

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

Application of)
)
Intelsat North America LLC)
) File No. SAT-MOD-20081124-00218
To Modify Authorization to Operate the) (S2401)
Intelsat 706 Satellite at 54.85° E.L.)
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OPPOSITION TO PETITION TO DENY OR CONDITION

Intelsat North America LLC (“Intelsat”), by its attorneys, hereby opposes the Petition to Deny or Condition (“Petition”) filed by New Skies Satellites B.V. (“New Skies”) regarding the above-referenced application for authority to operate Intelsat 706 in the C- and Ku-bands at the 54.85° E.L. orbital location.¹ New Skies’ alleged interference concern is not new and, in any event, will be addressed through Intelsat’s continued compliance with existing conditions on its use of this orbital location. Intelsat anticipated that the Commission would condition grant of the pending modification application for Intelsat 706 on compliance with the existing conditions on use of the 54.85° E.L. orbital location and agrees to accept them.

By ignoring the non-interference condition that applies to Intelsat’s use of the 54.85° E.L. location and by reason of the International Telecommunication Union (“ITU”) Radio Regulations, New Skies is creating a mythical problem. Indeed, Intelsat has operated the technically similar Intelsat 702 satellite at 54.85° E.L. subject to the same conditions since

¹ See New Skies Satellites B.V. Petition to Deny or Condition, IBFS File No. SAT-MOD-20081124-00218 (filed Feb. 23, 2009) (“NSS Petition to Deny”).

February 23, 2004 without having received a single interference complaint. Neither the substitution of Intelsat 706 for Intelsat 702 nor New Skies' proposed future replacement of the adjacent NSS-703 satellite with NSS-5 and NSS-12 alters this interference analysis or the availability of existing recourse to remedy any interference.

As such, the International Bureau expeditiously should grant authority for Intelsat 706 to operate at 54.85° EL subject to the same tried and true conditions. Doing so poses no interference risk to adjacent satellites and serves the public interest by ensuring continuity of service to Intelsat's U.S. customers following the planned relocation of Intelsat 702.

I. NEW SKIES' INTERFERENCE CONCERNS ARE NOT NEW AND ARE FULLY ADDRESSED BY THE EXISTING CONDITIONS ON INTELSAT'S USE OF THE 54.85° E.L. ORBITAL LOCATION

New Skies' alleged interference concerns are not new. Five years ago, New Skies asked the Commission to reconsider the International Bureau's decision partially and conditionally to authorize operation of the Intelsat 702 satellite at the 54.85° E.L. orbital location.² New Skies now rehashes the same arguments in its current Petition. In both proceedings, New Skies alleges that Intelsat's proposed operation at 54.85° E.L. poses an interference risk to its operation at the adjacent 57° E.L. orbital location. As shown below, New Skies' Petition attempts to create an interference problem that does not exist by ignoring Commission conditions and ITU regulations, which preclude any possible harmful interference.

New Skies' interference concern is mooted by Intelsat's continued compliance with existing conditions on its use of this non-U.S. orbital location.³ As New Skies notes, the

² New Skies Satellites N.V., Petition for Reconsideration, IBFS File No. SAT-AMD-20031118-00331 (filed Mar. 23, 2004) ("NSS Petition for Reconsideration"). This petition remains pending.

³ *Intelsat LLC; Amendment to Application to Modify Space Station Authorization to Operate the INTELSAT 702 Satellite at 54.85° E.L.*, File Nos. SAT-AMD-20031118-00331,

Commission “heavily conditioned” Intelsat’s five year old authorization to operate at the 54.85° E.L. orbital location.⁴ Of particular importance is the condition that requires Intelsat to operate at 54.85° E.L. only on a non-harmful interference basis:

Intelsat LLC’s operations shall be on a non-harmful interference basis, i.e., Intelsat LLC shall not cause harmful interference to, and shall not claim protection from interference caused to it by any other lawfully operating satellites.⁵

Intelsat anticipated that the Commission would condition grant of the pending modification application for Intelsat 706 on compliance with the existing conditions on use of the 54.85° E.L. orbital location and agrees to accept them. Intelsat’s continued compliance with these conditions for its operations at 54.85° E.L fully resolves New Skies’ alleged interference concerns.

Moreover, ITU regulation ensures no harmful interference comes from Intelsat’s operation in this non-U.S. orbital location and such assurance will be also made explicit in the Commission authorization, as it is always the case in such circumstances. As New Skies recognizes, Intelsat’s use of 54.85° E.L. is authorized by the United States under Article 4.4 of the ITU Radio Regulations, pursuant to which Administrations may license operations on a non-harmful interference basis.⁶

Intelsat’s adherence to the coordination agreements of the administration of India further

(Continued . . .)

