

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

In the Matter of)
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)
INTELSAT NORTH AMERICA, LLC) File No. SAT-MOD-20060901-00095
) SAT-STA-20060901-00094
Application to Modify License for the INTELSAT) SAT-STA-20061101-00127
709 satellite to include Fixed- Satellite Service in) Call Sign: S2396
the 11.7-11.95 GHz Frequency Band)
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ORDER

Adopted: July 6, 2007

Released: July 6, 2007

By the Deputy Chief, Satellite Division, International Bureau:

I. INTRODUCTION

1. By this Order, we grant Intelsat North America LLC's (Intelsat North America's) request to modify its license for the INTELSAT 709 satellite to allow it to provide fixed satellite service (FSS) in the Middle East in the 11.7-11.95 GHz frequency band from the 85.15° E.L orbital location. There is no international frequency allocation for such FSS operations, and, therefore, this authorization will be limited to operations on a non-harmful interference basis. We find that this action will allow Intelsat North America to meet a need for additional satellite capacity in support of U.S. Government operations in the Middle East.

II. BACKGROUND

2. For the purpose of frequency allocation, the International Telecommunication Union (ITU) has divided the world into three Regions. ITU Region 1 includes Europe, Africa, territories of the former U.S.S.R. in Asia, as well as portions of the Arctic, Atlantic and Pacific Oceans. ITU Region 2 includes North and South America. ITU Region 3 includes Southern Asia, Australia, New Zealand, and some Pacific Islands.1 The ITU Table of Allocations for Region 2 includes a primary allocation to the FSS (space-to-Earth) in the 11.7-11.95 GHz frequency band. In contrast, the ITU Table of Allocations for Regions 1 and 3 does not include an FSS allocation and instead allocates this spectrum on a co-primary basis to the fixed service (FS), broadcasting service (BS), broadcasting satellite service (BSS) and the mobile service (MS), excluding aeronautical mobile service (AMS).2

1 Section 2.104 of the Commission's rules provides a detailed description of the ITU Regions along with a map of the world with designations of respective ITU Regions. 47 C.F.R. § 2.104.

2 47 C.F.R. § 2.106.

3. Since 2003, the INTELSAT 709 satellite has been authorized to provide service to ITU Regions 1 and 3 from the 85.15° E.L. orbital location using the following frequencies: 3700 - 4200 MHz, 5925 - 6425 MHz, 10.95 - 11.2 GHz, 11.45 - 11.7 GHz, 12.5 - 12.75 GHz and 14.0 - 14.5 GHz.³ In July 2006, we granted Intelsat North America Special Temporary Authority (STA) to operate INTELSAT 709 in the 11.7-11.95 GHz band at the 85.15° E.L. orbital location on a non-harmful interference basis, to enable it to provide satellite service to U.S. government earth stations.⁴ Intelsat North America continues to operate in this band pursuant to STA.⁵

4. In September 2006, Intelsat North America filed a request to modify the INTELSAT 709 space station license to provide service in the 11.7-11.95 GHz frequency band on a non-harmful interference basis.⁶ In its modification request, Intelsat North America indicates that its proposed use of the 11.7-11.95 GHz band in Region 1 and 3 does not conform to the ITU Table of Frequency Allocations. Intelsat North America therefore seeks a waiver of Sections 2.106 (U.S. Table of Allocations), 25.112(a)(3) (applications considered defective if it requests authority for operations not allocated under the ITU Radio Regulations), and 25.140(b)(2) (requirement to provide a “2 degree” interference analysis) of the Commission’s rules.⁷ The modification application was placed on Public Notice⁸ and no comments were filed.

III. DISCUSSION

³ See Application of Intelsat LLC for Authority to Operate, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit, *Memorandum Opinion Order and Authorization*, 15 FCC Rcd 15460, at Appendix A, Table 1, *recon. denied*, 15 FCC Rcd 25234 (2000), *further proceedings*, 16 FCC Rcd 12280 (2001) (*Intelsat LLC Orders*). See also Application of Intelsat LLC for Authority to Operate, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit, Volume II, Annex 1 at 11-12 (submitted January 18, 2000), File Nos. SAT-LOA-20000119-00019 to SAT-LOA-20000119-00028 (requesting authorization only for Region 2). Intelsat LLC, Application of Intelsat LLC to Modify Authorization to Operate, and to Further Construct, Launch, and Operate C-band and Ku-band Satellites that Form a Global Communications System in Geostationary Orbit, File No. SAT-MOD-20020418-00065, (grant stamped with conditions on October 2, 2002).

