

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of

Horizons-3 License LLC

Application to Modify Authorization for
Horizons 3e (S2947)

File No. SAT-MOD- _____

APPLICATION TO MODIFY AUTHORIZATION FOR HORIZONS 3e

Horizons-3 License LLC (“Intelsat”),¹ pursuant to Section 25.117 of the Federal Communications Commission’s (“Commission” or “FCC”) rules,² hereby seeks to modify the authorization for the Horizons 3e satellite (Call Sign S2947).³ Specifically, this modification provides technical information reflecting the current design of the spacecraft, adds an additional frequency band, seeks two additional waivers, and updates International Telecommunication Union (“ITU”) filing information. With the exception of the additional frequency band, the waiver requests, and the ITU filing information provided herein, all information provided in the Legal Narrative of the original application remains unchanged,⁴ and Intelsat incorporates it by

¹ Horizons-3 License LLC is an indirect wholly owned subsidiary of Intelsat S.A.

² 47 C.F.R. § 25.117.

³ *See Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01236, SAT-MOD-20170113-00005 (May 5, 2017) (eliminating the continuity of service obligation imposed on Horizons 3e).

⁴ Horizons-3 License LLC, Application for Authority to Launch and Operate Horizons 3e, a Replacement Satellite with New Frequencies, at 169.0° E.L., File No. SAT-LOA-20151202-00080 (stamp grant July 6, 2016) (authorizing launch and operation of the Horizons-3 satellite and noting that the originally requested waivers of 47 C.F.R §§ 25.210(a)(3) and 25.210(i)(1) are

reference. Horizons 3e is scheduled for launch in Q1 2019 and will replace Intelsat 805 (call sign S2404) at 169.0° E.L.⁵

In accordance with the Commission's rules,⁶ this application has been filed electronically as an attachment to FCC Form 312 and Schedule S.

I. ADDITIONAL OPERATIONAL FREQUENCIES

In addition to the frequencies already authorized by the Commission for use on the Horizons 3e satellite, Intelsat seeks to add the 5850-5853.5 MHz band. The 5850-5853.5 MHz band will only be used for the tunable command link (Earth-to-space) and will not be used to provide service.

The following chart shows the frequencies that will be used by the Horizons 3e satellite, as well as the frequencies that currently are used by the Intelsat 805 satellite at 169.0° E.L.

	Intelsat 805	Horizons 3e
3400-3700 MHz	✓	
3700-4200 MHz	✓	✓
5850-5853.5 MHz	✓	✓
5853.5-5925 MHz	✓	
5925-6425 MHz	✓	✓
6425-6650 MHz	✓	
10850-11700 MHz		✓
12200-12250 MHz		✓

unnecessary due to the recent elimination of numerous Commission rules) *as modified by* Horizons-3 License LLC, Application to Modify Condition of Authorization for Horizons 3e, File No. SAT-MOD-201701113-00005 (stamp grant May 4, 2017) (granting waiver of the continuity of service obligation with respect to the 12.25-12.5 GHz and 14.25-14.5 GHz frequency bands).

⁵ See *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01139, SAT-MOD-20151020-00072 (Feb. 26, 2016).

⁶ 47 C.F.R. §§ 25.117(b), (c).

12250-12500 MHz		✓
12500-12750 MHz	✓	✓
12920-13250 MHz		✓
13750-13997 MHz		✓
13997-14000 MHz		✓
14000-14250 MHz	✓	✓
14250-14500 MHz		✓

II. WAIVER REQUESTS

Intelsat requests waiver of Section 25.210(f) of the Commission’s rules, which requires full frequency reuse for Horizons 3e’s use of the 10850-10922 MHz and 11523-11577 MHz bands.⁷ Additionally, to the extent required, Intelsat also seeks waiver of footnote US245 to the U.S. Table of Frequency Allocations, which limits the use of the 5850-5925 MHz frequency band to “international inter-continental systems.”⁸

Under Section 1.3 of the Commission’s rules, the Commission has authority to waive its rules “for good cause shown.”⁹ Good cause exists if “special circumstances warrant a deviation from the general rule and such deviation will serve the public interest” better than adherence to the general rule.¹⁰ In determining whether waiver is appropriate, the Commission should “take into account considerations of hardship, equity, or more effective implementation of overall policy.”¹¹ As shown below, there is good cause here to waive footnote US245 to the U.S. Table of Frequency Allocations and Section 25.210(f).

⁷ 47 C.F.R. § 25.210(f).

⁸ See 47 C.F.R. § 2.106 fn. US245.

⁹ 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

¹⁰ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

¹¹ *WAIT Radio*, 418 F.2d at 1159.

a. Section 25.210(f)

Horizons 3e employs full frequency reuse through the use of orthogonal polarization within the same beam and/or through the use of spatially isolated beams with the exception of the 10850-10922 MHz and 11523-11577 MHz bands. As such, Horizons 3e is compliant with Section 25.210(f) of the Commission's rules in all bands except for 10850-10922 MHz and 11523-11577 MHz. In total, the Horizons 3e satellite utilizes 3480 MHz of uplink and downlink spectrum, of which only 3.6% is not fully reused.

