application. Further, Hughes did not even file its conflicting and still unaccepted application until almost two years after the cut-off date. The Commission should not allow any newcomer claiming an interest in frequencies at issue in cut-off proceedings to so delay and abuse the regulatory process. Accordingly, the Commission should reject Hughes's comments.

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CONSOLIDATED OPPOSITION TO PETITION TO DENY
AND REPLY COMMENTS OF TRW INC.

TRW Inc. ("TRW"), by its attorneys, hereby opposes the petition to deny ("Petition") filed by Mobile Communications Holdings, Inc. ("MCHI") and replies to the comments filed by Hughes Communications Galaxy, Inc. ("Hughes"), as these pleadings relate to TRW's application, as amended.¹

¹ TRW's original application and subsequent amendments will be collectively referred to herein as the "Amended Application." TRW's November 16, 1994 amendment brings it into compliance with the Commission's service rules established in Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, FCC 94-261 (released October 14, 1994) ("Report and Order").

I. INTRODUCTION

MCHI clearly does not have the financial wherewithal to construct its own proposed system or to meet the Commission's financial qualifications standard. As a result, it has petitioned to deny each of the four other "Big LEO" applicants that made or attempted a financial qualifications showing in their most recent amendments. MCHI is grasping at straws in its attempt to delay or prevent the granting of licenses to qualified Big LEO applicants. In this way, it might buy itself more time to meet the Commission's Big LEO service rules without suffering the competitive setback that would otherwise attend such a delay. As explained below, however, MCHI's arguments to the Commission regarding TRW's Amended Application are both contrived and critically flawed.

MCHI misstates the Commission's financial qualification requirements by implying that companies that rely on internal funds to demonstrate their ability to finance the costs of their proposed systems must earmark funds for this purpose. MCHI also distorts the statements that TRW made in its Amended Application to the Commission regarding its financial qualifications in an effort to cause the appearance of lack of candor and non-conformity with the Commission's rules.

Contrary to MCHI's claims, assignment of specific funds is not required. Moreover, MCHI's arguments regarding TRW's candor are entirely specious. MCHI, in its zeal to pursue a revision of the standard that would accommodate its interests, completely ignores the fact that TRW is in full compliance with the applicable standard. MCHI's crusade is misdirected and mistimed. Its arguments must be rejected.

In its comments, Hughes argues that the Commission should not make even conditional feeder link assignments in the 20/30 GHz bands to Big LEO systems until the issue of sharing between LEO and geostationary systems is resolved. TRW and Motorola Satellite Communications, Inc. (whose 20/30 GHz band feeder link request is also attacked by Hughes) have had applications pending for these feeder link frequencies since 1991 and 1990, respectively. The bands were identified as appropriate for Big LEO feeder links due to their relative non-congestion and global availability. The Commission cannot permit the fact that Hughes, one of the two largest domestic satellite operators, happened along two years later, with a new request that conflicts with the previously cut-off applications of TRW and Motorola, to further delay the grant of TRW's Amended Application -- including the conditional feeder link authorization requested therein.

II. MCHI'S CLAIMS THAT TRW HAS FAILED TO MEET THE COMMISSION'S FINANCIAL STANDARDS ARE CONTRIVED AND CRITICALLY FLAWED.

A. Applicants Relying On Internal Funds To Meet The Commission's Financial Requirements Are Only Required To Demonstrate That They Have The Ability And Present Intention To Establish Their Proposed Systems.