⁴ Intelsat North America, LLC, Request for Special Temporary Authority for INTELSAT 709, File No. SAT-STA-20060630-00073, DA No. 06-1412 (stamp grant with conditions, by Cassandra Thomas, Deputy Chief, Satellite Division, on July 10, 2006). See also Intelsat North America, LLC, Request for Special Temporary Authority for INTELSAT 709, File No. SAT-STA-2006901-00094 and Intelsat North America, LLC, (“September 1, 2006 STA Extension Request”); Request for Special Temporary Authority for INTELSAT 709, File No. SAT-STA-20061101-00127. (“November 1, 2006 STA Extension Request”).

⁵ The September 1, 2006 and November 1, 2006 STA Extension requests sought continuation of operations authorized in File No. SAT-STA-20060630-00073, DA No. 06-1412. The INTELSAT 709 satellite operated during the requested period pursuant to Section 1.62 of the Commission’s rules, subject to the conditions specified in the original authorization. 47 C.F.R. §1.62 (a)(1).

⁶ Intelsat North America, LLC, Application to Modify Authorization for INTELSAT 709 to Allow the Provision of Fixed-Satellite Service on a Non-Interference Basis in Regions 1 and 3 in the 11.7-11.95 GHz Band, File No. SAT-MOD-20060901-00095 (filed September 1, 2006) (INTELSAT 709 Application). Pursuant to the *Intelsat 709 August 2003 Order*, Intelsat North America has already been authorized to operate the corresponding Earth-to-space 14.0-14.25 GHz frequency band. *Intelsat 709 August 2003 Order*, 18 FCC Rcd 16414, 16417.

⁷ INTELSAT 709 Application at 3-4.

⁸ See Policy Branch Information, Acceptable for Filing Public Notice, Report No. SAT-00396 (rel. October 20, 2006).

5. For the reasons discussed below, we grant Intelsat North America's modification request and authorize Intelsat North America to operate the INTELSAT 709 in the 11.7-11.95 GHz frequency band, on a non-harmful interference basis, at the 85.15° E.L. location, subject to conditions listed below.

6. *Waiver requests.* Section 1.3 of the Commission's rules authorizes the Commission to waive its rules for "good cause shown."⁹ Waiver is appropriate only 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.¹⁰ Generally, the Commission may grant a waiver of its rules in a particular case only if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.¹¹

7. Intelsat North America's first request is to waive Section 2.106 of the Commission's rules. We conclude that no waiver is necessary. Section 2.106 sets forth the U.S. Table of Allocations and includes, for informational purposes only,¹² the ITU Table of Frequency Allocations. Because INTELSAT 709 will not offer service in the United States, Section 2.106 is not applicable and a waiver is therefore not required.¹³

8. Intelsat North America also seeks a waiver of Section 25.112(a)(3) of the Commission's rules. This rule provides that an application is defective if it requests authority to operate a space station in a frequency band that is not allocated internationally for such operation under the ITU Radio Regulations. This rule was adopted in the *First Space Station Licensing Reform Order*.¹⁴ The Commission adopted this rule to prevent applicants from filing applications that would serve as mere "placeholders" for future service, while the applicant pursued changes to the ITU Radio Regulations necessary to permit that service.

⁹ See Section 1.3 of the Commission's rules, 47 C.F.R. §1.3. See also *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969) (*WAIT Radio*); *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1166 (D.C. Cir. 1990) (*Northeast Cellular*).

¹⁰ *Northeast Cellular*, 897 F.2d at 1166.

¹¹ *WAIT Radio*, 418 F.2d at 1157.

¹² Section 2.104(a) of the Commission's rules specifically states that inclusion of the ITU Table of Frequency Allocations is included for informational purposes only. 47 C.F.R. § 2.104(a).

