Before the
**Federal Communications Commission**
Washington, DC 20554

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| In the Matter of<br><br>Intelsat License LLC<br><br>Application to Modify Authorization for Intelsat 9 (S2380) | File No. SAT-MOD- _____ |

**APPLICATION OF INTELSAT LICENSE LLC**
**TO MODIFY AUTHORIZATION FOR INTELSAT 9**

Intelsat License LLC ("Intelsat"), pursuant to Section 25.117 of the rules of the Federal Communications Commission ("Commission" or "FCC"),[1] hereby seeks to modify the authorization for the Intelsat 9 satellite (Call Sign S2380). Specifically, this modification seeks authority to (i) redeploy Intelsat 9 to, and operate the satellite in inclined orbit at, 50.0° W.L. (310.0° E.L.);[2] and (ii) further extend the Intelsat 9 license term, and previously granted technical waivers, through October 31, 2022.[3] Grant of this application will enable Intelsat to partially

[1] 47 C.F.R. § 25.117.

[2] Intelsat 9 began inclined orbit operations in 2012. *See* Letter from Susan H. Crandall, Assistant General Counsel, Intelsat Corporation, to Marlene H. Dortch, Secretary, FCC, File No. SAT-MOD-20120703-00110 (Nov. 7, 2012).

[3] Specifically, to the extent necessary, Intelsat seeks an extension of the previously granted waivers of 47 C.F.R. §§ 25.114(d)(14)(ii) and 25.283(c), which require applicants to demonstrate that all stored energy will be removed at the spacecraft's end of life for the reasons previously stated. *See Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01236, File No. SAT-MOD-20161110-00105 (May 5, 2017) ("*2016 Modification*"). The FCC revised Rule 25.283(c) to remove the word "all" and thus permit a de minimis residual amount of fuel that cannot be vented, which may obviate the need to extend the previously granted waiver. Further, the change in satellite orbital location does not affect previously approved post-mission disposal plans for Intelsat 9, and thus extension of the waiver would appear to be unnecessary. *See* Intelsat License LLC Application to Modify Authorization for Galaxy 11, Stamp Grant, File No. SAT-MOD-20181231-00095, n.3 (2019) (finding it "unnecessary" to address Intelsat's request to continue previously-approved waivers of Sections 25.114(d)(14)(ii) and 25.283(c),

replace capacity previously provided at this location by Intelsat 29e (Call Sign S2913).

In accordance with the Commission's rules, this application has been filed electronically as an attachment to FCC Form 312.[4] Intelsat provides the technical information relating to the proposed modification on Schedule S and in narrative form in the attached Engineering Statement.[5]

Consistent with Section 1.62 of the Commission's rules,[6] Intelsat will continue to operate the Intelsat 9 satellite pursuant to the terms and conditions of its expiring license until such time as the Commission makes a determination with respect to this request.

## I. REQUEST TO RELOCATE INTELSAT 9 TO 50.0° W.L.

Intelsat requests authority to relocate Intelsat 9 to, and operate the satellite in inclined orbit at, 50.0º W.L. Intelsat 9 is currently licensed to operate at 66.15° E.L.[7] and, pursuant to Special Temporary Authority, began drifting from 66.15° E.L. to 50.0° W.L. on October 1, 2019.[8] The drift to 50.0° W.L. is expected to take approximately eight months.

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because "[t]he waivers have already been granted and a change in satellite orbital location does not affect Galaxy 11's post-mission disposal plans."). However, to the extent the Commission finds that such waiver is necessary, and out of an abundance of caution, Intelsat requests continued waiver of Sections 25.114(d)(14)(ii) and 25.283(c) for the reasons previously stated. *See 2016 Modification*.

4 47 C.F.R. §§ 25.117(b), (c).

5 *See* 47 C.F.R. § 25.114.

6 47 C.F.R. § 1.62 (permitting continued operations by a licensee where there is a proper and timely pending application for renewal of the license).

7 *Application of Intelsat License LLC to Modify Authorization for Intelsat 9* (S2380), Stamp Grant, File No. SAT-MOD-20180305-00019, Call Sign S2380 (July 17, 2019) ("*Intelsat 9 Stamp Grant*").

8 *See, e.g., Satellite Policy Branch Information; Actions Taken,* Public Notice, Report No. SAT-01426, File No. SAT-STA-20190925-00100 (Nov. 8, 2019).

During the drift of Intelsat 9, Intelsat will utilize only the satellite's telemetry, tracking, and command ("TT&C") frequencies and will follow industry practices for coordinating TT&C transmissions during the relocation process. The satellite's specific TT&C frequencies are as follows: 14.0005 GHz and 14.4945 GHz in the uplink; and 11.7005 GHz and 11.7020 GHz in the downlink.