In its Report and Order, the Commission formally adopted as its Big LEO financial standard the requirement that each applicant demonstrate the financial ability to build and launch all satellites for which it has applied, and to operate its system for one year after the launch of the first satellite in its constellation. Report and Order, FCC 94-261, slip op. at ¶ 38. To meet this standard, the Commission requires an applicant to submit an audited balance sheet that evidences that the applicant has internal funds in the form of current assets and operating income sufficient to cover these first-year costs.² In addition, an applicant that uses internal sources to demonstrate its ability to cover its space segment costs must provide a management commitment that "absent a material change in

² Specifically, each applicant must submit, supported by affidavit, a balance sheet and documentation of any financial commitments reflected in the balance sheet, including loan agreements and service contracts, demonstrating that the applicant has sufficient current assets and operating income to satisfy the Commission's financial standards. See 47 C.F.R. § 25.140(d)(1); Licensing Space Stations in the Domestic-Fixed Satellite Service, 50 Fed. Reg. 36071, ¶ 13 (Sept. 5, 1985) ("1985 Processing Order").

circumstances, it is prepared to expend the necessary funds" to construct, launch, and operate the system's space segment. It is a complete misnomer for MCHI to assert that such an applicant is only "relying" on internal funds to satisfy its financial requirements. The applicant merely must demonstrate the availability of such funds and provide evidence of management's preparedness to expend those funds on the system proposal. Id. at ¶ 35; 47 C.F.R. § 25.140(d)(1).³

In its Petition, MCHI characterizes this financial showing as a two-part test in which the applicant for Big LEO service must "demonstrate the factual availability of the necessary funds," and "demonstrate that those funds are committed to the satellite project." Petition at 4 (emphasis added). By purposefully distorting the Commission's requirements in this way, MCHI attempts to apply to TRW a financial standard that the Commission has expressly and repeatedly rejected as unnecessary and overly burdensome.

The purpose of the financial demonstration is to avoid the warehousing of orbit spectrum and ensure prompt service

³ If an applicant cannot demonstrate that it has the required level of internal funds, it may satisfy the Commission's requirements by submitting detailed evidence of "irrevocably" committed debt or equity financing. Report and Order, FCC 94-261, slip op. at ¶¶ 30, 32; 47 C.F.R. § 25.140(d)(2).

to the public. 1985 Processing Order at ¶¶ 5, 8.⁴ The Commission wants to satisfy itself that an applicant has the "ability" and "present intent" to construct, launch, and operate the system; it does not require that an applicant ultimately finance its system in the same manner in which it satisfies the Commission's financial qualification criteria. Report and Order, FCC 94-261, slip op. at ¶ 31. Specifically, the Commission stated in its Report and Order that:

[a]pplicants relying on internal financing need not set aside specific funds for their systems. Rather . . . we require only a demonstration of current assets or operating income sufficient to cover system costs. The availability of internal funds sufficient to cover a system's costs provides adequate assurance at the time the Commission acts on the application that the system can be built and launched.

Id. (emphasis added).⁵ Indeed, the Commission went on to

⁴ In adopting its Domsat financial standard, the Commission stated that applying a financial "standard less than requiring the demonstrated ability to proceed immediately with construction and launch would allow some permittees to tie up orbital locations for several years while attempting to bring their financing plans to fruition, and would prevent qualified applicants from implementing their plans to provide service to the public." 1985 Processing Order at ¶ 8.

⁵ Similarly, in its 1985 Processing Order, the Commission stated that its financial qualifications are designed to be objective criteria to be used only to identify applicants that are capable of financing their proposed systems:

[o]ur intention was to set objective criteria that could easily and consistently be applied to identify applicants who are financially capable of
(continued...)

recognize that well-capitalized companies such as TRW that use internal funds to make their demonstrations will not necessarily spend their own money on the project. It noted that "[h]ighly capitalized companies possess more collateral, and thus, are in a better position to borrow money than thinly capitalized companies." Id.

It cannot be overemphasized that, under the Commission's procedures, there is no requirement that applicants that use their internal funds to demonstrate their ability to satisfy the financial qualifications standards must actually finance their projects with internal funds. As noted above, the Commission contemplates that highly capitalized companies, which possess large amounts of collateral, will borrow against those assets -- not sell them off.⁶

⁵(...continued)

proceeding with the construction and launch of their proposed satellites immediately upon grant of their applications.