SAT-AMD-20040310-00029, SAT-AMD-20021127-00239, and SAT-MOD-20020923-00177 (stamp grant with conditions issued Mar. 19, 2004) (“Intelsat 54.85° EL Conditional Grant”).

⁴ NSS Petition to Deny at 3.

⁵ Intelsat 54.85° EL Conditional Grant, Condition 1.

⁶ NSS Petition to Deny at 9. ITU Radio Regulation 4.4 permits the FCC to license satellites without an ITU filing provided the license contains an express condition that the satellite “shall not cause harmful interference to, and shall not claim protections from harmful interference caused by, a station operating in accordance with the provisions of the Constitution, Convention and these Regulations.” ITU Radio Regulation 4.4.

mitigates any interference concerns. Just as with Intelsat 702, Intelsat will continue to adhere to existing coordination agreements when operating Intelsat 706 at 54.85° E.L. New Skies contends, however, that Intelsat's Ku-band operations at 54.85 E.L. are not fully covered by India's coordination agreements with the Kingdom of the Netherlands.⁷ To the extent that existing coordination agreements do not cover Intelsat 706's proposed operation, protection of New Skies' operations at 57° E.L. is ensured by the Commission's conditions and Article 4.4 of the ITU regulations.

Indeed, Intelsat has operated the Intelsat 702 satellite at 54.85° E.L. subject to the same conditions since February 23, 2004 without having received a single interference complaint. In particular, the NSS-703 satellite at 57° E.L. and Intelsat 702 at 54.85° E.L. both have operated during the last five years without any occurrence of harmful interference.⁸ Had the Commission denied Intelsat's request to operate Intelsat 702 at 54.85° E.L. based on New Skies' previous claim of possible interference, five years of service to customers – including U.S. Government customers – would have been lost and valuable spectrum would have remained fallow.

Accepting New Skies' current request to deny will lead to the same result.

Moreover, Intelsat's decision to substitute Intelsat 706 for Intelsat 702 raises no new interference concerns. New Skies suggests that Intelsat 706's "proposed power levels are significantly higher than" Intelsat 702. However, Intelsat 702 and Intelsat 706 are technically similar satellites and both can comply with the same operational limits to protect adjacent satellite operators. In addition to the requirement to operate on a "non-harmful interference

⁷ NSS Petition to Deny at 5-6.

⁸ New Skies also argues that Intelsat must present "a full and proper showing" of how it will comply with the non-interference requirements. NSS Petition to Deny at 10. Such a showing is unnecessary given that Intelsat's ability to operate on a non-interference basis has been demonstrated over the past five years of operation at 54.85° E.L.

basis,” Intelsat 706 will comply with the same limits on downlink EIRP density and uplink power density as the Commission imposed on Intelsat 702.

These limits are reproduced below in Table 1 for both C- and Ku-band.

**Table 1. Downlink EIRP Density and Uplink Power Density Limits
Applicable to the Intelsat 702 Operation**

Frequency Bands (MHz)	Maximum Downlink EIRP Density (dBW/Hz)	Maximum Uplink Power Density (dBW/Hz)
3700-4200	-45.0	-
5925-6425	-	-58.0
10950-11200 11450-11700 12500-12750	-30.1	-
14000-145000	-	-54.5

Contrary to New Skies’ claims, its proposed future deployment of NSS-5 and NSS-12 at the adjacent nominal 57° E.L. orbital location does not require any new conditions. New Skies states that its two newer satellites “have greater capabilities and coverages than the NSS-703 satellite.”⁹ However, under Intelsat’s and New Skies’ June 2004 coordination agreement, NSS-5 and NSS-12 operating at nominal 57° E.L will be susceptible to greater interference from the adjacent Intelsat satellite at 60° E.L. than from Intelsat 706 at 54.85° E.L. According to this agreement, both parties are subject to the downlink EIRP density and uplink power density limits given below in Table 2.

⁹ NSS Petition to Deny at ii.

**Table 2. Downlink EIRP Density and Uplink Power Density Limits
Applicable to the Operations of Intelsat at 60°E and New Skies at 57° E.L.**

Frequency Bands (MHz)	Maximum Downlink EIRP Density (dBW/Hz)	Maximum Uplink Power Density (dBW/Hz)
3700-4200	-36.0 (-32 with 3-day notification for most transponders)	-
5925-6425	-	-42.0
10950-11200 11450-11700 12500-12750	-26 (-22 with 10-day notification for several identified transponders)	-
14000-145000	-	-45

Table 2 defines the levels that have been accepted by New Skies for the interference from an Intelsat satellite located 3° away. Intelsat 706 at 54.85° E.L. will be 2.15° away from the New Skies satellite at 57° E.L. Therefore, the same interference levels will be produced by the Intelsat satellite at 60° E.L. and by Intelsat 706 if the limits applicable to the latter are reduced by $25\log(3/2.15) = 3.6$ dB with respect to those in Table 2. This would lead to the limits shown below in Table 3.