¹³ Application of Intelsat LLC to Modify Authorization for INTELSAT 805 to Allow the Provision of Fixed-Satellite Service Between Non-U.S. Points in the 12.7-12.75 GHz Frequency Band, *Order and Authorization*, 19 FCC Rcd 2775, 2777-78 ¶¶ 8 (2004) (holding that a waiver of Section 2.106 is not required "because the United States Table of Frequency Allocations applies only to operations in the United States and the insular areas listed in Section 2.105 (a) footnotes, 2, 3, and 4...[The] service area in which Intelsat seeks to operate does not include jurisdiction of the United States or its possessions, therefore a waiver of Section 2.106 is not required."). SES AMERICOM, INC., Application for Modification of Satcom SN-4 Fixed Satellite Space Station License, *Order and Authorization*, 05-1812 (rel. June 28, 2005).

¹⁴ Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order and Further Notice of Proposed Rulemaking in IB Docket No. 02-34, and First Report and Order in IB Docket No. 02-54*, 18 FCC Rcd 10760, 10809 ¶¶ 122-124 (2003) (*Space Station Licensing Reform Order*) (adopting a processing queue for space station applications). The Commission stated that it would, however, consider applications filed after the ITU adopts an international frequency allocation but before the Commission adopted a domestic allocation. *Space Station Licensing Reform Order*, 18 FCC Rcd 10760, 10809 ¶ 124. The Commission stated that we would consider such applications only on a non-conforming, non-harmful interference basis to facilities operating consistent with the Table of Frequency Allocations. In addition, the Commission held that parties seeking authority to operate on a non-conforming basis must request a waiver of Section 2.106 of the Commission's rules, and must demonstrate good cause for that waiver.

9. In this instance, we find Intelsat North America has justified its waiver request. We conclude that Intelsat North America's application is not the type of placeholder application the rule was designed to prevent. Intelsat North America seeks to use the band immediately with a currently operational satellite. Granting this waiver as conditioned would allow Intelsat North America to fully utilize available unused capacity on INTELSAT 709 and allow it to meet the immediate operations needs of a U.S. Government customer in the Middle East.

10. Further, Intelsat North America's proposed non-harmful interference use of the spectrum is consistent with Section 4.4 of the ITU Radio Regulations. Specifically, Section 4.4 of the ITU Radio Regulations states that "Administrations of Member States shall not assign to a station any frequency in derogation of the Table of Frequency Allocations in this Chapter or other provisions of these Regulations, except on the express condition that such a station, when using such a frequency assignment, shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the Constitution, the Convention and these Regulations."¹⁵ We specifically condition Intelsat North America's authorization to operate INTELSAT 709 consistent with Section 4.4. Based upon information provided in Intelsat North America's application, and the conditions imposed in this Order, we conclude that Intelsat North America will be able to operate the satellite on a non-harmful interference basis. Footnote 5.492 of the ITU Table of Frequency Allocations allows BSS Plan frequency assignments in the 11.7-11.95 GHz band to be used for FSS transmissions provided that the operator meets the interference criteria specified in Appendix 30 of the ITU Radio Regulations, which is intended to protect the FS operations in this band.¹⁶ Intelsat North America submitted information to indicate that its proposed operations in the 11.7-11.95 GHz band will be within the limits required to protect FS.¹⁷ Additionally, we require Intelsat North America's operations to meet the BSS PFD limits specified in the ITU Radio Regulations, to protect co-frequency MS and FS operators.¹⁸ Finally, Intelsat North America notes there are no existing operational BSS satellites within 9 degrees of the 85.15° E.L. orbital location.¹⁹ Accordingly, we conclude that Intelsat North America's proposed operations in the 11.7-11.95 GHz band in Regions 1 and 3 are consistent with Section 4.4 of the ITU Radio Regulations.

11. Finally, Intelsat North America requests a waiver of Section 25.140(b)(2) of the Commission's rules. We find that Intelsat North America has made the appropriate showing to grant this request. Section 25.140(b)(2) of the Commission's rules requires FSS applicants to provide an interference analysis to demonstrate compliance with the Commission's two-degree spacing policy. Because the 11.7-11.95 GHz band is assigned to the BSS in Regions 1 and 3, Intelsat North America has provided an analysis of the interference environment within a +/- 9 degree arc as is customary for BSS satellites in this band. This analysis was provided in lieu of a two-degree spacing interference analysis. In light of the international allocation of this band to BSS in Regions 1 and 3, we find that Intelsat North America's interference analysis for operations at 85.15° E.L. orbital location satisfies the purpose of the rule.