At the 50.0° W.L. location, Intelsat 9 will be nominally co-located with Intelsat 902 (Call Sign S2406).[9] The chart below illustrates the frequencies that (i) will be used by Intelsat 9, some of which are identical to frequencies previously operated on Intelsat 29e (Call Sign S2913) at 50.0° W.L.; (ii) will be used by Intelsat 902 at 50.1° W.L.; and (iii) were previously used by Intelsat 29e at 50.0° W.L. "Common Heritage" frequencies under the International Telecommunications Satellite Organization ("ITSO") Agreement are highlighted in gray.

| | **Intelsat 9** | **Intelsat 902** | **Intelsat 29e** |
|---|---|---|---|
| 3625-3700 MHz | | ✓ | |
| 3700-4200 MHz | ✓ | ✓ | ✓ |
| 5850-5925 MHz | | ✓ | ✓ |
| 5925-6425 MHz | ✓ | ✓ | ✓ |
| 6425-6725 MHz | | ✓ | ✓ |
| 10.7-10.95 GHz | | | ✓ |
| 10.95-11.2 GHz | | | ✓ |
| 11.2-11.45 GHz | | ✓ | ✓ |
| 11.45-11.7 GHz | ✓ | | ✓ |
| 11.7-11.95 GHz[10] | ✓ | ✓ | ✓ |
| 11.95-12.2 GHz | ✓ | | ✓ |
| 12.2-12.5 GHz | | | ✓ |
| 12.75-13.25 GHz | | | ✓ |
| 13.75-14.0 GHz | | | ✓ |
| 14.0-14.5 GHz | ✓ | | ✓ |

[9] Intelsat 902 is currently drifting to 50.1° W.L. *See, e.g., Satellite Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01440, File No. SAT-STA-20191114-00132 (Jan. 17, 2020).

[10] In accordance with the International Table of Allocations, Intelsat will only utilize the 11.7-11.95 GHz frequency band in Region 2.

| | | | |
|---|---|---|---|
| 17.3-17.55 GHz | | ✓ | ✓ |
| 19.7-20.2 GHz | | | ✓ |
| 29.5-30.0 GHz | | | ✓ |

## II. REQUEST TO PARTIALLY FULFILL REPLACEMENT EXPECTANCY FOR INTELSAT 29e AT 50.0º W.L.

By relocating Intelsat 9 from 66.15º E.L. to 50.0º W.L., Intelsat intends to fulfill its replacement expectancy for several C- and Ku-band frequencies previously utilized at the nominal 50° W.L. orbital location by Intelsat 29e. Following the in-orbit failure of Intelsat 29e and the full cessation of operations in all assigned frequencies bands due to back-to-back anomalies on April 7 and 9, 2019, Intelsat informed the Commission that it was not waiving or otherwise relinquishing its C-, Ku-, or Ka-band frequency assignments at the 50.0º W.L. location.[11] Intelsat further notified the FCC of its intention to bring satellites with C-, Ku-, and Ka-band capacity into operation at this location, including plans to relocate an on-orbit satellite with C- and Ku-band frequencies within 18 months to restore service to customers.[12] Intelsat therefore requested, to the extent necessary, that the Commission retain Intelsat's replacement expectancy at 50º W.L. while Intelsat prepared to bring satellites into operation at this location.[13]

Intelsat 9 is currently authorized to operate at 66.15° E.L. using most of the same C- and Ku-band frequencies as Intelsat 29e, including the following "Common Heritage" frequencies subject to the ITSO Agreement: 3700-4200 MHz, 5925-6425 MHz, 11.45-11.7 GHz,

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11 *See* Letter from Susan H. Crandall, Associate General Counsel, Intelsat US LLC, to Ms. Marlene H. Dortch, Secretary, FCC, File No. SAT-MOD-20160916-00091 (Jun. 28, 2019) ("Intelsat 29e Notification Letter").

12 *Id.*

13 *Id.*

11.7-11.95 GHz, and 14.0-14.5 GHz.[14] Intelsat began the drift of Intelsat 9 to 50.0º W.L. on October 1, 2019 and the satellite will arrive on-station in May 2020.

While the Intelsat 9 satellite will restore a portion of the lost Intelsat 29e capacity, it will not provide service in all frequency bands authorized to Intelsat 29e. Intelsat therefore requests, to the extent necessary, that the Commission continue to preserve Intelsat's replacement expectancy for the remaining frequency bands, including the outstanding "Common Heritage" Ku-band.[15]

## III. REQUEST FOR EXTENSION OF LICENSE TERM

Intelsat seeks to extend the license term for the Intelsat 9 satellite through October 31, 2022. Intelsat 9 commenced operation on September 6, 2000.[16] The current July 31, 2021 license term expiration for Intelsat 9 is 15 months before the current expected end of service life of the satellite, which was most recently estimated to be October 2022. To the extent the satellite's projected end of service life is extended in the future, Intelsat will seek an additional extension of the license term.