Table 3. Downlink EIRP Density and Uplink Power Density Limits that Would Be Applicable to INTELSAT 706 at 54.85° E.L. In Order for Interference to New Skies at 57° E.L. To Be Equal to That Agreed by New Skies for the Intelsat Satellite at 60° E.L.

Frequency Bands (MHz)	Maximum Downlink EIRP Density (dBW/Hz)	Maximum Uplink Power Density (dBW/Hz)
3700-4200	-39.6 (-35.6 with 3-day notification)	-
5925-6425	-	-45.6
10950-11200 11450-11700 12500-12750	-29.6 (-25.6 with 10-day notification)	-
14000-145000	-	-48.6

A comparison between Tables 1 and 3 shows that the limits under which Intelsat is currently authorized to operate Intelsat 702 at 54.85° E.L. produce lower interference than that agreed by New Skies with respect to the Intelsat operation at 60° E.L. Therefore, the conclusion reached

from Table 3, namely that Intelsat 706 operation at 54.85° E.L. will cause less interference to New Skies' operations at 57° E.L. than that produced by the Intelsat satellite at 60° E.L., remains valid regardless of which New Skies satellite is deployed at 57° E.L.¹⁰

Finally, in the unlikely event that operation of Intelsat 706 at 54.85° E.L. results in harmful interference to NSS-5 or NSS-12 or both, New Skies has adequate recourse mechanisms at its disposal. New Skies claims that the mechanism for seeking an end to harmful interference is "not at all clear."¹¹ The conditions on Intelsat's use of the 54.85° E.L. orbital location, however, specifically invoke the ITU's Radio Regulations.¹² Article 15 of the ITU's Radio Regulations provides New Skies with adequate and effective internationally recognized and accepted recourse.¹³ Intelsat is also willing immediately to respond to any interference concerns brought directly to its attention by New Skies.

II. CONCLUSION

The existing FCC-imposed conditions and ITU requirements on Intelsat's use of the 54.85° E.L. orbital location adequately protect all surrounding satellites, including NSS-5 and NSS-12 when they are eventually deployed, from harmful interference. Thus, Intelsat respectfully requests that the Commission dismiss New Skies' Petition to Deny or Condition and

¹⁰ New Skies further argues that Intelsat must analyze the possibility for interference when either New Skies or Intelsat relocates one or more of its spot beams. NSS Petition to Deny at 10-11. Regardless of whether Intelsat relocates its spot beams, there will be no harm to New Skies given the non-interference conditions imposed by the Commission and those applicable under Article 4.4 of the ITU regulations.

¹¹ NSS Petition to Deny at 3.

¹² See Further Amendment to Intelsat 702, File No. SAT-AMD-20031118-000331, Stamp Grant (Feb. 23, 2004), Condition 7.

¹³ Article 15 of the ITU Radio Regulations establishes a "procedure in case of harmful interference." ITU Radio Regulation, Article 15.

expeditiously grant Intelsat authority to operate Intelsat 706 at 54.85° E.L. subject to the same protective conditions applicable currently to Intelsat 702. Prompt approval will serve the public interest by ensuring continuity of service to U.S. customers following the planned relocation of Intelsat 702.

Respectfully submitted,

WILEY REIN LLP

By: /s/ Jennifer D. Hindin

Bert W. Rein
Jennifer D. Hindin
Carl R. Frank
Wiley Rein LLP
1776 K Street NW
Washington, DC 20006
TEL: 202.719.7000

Attorneys for Intelsat North America LLC

Dated: March 6, 2009

ENGINEERING CERTIFICATION

The undersigned hereby certifies to the Federal Communications Commission as follows:

- (i) I am the technically qualified person responsible for the engineering information contained in the foregoing Opposition,
- (ii) I am familiar with Part 25 of the Commission's Rules, and
- (iii) I have either prepared or reviewed the engineering information contained in the foregoing Opposition, and it is complete and accurate to the best of my knowledge and belief.

Signed:

/s/ Jose Albuquerque

Jose Albuquerque

March 6, 2009

Date

CERTIFICATE OF SERVICE

I hereby certify that, on this 6th day of March, 2009, a copy of the foregoing Opposition to Petition to Deny or Condition was served by electronic mail and hand delivery upon:

Joslyn Read
Vice President, Regulatory Affairs
SES NEW SKIES
2001 L Street, NW
Washington, DC 20036
202-478-7100

William M. Wiltshire
HARRIS, WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, NW
Washington, DC 20036
202-730-1300

/s/ _____
Kim Riddick