¹⁵ ITU Radio Regulations, Art. 4.4 (2004).

¹⁶ INTELSAT 709 Application at 7. *See also* 47 CFR § 2.106 n. 5.492 ("Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate region Plan or included in the Regions 1 and 3 List in Appendix 30 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating conformity with the Plan or the List, as appropriate.")

¹⁷ INTELSAT 709 Application at 7.

¹⁸ ITU Radio Regulations, Art. 20, Section V, Table 21-4.

¹⁹ INTELSAT 709 Technical Exhibit at 6-7.

12. Finally, we emphasize that granting this authority does not provide Intelsat North America with any authority to operate another satellite at the 85.15° E.L orbital location in the 11.7-11.95 GHz frequency band. Moreover, it does not give Intelsat North America any priority in the U.S. application-processing queue²⁰ relative to a future application for authority to operate such a satellite.

IV. CONCLUSION

13. Under the circumstances presented, we find that a grant of Intelsat North America's application to modify its license and operate the INTELSAT 709 satellite in the 11.7-11.95 GHz frequency band, in ITU Regions 1 and 3, will not cause harmful interference to services operating in conformance with the ITU Table of Frequency Allocations and will serve the public interest.

V. ORDERING CLAUSES

14. Accordingly, IT IS ORDERED that Intelsat North America's Application, File No. SAT-MOD-20060901-00095, to modify its space station authorization (Call Sign: S2396) for the INTELSAT 709 satellite to allow the provision of fixed-satellite service at the 85.15° E.L orbital location on a non-harmful interference basis in ITU Regions 1 and 3 in the 11.7-11.95 GHz frequency band and request for waivers of Sections 25.112(a)(3) and 25.140(b)(2), IS GRANTED.

15. IT IS FURTHER ORDERED that Intelsat North America's Applications for request of extension of Special Temporary Authority, File Nos. SAT-STA-20060901-00094 and SAT-STA-20061101-00127 ARE GRANTED to the extent necessary, subject to the terms and conditions specified in IBFS File No. SAT-STA-20060630-00073 and otherwise ARE DISMISSED AS MOOT.

16. IT IS FURTHER ORDERED that Intelsat North America's operations of the 11.7-11.95 GHz frequency band shall be on a non-harmful interference basis, *i.e.*, Intelsat North America shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radiocommunication services, including the fixed service, broadcasting service, broadcasting satellite service, and the mobile service.

17. IT IS FURTHER ORDERED that grant of this modification request does not provide Intelsat North America with any authority to operate another satellite at the at the 85.15° E.L orbital location in the 11.7-11.95 GHz frequency band or any priority in the U.S. application-processing queue relative to future applications for authority to operate a satellite at this orbital position in the 11.7-11.95 GHz frequency band.

18. IT IS FURTHERED ORDERED that in the event of any harmful interference does occur, Intelsat North America shall cease operations immediately upon notification of such interference and shall inform the FCC in writing immediately of such an event.

19. IT IS FURTHERED ORDERED that this authorization does not grant Intelsat North America any authority for earth station operations. Any such operations will need to be authorized pursuant to the applicable laws, regulations, rules and licensing procedures for the government of the country or governments of the countries to which such operations are subject.

20. IT IS FURTHER ORDERED that Intelsat North America shall prepare any necessary submissions to the ITU for the completion of the appropriate notification obligations for these frequency assignments in accordance with the ITU Radio Regulations, indicating their operation in accordance with

²⁰ *Space Station Licensing Reform Order*, 18 FCC Rcd 10760, 10809.

Article 4.4.

21. IT IS FURTHER ORDERED that the power flux density of emissions in the 11.7-11.95 GHz band at the Earth's surface shall not exceed the following limits in a reference bandwidth of 1 MHz:

For angles of arrival of 0-5° above the horizontal plane, -124 dB(W/m²);

For angles of arrival of 5-25° above the horizontal plane, $-124 + 0.5(\delta - 5)$ dB(W/m²), where δ is the angle of arrival;

For angles of arrival of 25-90° above the horizontal plane, -114 dB(W/m²).

22. This Order is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Cassandra C. Thomas
Deputy Chief
Satellite Division