



Federal Communications Commission  
Washington, D.C. 20554

December 17, 2010

Susan H. Crandall  
Assistant General Counsel  
Intelsat Corporation  
3400 International Drive, N.W.  
Washington, DC 20036

Re: IBFS File No. SAT-LOA-20100726-00167 (Intelsat 17).

IBFS File Nos. SAT-LOA-20101014-00219 (Intelsat 18, S2817); SAT-MOD-20100511-00098 (Intelsat 706, S2401); SAT-MOD-20091106-00117 (Intelsat 709, S2396); SAT-LOA-20090227-00029 (Galaxy KA, S2787); SAT-MOD-20101029-00228 (Intelsat New Dawn, S2751); SAT-MOD-20101102-00229 (Galaxy 11, S2253)

Dear Ms. Crandall:

This letter is to inform you that the above-referenced applications filed by companies affiliated with Intelsat do not contain the two-degree spacing analysis required under the Commission's rules, as explained below. Although the pending applications are subject to the Commission's first-come, first-served licensing requirements, we are not dismissing the applications as incomplete at this time for the reason set forth below. We request, however, that Intelsat supplement the above-referenced applications to provide the missing technical analyses no later than January 17, 2011, so that we can continue to process the applications. Failure to provide the missing analyses by this deadline may result in the dismissal of the pending applications.<sup>1</sup> We stress that any application filed after the date of this letter will be dismissed as incomplete if it does not contain the required two-degree spacing analysis. In addition, we will add conditions to the recent Intelsat 17 grant to limit transmissions to power levels consistent with Sections 25.212(c) and (d) of the Commission's rules.<sup>2</sup>

Section 25.140(b)(2) of the Commission's rules requires applicants to submit an interference analysis showing the compatibility of its proposed system two degrees from any authorized space station.<sup>3</sup> As clarified through Public Notices released in 2003 and 2004, the requirements of Section 25.140(b)(2) for fixed-satellite service (FSS) systems are met by providing certain minimal data requirements, as well as certain technical analyses.<sup>4</sup> For FSS systems operating in the conventional Ku-frequency bands subject to

---

<sup>1</sup> 47 C.F.R. § 25.112 (requiring the Commission to return, as unacceptable for filing, any space station application that is not substantially complete, contains internal inconsistencies, or does not substantially comply with the Commission's rules).

<sup>2</sup> 47 C.F.R. §§ 25.212(c) & (d).

<sup>3</sup> 47 C.F.R. § 25.140(b)(2).

<sup>4</sup> International Bureau, Satellite Division Information: Clarification of 47 C.F.R. § 25.140(b)(2), Space Station Application Interference Analysis, *Public Notice*, 19 FCC Rcd 10652 (Int'l Bur. 2004) ("2004 Public Notice"); International Bureau, Satellite Division Information: Clarification of 47 C.F.R. § 25.140(b)(2), Space Station Application Interference Analysis, *Public Notice*, 18 FCC Rcd 25099 (Int'l Bur. 2003) ("2003 Public Notice").

Section 25.212(c), applicants must provide an analysis demonstrating that the satellite's EIRP density and the earth station input power density values will not exceed and can operate at the levels listed in Section 25.212(c).<sup>5</sup> For all other FSS satellite systems – including systems operating in conventional C-bands and “extended” frequency bands (but excluding systems operating in the Ka-band) – the applicant must provide an analysis showing the potential of interference into and from carriers of adjacent satellites with a spacing of two degrees.<sup>6</sup> This analysis must include the radiofrequency characteristics of both interfering and interfered with carriers, as well as the resulting interference potential, such that the Commission (or other applicants in the future course of consideration of these applications) can complete the analysis.

