Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Loral SpaceCom Corporation, Debtor-in-)	
Possession)	SAT-MOD-20030507-00097
)	SAT-MOD-19991102-00106
Application for Modification of Fixed Satellite	Ĵ	Call Sign S2160
Service Space Station Authorization	Ĵ	C
Telstar 8	Ĵ	
	Ĵ	
Request for Extension of Milestones and)	
Waiver or Petition for Reconsideration	Ĵ	

MEMORANDUM OPINION AND ORDER

Adopted: October 27, 2003

Released: October 27, 2003

By the Chief, Satellite Division, International Bureau:

I. INTRODUCTION

1. By this Order, we grant Loral SpaceCom Corporation, Debtor-in-Possession's (Loral) request for an additional extension of milestones for its Telstar 8 satellite.¹ Specifically, we extend the milestone to complete construction to June 2004, and extend the launch milestone to September 2004. Because we grant this request, we do not address Loral's alternative request for reconsideration of a prior International Bureau decision relating to the Telstar 8 milestones.² We also grant Loral's request for a waiver of Section 25.210 of the Commission's Rules, requiring satellites to be configured for full frequency re-use.³

¹ This application, to modify the Telstar 8 authorization, was filed by Loral SpaceCom Corporation on May 7, 2003. On July 15, 2003, Loral Space & Communications Ltd. and certain of its subsidiaries, including Loral SpaceCom Corporation, filed for voluntary bankruptcy under Chapter 11, Title 11 of the United States Code, in the United States Bankruptcy Court for the Southern District of New York. Accordingly, pursuant to Section 1.65 of the Commission's rules, Loral SpaceCom Corporation informed the Commission that for purposes of the abovereferenced proceeding, it is now Loral SpaceCom Corporation (Debtor-in-Possession). *See* Letter to Marlene H. Dortch, Secretary, FCC, from Philip L. Verveer, Counsel for Loral SpaceCom Corporation (Debtor-in-Possession) dated July 25, 2003. In addition, pursuant to Section 25.119 of the Commission rules, Loral SpaceCom Corporation sought the Commission's consent to the *pro forma* assignment of its authorizations from Loral SpaceCom Corporation to Loral SpaceCom Corporation (Debtor-in-Possession). The Satellite Division, Policy Branch, granted this request on August 14, 2003. *See* Stamp-Grant by Jennifer M. Gilsenan, File No. SAT-ASG-20030725-00145, dated August 14, 2003.

² Loral SpaceCom Corp. and Loral Space and Communications Corp., *Memorandum Opinion, Order and Authorization*, 18 FCC Rcd 6301 (Int'l Bur. 2003) (*Loral SpaceCom Modification Order*).

II. BACKGROUND

2. Loral was initially authorized to operate Telstar 8 as a hybrid C/Ku band satellite at the 77° W.L. orbital location.⁴ The license included implementation milestones which required Loral to complete construction by December 1999 and launch in March 2000.⁵ In November 1999, Loral filed for an extension of its milestones to April 2002 and July 2002 to incorporate the parameters of simultaneously filed modification applications. The modification applications proposed to reassign Telstar 8 to the 89° W.L. orbital location, redefine certain coverage areas, modify the C and Kuband transponder configuration, and incorporate a Ka-band payload. Further, as part of the first Ka-band processing round, Loral, through its predecessors in interest, was authorized to operate a Ka-band system at four orbital locations including 89° W.L. This authorization also included implementation milestones, which required completion of construction by April 2002 and launch of its Ka-band satellites by May 2002. In April 2002, Loral filed a second extension applications.

3. In April 2003, the International Bureau addressed Loral's pending applications and authorized Loral to make several modifications to its authorizations.⁶ These modifications included authorizing Loral to incorporate a Ka-band payload onto the Telstar 8 satellite, making it a C/Ku/Ka band satellite.⁷ It was also authorized to operate Telstar 8 at 89° W.L. instead of 77° WL^8 In addition, Loral was granted authority to make technical modifications, including modifying the Telstar 8 C-band and Ku-band transponder configurations. To accomplish its technical modifications, the Bureau granted Loral's request to extend the construction completion and launch milestones for the Telstar 8 satellite to March 2003 and May 2003, respectively.⁹ The Bureau found that Loral's milestone extension requests were based on "tangible, physical, construction related concerns" and thus grantable under Commission precedent.¹⁰ Further, the Bureau stated the extensions were warranted given the complex nature of the satellite and the fact that Loral had continued to work on the satellite during the pendency of the proceeding. In the same order, the Bureau addressed Loral's request to reconsider a prior order denying Loral's request to extend the construction completion and launch milestones for its Ka-band authorizations at the 89° W.L., 81° W.L., 47° W.L., and 78° E.L. orbital locations.¹¹ The Bureau denied Loral's request for reconsideration finding that Loral had produced no evidence of progress toward milestone compliance.¹² Although the Bureau had affirmed its decision not to extend Loral's Kaband construction milestones, it did, however, grant a limited waiver of the construction and launch

⁴ Loral Space & Communications Ltd., *Memorandum Opinion and Order*, 11 FCC Rcd 20441 (Int'l Bur. 1996) (*Telstar 8 License*). Telstar 8 was previously designated LoralSat/Loral 2.