In this case, there is good cause for granting the requested waiver. The full frequency reuse requirements of Section 25.210(f) were designed to ensure that satellites maximize the use of their transponder capacity to benefit the public.¹² The 10850-10922 MHz and 11523-11577 MHz frequency bands were added to the satellite to address a specific customer requirement. Full frequency reuse in these bands was not possible, however, because the launch mass and power constraints on the satellite would have been exceeded had Intelsat included the necessary hardware that would have permitted full frequency reuse in the 10850-10922 MHz and 11523-11577 MHz bands. These constraints resulted in Intelsat only using 10850-10922 MHz and 11523-11577 MHz in one polarization.

Intelsat's waiver request applies to a *de minimis* portion of Horizons 3e's bandwidth – less than 4% – that is not compliant with Section 25.210(f), and this waiver will allow Intelsat to meet additional customer demand that would otherwise likely go unserved. Accordingly, there is

¹² See *Licensing of Space Stations in the Domestic Fixed Satellite Service and Related Revisions to Part 25 of the Rules and Regulations*, Report and Order, 54RR2d 577, ¶ 69 (1983).

good cause for waiver of Section 25.210(f) in this case. Moreover, waiver of Section 25.210(f) is consistent with Commission precedent.¹³

b. U.S. Table of Frequency Allocations Footnote US245

In the event that Intelsat may use a U.S. earth station for commanding Horizons 3e, good cause exists here to grant a waiver, to the extent necessary, of US245 to allow Horizons 3e to provide a command link in the 5850-5925 MHz band on hardship grounds. Footnote US245 assumes the use of a paired downlink band within the 5850-5925 MHz uplink band, and requires the paired link to be used for international, intercontinental transmissions. In the instant case, however, the satellite's command link, 5850-5853.5 MHz, is an unpaired Earth-to-space link, and therefore cannot comply with US245.¹⁴ The purpose of the rule, to limit the number of FSS antennas using these frequencies in the United States, will not be undermined by grant of the waiver to allow a command uplink earth station in the United States. For this reason, there is good cause for waiver of footnote US245 of the Table of Allocations in this case.

III. ITU FILINGS

Horizons 3e's operations in the 3700-4200 MHz, 5925-6425 MHz, 12250-12750 MHz, and 14000-14500 MHz; 11450-11700 MHz; and 13750-14000 MHz bands have been coordinated and notified under the Administration of the United States' ITU filings USASAT-60J, USASAT-55L, and USASAT-55V, respectively.

¹³ See *Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01228, SAT-LOA-20150327-00016 (Mar. 31, 2017) (granting waiver of 47 C.F.R. § 25.210(f) on the basis of satellite weight limitations and *de minimis* non-frequency reuse for Intelsat 33e).

¹⁴ Moreover, Horizons 3e's use of 5850-5853.5 MHz for the command link from a U.S. earth station, without a paired downlink in the United States would not impede non-FSS use of these frequencies in the United States any more than a rule compliant use would.

Horizons 3e's operation in the frequency bands 12750-13250 MHz, 10700-10950 MHz, and 11200-11450 MHz bands have been coordinated and notified under the ITU filings of the Administration of the United States' USASAT-101C and the Administration of Papua New Guinea's NEW DAWN FSS-7. The Administration of Papua New Guinea has authorized use of NEW DAWN FSS-7 by Intelsat.

Horizons 3e's operation in the frequency bands 5850-5853.5 MHz, 10950-11200 MHz and 12200-12250 MHz will use the ITU filings of the Administration of the United States' USASAT-60V and the Administration of Papua New Guinea's NEW DAWN 43. The administration of Papua New Guinea has authorized use of NEW DAWN 43 by Intelsat.

Intelsat respectfully requests that the United States Administration state its non-objection to Papua New Guinea's use of Horizons 3e for purposes of bringing into use and maintaining the NEW DAWN FSS-7 and NEW DAWN 43 filings.

IV. GRANT OF THIS APPLICATION WILL SERVE THE PUBLIC INTEREST

Grant of this application will serve the public interest by ensuring continuity of service and providing additional capacity in the United States and Asia Pacific region from the nominal 169.0° E.L. orbital location.

III. CONCLUSION

Based on the foregoing, Intelsat respectfully requests that the Commission grant this modification application.

Respectfully submitted,

/s/ Susan H. Crandall

Susan H. Crandall
Associate General Counsel
Intelsat Corporation

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

June 22, 2017

Exhibit A

FCC Form 312, Response to Question 34: Foreign Ownership

The Commission previously approved foreign ownership in Intelsat License LLC (“Intelsat”), in the *Intelsat-Serafina Order*.¹ In December 2009 and October 2011, the Commission also approved *pro forma* changes in Intelsat’s foreign ownership.² There have been no other material changes to Intelsat’s foreign ownership since the date of the *Intelsat-Serafina Order*.