This analysis must also demonstrate the proposed satellite's compatibility with currently authorized satellites two degrees away from the proposed satellite.<sup>7</sup> Where there are no currently authorized satellites within two degrees of the applicant's proposed station, the applicant must demonstrate compatibility with a proposed satellite at an assumed two-degree separation. In situations where there are no authorized or proposed satellites within two degrees of the applicant's requested orbital location, the applicant must submit an interference analysis using either: (1) the technical characteristics of authorized or proposed satellites located more than two degrees away that meet U.S. two-degree compliance rules; or (2) the technical characteristics of the applicant's own satellite.<sup>8</sup>

Although the above-referenced applications provide the data elements required by Section 25.212(c), they did not contain all the required analysis to accompany the data. In each, the applicant states that the impact of the proposed satellite's emissions on the transmissions of adjacent satellites was not analyzed because the power levels of the transmissions would be limited to those levels contained in Section 25.212(c) and (d) of the Commission's rules. In each the applicant also states that, in those cases where it may require to transmit carriers with power levels in excess of those in section 25.212(c) or (d), it will coordinate those operations with the affected adjacent satellite operators.<sup>9</sup> This statement constitutes neither a demonstration that the satellite's EIRP density and the earth station input power density values will not exceed and can operate at the levels listed in Section 25.212(c), nor an analysis showing the potential of interference into and from carriers of adjacent satellites with a spacing of two degrees. Furthermore, the statement holds open the possibility that Intelsat would seek to operate at higher power levels than those set forth in its application at a future date without prior approval from the Commission.

We note that the Commission has accepted for filing and, in some cases, granted applications from Intelsat that contained similar language. For example, on November 17, 2010, we granted Intelsat's application to launch and operate the Intelsat 17 FSS space station at 66° E.L.<sup>10</sup> Although prior staff error is not a basis for non-conformance with the Commission's rules, we will not retract this grant nor dismiss still-pending applications based on the failure to provide the analyses required under Section 25.210(b)(2). Instead, we will add conditions to the Intelsat 17 grant to limit transmissions in the C- and Ku-bands to power levels consistent with Sections 25.212(c) and (d) of the Commission's rules.<sup>11</sup> We

---

<sup>5</sup> 2003 Public Notice, 18 FCC Rcd at 25100.

<sup>6</sup> *Id.*

<sup>7</sup> 2004 Public Notice, 19 FCC Rcd at 10653.

<sup>8</sup> *Id.*

<sup>9</sup> See, e.g., *Application for Authority to Launch and Operate Intelsat 18*, IBFS File No. SAT-LOA-20101014-00219, Engineering Statement at 23 (Part 9.0: Adjacent Satellite Link Analysis).

<sup>10</sup> IBFS File Nos. SAT-LOA-20100726-00167 (granted Nov. 17, 2010).

<sup>11</sup> Specifically, we will re-issue the Intelsat 17 authorizing conditions to add the following two conditions (no other conditions will be changed):

also ask Intelsat to supplement the above-referenced pending applications to provide the missing analyses so that we can continue to process the applications.

We request that Intelsat file these supplements by January 17, 2011. Failure to provide the missing analyses by this time may result in the dismissal of the pending applications. Furthermore, we stress that any application filed after the date of this letter will be dismissed as incomplete if it does not contain the required two-degree spacing analysis.

Sincerely,



Robert G. Nelson  
Chief, Satellite Division  
International Bureau

Cc: Jennifer D. Hindin, Esq.  
WILEY REIN LLP  
1776 K Street, N.W.  
Washington, DC 20006

*Counsel to Intelsat*

---

"The EIRP density from the Intelsat 17 space station in the downlink frequency band of 3700-4200 MHz shall not exceed the lesser of the values provided either in Intelsat's application or in Sections 25.212(d)(1) and (d)(2) of the Commission's rules, and the uplink power spectral density in the frequency band of 5925-6425 MHz shall not exceed the lesser of the values provided either in Intelsat's application or in Sections 25.212(d)(1) and (d)(2) of the Commission's rules. Operations with powers exceeding these levels require separate specific Commission authorization."

"The EIRP density from the Intelsat 17 space station in the downlink frequency bands of 10.95-11.20 GHz, 11.45-11.7 GHz, and 12.50-12.75 GHz shall not exceed the lesser of the values provided either in Intelsat's application or in Section 25.212(c) of the Commission's rules, and the uplink power spectral density in the frequency band of 14.0-14.5 GHz shall not exceed the lesser of the values provided either in Intelsat's application or in Section 25.212(c) of the Commission's rules. Operations with powers exceeding these levels require separate specific Commission authorization."