⁵ Telstar 8 License, 11 FCC Rcd at 20444.

⁶ Loral SpaceCom Modification Order, 18 FCC Rcd 6301.

⁷ Loral SpaceCom Modification Order, 18 FCC Rcd at 6307.

⁸ Loral SpaceCom Modification Order, 18 FCC Rcd at 6306.

⁹ Loral SpaceCom Modification Order, 18 FCC Rcd at 6307.

¹⁰ Loral SpaceCom Modification Order, 18 FCC Rcd at 6307.

¹¹ Loral Space and Communications Corporation, Request for Extension of Time to Construct Launch and Operate a Ka-band Satellite System in the Fixed Satellite Service, *Order*, 16 FCC Rcd 11044 (Int'l Bur. 2001)(denying Loral's request to extend its construction completion and launch milestones for the 89°W.L., 81° W.L., 47° W.L. and 78° E.L. orbital locations).

¹² Loral SpaceCom Modification Order, 18 FCC Rcd at 6309.

milestones of Loral's Ka-band authorization consistent with its decision to allow Loral to include a Ka-band payload on Telstar 8 satellite using 500 MHz of spectrum at the 89° W.L. orbital location.¹³ The Bureau concluded that the limited waiver would not contravene the purpose of milestone rule, namely to prevent warehousing, as the approaching launch of Telstar 8 would provide service to the public in the near term.¹⁴

4. Loral also proposed technical modifications to its C and Ku-band payloads on Telstar 8.¹⁵ These proposals included expanding service to a larger geographic service area, including South America. Loral's proposed C- and Ku-band coverage of South America, however, did not meet the frequency re-use requirements of Section 25.210 (e) and (g) of our rules.¹⁶ Because Loral had not requested a waiver of the rules, the Bureau deferred action on those parts of the Telstar 8 modification application related to the proposed South American coverage.¹⁷

5. In May 2003, Loral filed the instant application to extend the completion and launch milestones for the Telstar 8 satellite at the 89° W.L. orbital location. It also filed a request for waiver of Section 25.210 of our rules.¹⁸ In reference to its extension request, Loral states an additional extension is necessary because of unanticipated technical problems experienced during the construction and testing of the spacecraft. Loral explains that the Telstar 8 spacecraft is the first of its kind, designed to incorporate significant increases in mass, power and capability. It also has two significant innovations used for the first time, Deployable Thermal Radiators and Deployable Battery Modules. Loral states that the satellite will also utilize new Ka-band technologies and as a result, engineers have had to re-design, re-test and re-qualify certain elements of the satellite communications sub-system to meet the new design requirements. Loral provided specific examples of problems and technical difficulties requiring re-design and re-testing of various components and sub-systems.¹⁹ Loral states that the construction of Telstar 8 is approximately 80 percent complete, and that it has expended funds approximating 60 percent of the final cost of the satellite.²⁰ Loral's extension request included copies of photographs of the Telstar 8 satellite, demonstrating that construction was well underway.²¹ To accommodate additional construction and testing uncertainties of Telstar 8, Loral projects that construction will be completed in the second quarter of 2004 and launch in the third quarter of 2004.²² Loral states that these times provide the best estimate of additional time needed to complete each of the remaining test phases and provides a cushion for additional unforeseen difficulties and testing. Further, Loral asserts that the extension

¹³ Loral SpaceCom Modification Order, 18 FCC Rcd at 6313. The Telstar 8 Ka-band payload is authorized to use the 19.7-20.2 GHz (downlink) and 29.5-30.0 GHz (uplink) portions of the band.

¹⁴ Loral SpaceCom Modification Order, 18 FCC Rcd at 6313.

¹⁵ The C-band refers to Earth-to-space (uplink) frequencies at 5.925-6.425 GHz and the corresponding space-to-Earth (downlink) frequencies at 3.7-4.2 GHz. The Ku-band refers to Earth-to-space (uplink) at 11.7-12.2 GHz and the corresponding Earth-to-space (downlink) frequencies at 14.0-14.5 GHz. The Telstar 4 satellite was initially authorized to operate in the C-and Ku-band frequencies at the 89° W.L. orbital location. American Telephone and Telegraph Company, *Order and Authorization*, 3 FCC Rcd 6980 (1988).