1985 Processing Order at ¶ 10 (emphasis added).

⁶ Current assets provide a general measure of a company's ability to raise funds on the basis of its ongoing operations and as an indication of a company's ability to finance its system promptly upon grant. It is the identification of which applicants have this ability -- and thus will be disinclined to squander or sit on spectrum resources while searching for funding -- that is the objective of the threshold financial qualifications standards. Implementation milestones will ensure that a qualified applicant that is reticent to spend its funds does not sit too long atop the fence.

B. TRW Has Made The Required Financial Showing That It Has The Present Ability And Intent To Construct Its Proposed System.

TRW's submissions in its Amended Application more than satisfy the Commission's financial qualification requirements. As noted in the Amended Application, the total anticipated costs for its proposed system are approximately \$1.8 billion. Amended Application, Attachment B at 1. TRW has submitted an audited balance sheet demonstrating that it has current assets of \$1.994 billion and operating income of \$359 million, well in excess of the amounts necessary to meet the Commission's financial qualification standards.

Wisely declining to challenge the facial sufficiency of TRW's showing, MCHI instead questions whether TRW "will rely upon internal funding as it claims in the amendment." Petition at 6. This question, however, has nothing to do with the applicable standard, and as such, need not be answered.

TRW is not required to commit or state with absolute certainty that it will sell or spend \$1.5 billion of its own current assets and the total of its 1993 operating income to finance its proposed system, and TRW has made no such claim in its Amended Application. TRW has demonstrated its ability to finance its proposed system under the applicable standard and has

made the requisite commitment as called for by the new Commission rule. As such, it is financially qualified, and whether TRW spends its own money, uses financing from joint venturers or strategic partners, or borrows from financial institutions, is irrelevant to this standard.

As a result, there is absolutely no merit to MCHI's argument that because TRW may not actually spend internal funds on its system, but may instead seek external debt and equity funding, TRW was required to submit evidence of fully-negotiated, non-contingent commitments for the estimated systems costs. See Petition at 8. The Commission's rules require only those applicants that do not have sufficient current assets and operating income to meet the Commission's financial standards to submit evidence of external debt and equity funding, if any, on which they will rely to demonstrate that they have the financial wherewithal to construct their proposed systems. 47 C.F.R. § 25.140(d)(2).

Finally, there is no merit whatsoever to MCHI's assertion that the absence of disclosures regarding the financing of TRW's proposed system by TRW in formal Securities and Exchange Commission ("SEC") filings is evidence of TRW's lack of candor with the Commission and/or absence of commitment. MCHI attempts

to twist both the Commission's financial qualifications standard and SEC regulations by asserting that TRW's management commitment to the project is tantamount to a "contingent liability" that "must materially affect [TRW's] liquidity and profitability" and, hence, should have been disclosed in its past SEC reports.

Petition at 31. MCHI continues by alleging that in the absence of such disclosures, "there is no bona fide TRW commitment fully to fund Odyssey from internal funds." Id.

TRW, one of the largest publicly-held corporations in the country, is intimately familiar with all of the applicable SEC regulations and reporting requirements, and is confident that it has been and remains in full compliance with those requirements. To the extent that MCHI is asserting otherwise -- relying on nothing more than supposition and a mischaracterization of the applicable FCC standard -- it is grasping at straws.

In short, TRW has made the management commitment that is required by new Section 25.143(b)(3) of the Commission's rules, and continues to stand behind that commitment.⁷ MCHI's

⁷ As for the MCHI view that Teleglobe Inc.'s investment in TRW's proposed system is to be viewed with suspicion, the Commission itself recognized that such global partnering was to be expected:

(continued...)

lack of candor argument does nothing more than obfuscate the intent of two disparate regulatory requirements in the hope of persuading this Commission to adopt an overly stringent financial commitment standard that has repeatedly been rejected by the agency. MCHI's Petition must be denied.