¹ *Intelsat Holdings, Ltd. and Serafina Holdings Limited, Consolidated Application for Consent to Transfer of Control of Holders of Title II and Title III Authorizations*, Memorandum Opinion and Order, 22 FCC Rcd 22151 (2007).

² *See Intelsat North America LLC, Intelsat LLC, PanAmSat Licensee Corp., PanAmSat H-2 Licensee Corp., and Intelsat New Dawn Company, Ltd., Applications for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20091125-00128, SAT-T/C-20091125-00124, SAT-T/C-20091125-00127, SAT-T/C-20091125-00125, SAT-T/C-20091125-00126, SES-T/C-20091125-01505, SES-T/C-20091125-01502, SES-T/C-20091125-01506, SES-T/C-20091125-01504 and SES-T/C-20091125-01503 (granted Dec. 3, 2009); *Intelsat Application for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20110810-00160, SAT-T/C-20110811-00161, SES-T/C-20110811-00948, SES-T/C-20110812-00963 (granted Oct. 13, 2011), and 0004825139 (granted Oct. 19, 2011).

Exhibit B

FCC Form 312, Response to Question 36: Cancelled Authorizations

Intelsat License LLC (“Intelsat”) has never had an FCC license “revoked.” However, on June 26, 2000, the International Bureau “cancelled” two Ka-band satellite authorizations issued to a former Intelsat entity, PanAmSat Licensee Corp. (“PanAmSat”),¹ based on the Bureau’s finding that PanAmSat had not satisfied applicable construction milestones.² In that same order, the Bureau denied related applications to modify the cancelled authorizations. PanAmSat filed an application for review of the Bureau’s decision, which the Commission denied, and subsequently filed an appeal with the United States Court of Appeals for the District of Columbia Circuit, which was dismissed in January 2003 at PanAmSat’s request. Notwithstanding the fact that the Bureau’s action does not seem to be the kind of revocation action contemplated by question 36, Intelsat is herein making note of the decision in the interest of absolute candor and out of an abundance of caution. In any event, the Bureau’s action with respect to PanAmSat does not reflect on Intelsat’s basic qualifications, which are well-established and a matter of public record.

¹ All licenses previously held by PanAmSat Licensee Corp. have been assigned to Intelsat License LLC. See IBFS File Nos. SAT-ASG-20101203-00252 (granted Dec. 23, 2010), SES-ASG-20101203-0150 (granted Dec. 20, 2010), and SES-ASG-20101206-01502 (granted Dec. 20, 2010).

² See *PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 18720 (IB 2000).

Exhibit C
FCC Form 312, Response to Question 40:
Officers, Directors, and Ten Percent or Greater Shareholders

The officers and directors/managers of Intelsat License LLC are as follows:

Officers:

Jacques Kerrest, Chairman
Franz Russ, Deputy Chairman
Michelle Bryan, Secretary
Mirjana Hervy, Director, Finance

Board of Managers:

Jacques Kerrest
Franz Russ
Michelle Bryan

The business address of all Intelsat License LLC officers and members of the Board of Managers is:

4 rue Albert Borschette
L-1246 Luxembourg

Intelsat License LLC is a Delaware limited liability company that is wholly owned by Intelsat License Holdings LLC, also a Delaware limited liability company. Intelsat License Holdings LLC is wholly owned by Intelsat Jackson Holdings S.A., a Luxembourg company. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat (Luxembourg) S.A., a Luxembourg company. Intelsat (Luxembourg) S.A. is wholly owned by Intelsat Investments S.A., a Luxembourg company. Intelsat Investments S.A. is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by Intelsat Investment Holdings S.à r.l., a Luxembourg company. Intelsat Investment Holdings S.à r.l. is wholly owned by Intelsat S.A., a Luxembourg company. Each of these entities may be contacted at the following address: 4 rue Albert Borschette, L-1246 Luxembourg.

Intelsat S.A.'s ownership was approved by the Commission as part of the *Intelsat-Serafina Order* and the recent Intelsat Pro Forma and is incorporated by reference. See *Intelsat Holdings, Ltd. and Serafina Holdings Limited, Consolidated Application for Consent to Transfer of Control of Holders of Title II and Title III Authorizations*, Memorandum Opinion and Order, 22 FCC Rcd 22151 (2007) (“*Intelsat-Serafina Order*”); *Intelsat Application for Pro Forma Transfer of Control*, File Nos. SAT-T/C-20110810-00160, SAT-T/C-20110811-00161, SES-T/C-20110811-00948, SES-T/C-20110812-00963 (granted Oct. 13, 2011), and 0004825139 (granted Oct. 19, 2011) (“*Intelsat Pro Forma*”). On May 16, 2012, the International Bureau granted an application to transfer control of Intelsat pursuant to a public offering of newly issued voting shares by Intelsat, subsequent voting share sales by current shareholders and possible private placements of newly issued voting shares. *In the Matter of Intelsat Global Holdings, S.A., Applications to Transfer Control of Intelsat Licenses and Authorizations from BC Partners Holdings Limited to Public Ownership*, Order, 27 FCC Rcd 5226 (IB 2012). This change of control has not yet been fully consummated.