¹⁶ 47 C.F.R. § 25.210(e) and (g).

¹⁷ Loral SpaceCom Modification Order, 18 FCC Rcd at 6308.

¹⁸Loral SpaceCom Extension Application, File No. SAT-MOD-20030507-00097 (May 7, 2003) (Loral Application).

¹⁹ Loral Application at 4.

²⁰ Loral Application at 5.

²¹ Loral Application, Exhibit 1.

²² Loral Application at 2.

benefits the public interest because Telstar 8 is a state-of-the-art hybrid satellite with a high capacity that will result in lower costs to the public. In the alternative, Loral seeks reconsideration of the International Bureau's April 2003 order extending the launch milestones for Telstar 8 to May 2003.²³

6. In its application, Loral also seeks a waiver of Section 25.210(e) and (g) of the Commission's rules requiring full frequency re-use. In support of its request, Loral states that Telstar 8 employs full frequency reuse for its coverage of the United States, and reuses 500 MHz of C- and Ku-band spectrum for coverage of South America, increasing the orbital spectrum efficiency by 50 percent over current generation satellites. The total transponder count of Telstar 8 for its C/Ku/Ka-band payload is 68, a 40 percent increase over typical current generation U.S. domestic hybrid satellites. Although Telstar 8 has increased capabilities, there is no additional unused capacity on the spacecraft available for the payload equipment necessary to comply with the rules. As a result, Loral claims that it is not feasible to add the additional payload equipment needed to provide dual polarization and full frequency re-use for coverage of South America.²⁴ Loral's application was placed on Public Notice.²⁵ No comments were received in response to the Notice.

III. DISCUSSION

7. *Extension Request.* Milestones are necessary to ensure that licensees build their systems in a timely manner and that orbital resources and spectrum are not being held by licensees unable or unwilling to proceed with their plans.²⁶ It is in the public interest to ensure that licensees proceed expeditiously in completing construction of their systems and commencing service and not blocking entry by other qualified service providers. Therefore, the Commission has strictly enforced its milestone schedules.²⁷ As a general rule, we grant milestone extensions only when the delay is due to circumstances beyond the control of the licensee.²⁸ For example, unanticipated technical problems encountered during physical construction of the satellite may justify a milestone extension.²⁹ The situation presented by Loral is consistent with this circumstance. In addition, Loral has demonstrated that construction is well underway and progressing.

8. The Telstar 8 satellite is the first of its kind, incorporating technology used for the first

²³ Loral Application at 7. In the extension application addressed in the Loral SpaceCom Modification Order, Loral had requested an extension of its construction completion and launch milestones to March 2003 and May 2003 respectively. The Loral SpaceCom modification Order, however, was released in April 2003. In its application for an additional extension of milestones to 2004, Loral requested, in the alternative, reconsideration of the Loral SpaceCom Modification Order because it was released after Loral's proposed construction completion milestone. Because we grant Loral's application to extend the milestones for Telstar 8, we need not address its alternative request for reconsideration of the milestones in the Loral SpaceCom Modification Order.

²⁴ Loral Application at 10.

²⁵ Public Notice, Policy Branch Information, Report No. SAT-00153 (June 20, 2003).

²⁶ Columbia Communications Corp., Application for Amendment to Pending Application to Extend Milestones, *Memorandum Opinion and Order*, 15 FCC Rcd 15566 (Int'l Bur. 2000).

²⁷ Advanced Communications Corporation, *Memorandum Opinion and Order*, 10 FCC Rcd 13337 (Int'l Bur. 1995).

²⁸ 47 C.F.R § 25.117(e); Columbia Communications Corp., 15 FCC Rcd at 15571.

²⁹ See, e.g., Earthwatch Incorporated, Order and Authorization, 15 FCC Rcd 18725 (Sat & Radiocom. Div., Int'l Bur. 2000); AMSC Subsidiary Corp., Order and Authorization, 10 FCC Rcd 3791 (Sat. & Radiocom. Div., Int'l Bur. 1995).

time. As a result, the Telstar 8 manufacturing engineers have faced numerous challenges. Loral provided detailed examples of unanticipated technical problems arising from testing the new equipment which led to the redesign, reworking and retesting of various components. It also listed specific testing underway. Loral has completed thermal vacuum testing, and is performing major construction including dynamics testing and alignments, compact antenna range testing, final performance testing, and final assembly. We find it would not be in the public interest to cancel the license of a company that has completed construction of approximately 80 percent of its satellite and provided a concrete plan for completing construction and launching a satellite within the next year. For these reasons, grant of the construction completion and launch milestone would serve the public interest.³⁰