C. TRW Does Not Own An Interest In Any Other Big LEO Applicant.

In footnote 51 of its Petition, MCHI suggests that TRW's one-time ownership of an inconsequential, indirect minority stock interest in Defense Systems, Inc., which itself was an original minority investor in Big LEO applicant Constellation Communications, Inc. ("Constellation"), raises questions regarding TRW's legal qualifications to be a Commission licensee. This is nonsense -- and old nonsense at that.⁸

TRW does not now own, nor has it ever owned, a direct

⁷(...continued)

[T]hese systems are inherently global, and extremely expensive.... As such, it is reasonable to expect that investors will want to be involved with system operation, particularly if the system will be accessed from the investor's jurisdiction. We concur that this foreign participation is likely to improve the likelihood of receiving a grant of space station access by foreign administrations. (Report and Order, FCC 94-261, slip op. at ¶ 181.)

⁸ TRW responded to this assertion once before. See Consolidated Opposition to Petitions To Deny And/Or Dismiss And Reply Comments Of TRW Inc. at 34-35 filed January 31, 1992. And DSI is no longer a Constellation shareholder.

interest in DSI, a 10.1% investor in Constellation in 1991. At the time of TRW's initial application in June 1991, TRW owned 19.9% of the common stock of DSI's parent company, Engineering Technologies, Inc. ("ETI"). TRW did not then, and has not ever, exercised control over ETI, and it had little, if any, role in DSI's decision to invest in Constellation. On July 2, 1992, TRW sold its remaining interests in ETI to CTA, Inc.

TRW's maximum, indirect economic interest in Constellation amounted to an insubstantial two percent. There is no known bar to such an interest. Indeed, TRW observes that its interest in Constellation would not even have been cognizable for regulatory purposes in the broadcast services. 47 C.F.R. § 73.3555, Note 2(a). MCHI's assertion is irrelevant to the licensing of Odyssey.

III. THE COMMISSION SHOULD GRANT TRW'S REQUEST FOR A CONDITIONAL FEEDER LINK AUTHORIZATION IN THE 20/30 GHZ BANDS.

To bring its system proposal into conformity with the Commission's technical service requirements, TRW altered its system design to include the use of smaller subbands and more beams per satellite. This alteration in turn affected TRW's feeder link spectrum requirements. Specifically, feeder links for the 19 beams contemplated in the system as originally

proposed could have been accommodated in just over 100 MHz of spectrum in each direction in the 29.5-30.0 MHz and 19.7-20.2 GHz bands. However, TRW's current 37-beam proposal, coupled with full frequency reuse capability in each beam, will require approximately 300 MHz of 20/30 GHz-band spectrum in each direction once adequate guardbands and TT&C capabilities are factored in. Amended Application at 5, n.7. TRW identified this increase in feeder link spectrum requirements as the inevitable byproduct of the changes TRW made in the beam pattern to bring its system into conformance with both the rules and policies adopted in the Report and Order.⁹ As a result, it demonstrated that its increase in required feeder link spectrum should not be considered a major amendment affecting TRW's status as a member of the first-round processing group. See Amended Application at 5, n.7; Report and Order, FCC 94-261, slip op. at ¶ 59.¹⁰

⁹ Odyssey™'s medium Earth orbit altitude also contributes to the increased number of beams and feeder link spectrum. But the fewer number of satellites using this spectrum (as compared to other applicants) makes Odyssey more spectrum efficient and eases the difficulty of coordination as well.

¹⁰ See also Report and Order, FCC 94-261, slip op. at ¶ 164 (Commission recognizes that four of the Big LEO applicants -- including TRW -- have indicated that their feeder link spectrum requirements have "increased significantly" since the original applications were filed). In any event, TRW notes that its proposal to increase from 100 to 300 MHz of feeder link spectrum in each direction will not create any conflict with any other current Big LEO applicant's proposal, or with any other applicant that has secured cut-off protection for
(continued...)