9. Coverage of South America. Loral requests a waiver of Section 25.210(g), the Commission's rule that requires full frequency re-use for its service to South America.³¹ In support of its waiver request, Loral states that Telstar 8 meets the full frequency re-use requirement with respect to its coverage of the United States. Loral further states that unlike typical current generation U.S. domestic hybrid satellites that have 24 C-band transponders and 24 Ku-band transponders, Telstar 8 has 68 transponders. This increase in the number of transponders, Loral states, requires additional physical space, power, and thermal dissipation on the spacecraft. According to Loral, because there is no additional unused capacity remaining on the spacecraft, it is not feasible to add the additional payload equipment needed to provide full-frequency re-use for coverage of South America.³²

10. Commission rules may be waived where there is good cause to do so.³³ Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule.³⁴ Generally, the Commission may grant a waiver of its rules in a particular case if the relief requested would not undermine the policy objective of the rule. The full frequency re-use requirements were designed to "derive the maximum capacity feasible from the assigned orbital location."³⁵ Because there is no unused capacity on the satellite, requiring Loral to meet the full frequency re-use requirement over South America would compromise its ability to provide full frequency re-use over the United States. Given these limitations, together with the extensive capabilities of the satellite, we grant a waiver of the full frequency re-use requirement, in a limited amount of bandwidth and for a limited service area.

11. In granting this waiver request for the coverage to South America, we remind Loral that consistent with our rules, given the non-conforming design of its satellite, Loral must protect the routinely licensed services of other two-degree spacing compliant satellite networks serving the United States. In addition, Loral must coordinate its non-compliant services of other satellite networks authorized by the United States or authorized to serve the United States on an equal basis.

³⁰ We note that an application to transfer the Telstar 8 satellite from Loral to Intelsat North America LLC is presently pending before the Commission. *See* Public Notice, Report No. SPB-191, DA 03-2672 (rel. Aug. 15, 2003). In the event the application is granted, Intelsat North America LLC must comply with the milestone schedule and conditions set forth in this Order.

³¹ Loral SpaceCom Corp. Modification Order, 18 FCC Rcd at 6308, 6315.

³² Loral Application at 9-10.

³³ 47 C.F.R. § 1.3.

³⁴ Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

³⁵ 47 C.F.R. § 25.210(e).

IV. CONCLUSION AND ORDERING CLAUSES

12. We find that granting the application of Loral will help ensure the successful launch of the Telstar 8 satellite and serve the public interest by providing effective use of the limited orbit spectrum resource.

13. Accordingly, IT IS ORDERED, that the Request for Extension of Milestones and Waiver or Petition for Reconsideration filed by Loral SpaceCom Corporation DIP, File No. SAT-MOD-20030507-00097 is GRANTED.

14. IT IS FURTHER ORDERED that the Telstar 8 satellite must be constructed and launched by the following dates in accordance with the technical parameters and terms of its authorization, as modified, or its authorization is null and void:

Complete Construction:Launch:June 30, 2004September 30, 2004

15. IT IS FURTHER ORDERED, pursuant to 47 C.F.R. § 1.3, that Loral SpaceCom Corporation DIP's request for a waiver of 47 C.F.R. § 25.210(e) and (g), IS GRANTED, with respect to coverage of South America as set forth in Loral SpaceCom Corporation's modification application, File No. SAT-MOD-19991102-00106, and the portions of that application deferred in Loral SpaceCom Corp. and Loral Space and Communications Corp., *Memorandum Opinion and Order*, 18 FCC Rcd 6301 (Int'l Bur. 2003). Loral must protect the routinely licensed services of other two-degree spacing compliant satellite networks serving the United States. In addition, Loral must coordinate its non-compliant services of other satellite networks authorized by the United States or authorized to serve the United States on an equal basis.

16. IT IS FURTHER ORDERED, that Loral's request for reconsideration of the International Bureau's order, Loral SpaceCom Corporation and Loral Space & Communications Corporation, *Memorandum Opinion and Order, Order and Authorization*, 18 FCC Rcd 6301 (Int'l Bur. 2003) is dismissed as moot.

17. Loral SpaceCom Corporation, DIP is afforded 30 days from the date of this Order to decline this authorization as conditioned. Failure to respond within this period will constitute a formal acceptance of the authorization as conditioned.

18. This Order is issued pursuant to 47 C.F.R. § 0.261, and is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Thomas S. Tycz Chief Satellite Division International Bureau