In its comments, Hughes asserts that action on TRW's feeder link request could prejudice the Commission's proceedings in the 28 GHz Rulemaking, CC Docket No. 92-297. Comments at 3. While Hughes offers no support for this assertion, it correctly notes that TRW actively participated as a member of the 28 GHz Negotiated Rulemaking Committee ("28 GHz NRM"). Id. at 3, n.4. However, Hughes's assertion that TRW's current MSS feeder link plan might somehow be affected by the outcome of the 28 GHz Rulemaking is patently incorrect;¹¹ TRW's Amended Application specifies different frequencies for its feeder links than those involved in CC Docket No. 92-297.

Hughes, one of the two largest domsat operators, merely seeks to preserve spectrum access for itself at the expense of TRW and others; as such, its position is legally untenable. TRW's original application -- in which it requested feeder link

¹⁰(...continued)

proposals to use the frequencies requested by TRW for its feeder links. Amended Application at 5, n.4. For these reasons, TRW's feeder link proposal does not raise the same concerns as the proposals of other LEO applicants. See, Consolidated Comments and Petition to Defer And/Or Deny of Motorola Satellite Communications, Inc. at 6.

¹¹ The proceeding in CC Docket No. 92-297 may well affect Hughes, however, which has a geostationary FSS proposal (not yet even accepted for filing) that overlaps the upper 500 MHz of the 27.5-29.5 GHz band. TRW's proposed use of the FSS allocation at 20/30 GHz is fully consistent with domestic and international allocations.

frequencies in bands identical to the bands specified in its Amended Application -- was subject to a cut-off for comments on December 18, 1991. See Public Notice, Report No. DS-1134 (released October 24, 1991). Hughes, which had earlier filed comments on other Big LEO applicants' proposals, did not at that time file any comments regarding TRW's application. Furthermore, Hughes did not even file its materially inconsistent application -- which has not been accepted for filing by the Commission -- until almost two years after the cut-off date for comments relating to TRW's original application. Comments at 2, n. 2.

The Commission should not allow Hughes, a johnny-come-lately to the feeder links bands specified in 1991 by TRW, to assert that its belatedly-expressed concerns must be mollified before TRW's application can even be conditionally granted.¹² Odyssey's much needed service must not be delayed merely to serve the parochial interests of Hughes. Hughes was aware of the interests expressed by TRW and Motorola in 20/30 GHz band feeder links, and sat on its hands. It must be held to its election.

¹² If Hughes's position were to be accepted, the Commission would be faced with a never-ending parade of newcomers, each asking that its predecessors not be licensed until the latecomer is given access to the frequencies at issue. This is a prescription for continuous delay and regulatory abuse.

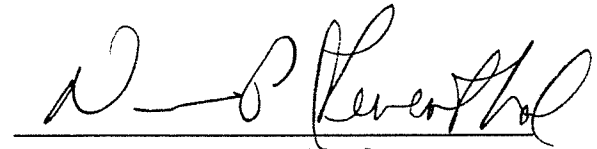
IV. CONCLUSION

MCHI's Petition misstates the Commission's financial qualification rules and distorts TRW's submissions regarding its financial and legal qualifications for the provision of Big LEO service. Hughes's Comments are wholly inappropriate at this stage of this proceeding and, if adopted, would greatly disserve the public. Accordingly, and for all of the reasons expressed herein, the Commission should deny MCHI's Petition and reject Hughes's Comments.

Respectfully submitted,

TRW Inc.

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January 3, 1995

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CERTIFICATE OF SERVICE

I, Cristina M. Lirag, hereby certify that a true and correct copy of the foregoing "Consolidated Opposition to Petition to Deny and Reply Comments of TRW Inc." was mailed, first-class postage prepaid, this 3rd day of January, 1995, to the following:

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