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[14] *See Intelsat 9 Stamp Grant.* Intelsat 9 will not operate in the 10.95-11.2 GHz band, which comprises the remaining "Common Heritage" frequencies previously authorized to Intelsat 29e. Intelsat preserves its request to retain replacement expectancy for these frequencies.

[15] *See Application of Intelsat License LLC to Launch and Operate Intelsat 29e, a Replacement Satellite with New Frequencies,* Stamp Grant, File Nos. SAT-LOA-20130722-00097, SAT-AMD-20140718-00087 (May 21, 2015).

[16] *See* Letter from Joseph A. Godles, Counsel to PanAmSat Licensee Corp., to Ms. Magalie R. Salas, FCC, File No. SAT-LOA-19990812-00081 (Jan. 12, 2001) (certifying that the PAS-23 spacecraft had been successfully placed into orbit). The PAS-23 satellite was subsequently renamed Intelsat 9. *See* Letter from Susan H. Crandall, Intelsat Corporation, to Marlene H. Dortch, FCC, Intelsat North America LLC and PanAmSat Licensee Corp., Notification of New Space Station Names (filed Jan. 8, 2007).

## IV. PUBLIC INTEREST SHOWING

Grant of this modification application to relocate and extend the license term of Intelsat 9 is in the public interest because it will allow Intelsat to replace capacity at 50.0° W.L., as well as provide that capacity beyond Intelsat 9's current license term expiration date of July 31, 2021.

Grant of this relocation request will not result in an increased risk of harmful interference. As noted above, Intelsat will operate only the above-listed TT&C frequencies during the drift and will coordinate its TT&C transmissions with operators of satellites in the drift path. Should any interference occur during the drift, Intelsat will take all reasonable steps to eliminate such interference. Intelsat will operate Intelsat 9's communications payload and TT&C frequencies at 50.0° W.L. in conformance with existing coordination agreements and the FCC's rules governing operations vis-à-vis adjacent locations.

Grant of this relocation request will permit Intelsat to restore some of the capacity at 50.0° W.L. that was affected by the unforeseen loss of Intelsat 29e earlier this year. The Intelsat 9 satellite is an on-orbit satellite with payloads that overlap most of Intelsat 29e's C and Ku service bands.[17] Additionally, grant of the license term extension request will allow Intelsat to maximize the use of Intelsat 9, which has more than a year of useful life remaining beyond the current license term's expiration date. The Intelsat 9 satellite's subsystems and solar panels are functioning normally, and there are no single points of failure on the satellite that would affect the ability to de-orbit the satellite. Additionally, the satellite's TT&C functions are operating normally, and all the payload is operational.[18] Extending the license term will promote the

[17] As mentioned above, the Intelsat 9 satellite will not be providing service in the 10.95-11.2 GHz band.

[18] The Xenon Ion propulsion system on Intelsat 9 is non-operational. Intelsat uses liquid propulsion for all East-West station-keeping of Intelsat 9.

continued efficient use of orbital resources and is consistent with prior decisions by the Commission to extend satellite license terms.[19]

## V. WAIVER REQUEST

Intelsat requests waiver of Section 2.106, Footnote NG52 of the U.S. Table of Allocations, which restricts use of the 11.45-11.7 GHz band by non-federal Fixed Satellite Service ("FSS") in the geostationary orbit to international systems only.[20]

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown."[21] 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.[22] In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy."[23] Additionally, a waiver of the Table of Allocations is generally granted "when there is little potential interference into any service authorized under the Table of Frequency allocations and when the nonconforming operator accepts any interference from authorized services."[24]

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19 *See, e.g., Policy Branch Information; Actions Taken*, Public Notice, Report No. SAT-01199, DA 16-1251, File Nos. SAT-MOD-20180305-00019, SAT-MOD-20160805-00079, SAT-MOD-20160816-00084, and SAT-MOD-20160906-00088 (Nov. 4, 2016) (extending license terms of the Intelsat 9, Intelsat 904, Intelsat 902, and Intelsat 901 satellites, respectively).

20 47 C.F.R. § 2.106, n. NG52.

21 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

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

23 *WAIT Radio*, 418 F.2d at 1159.

24 *See The Boeing Company*, Order and Authorization, 16 FCC Rcd 22645, ¶ 12 (2001); *Application of Fugro-Chance, Inc. for Blanket Authority to Construct and Operate a Private Network of Receive-Only Mobile Earth Stations*, Order and Authorization, 10 FCC Rcd 2860, ¶ 2 (1995) (authorizing Mobile Satellite Service in the C-band). *See also Application of Motorola Satellite Communications, Inc. for Modification of License*, Order and Authorization, 11 FCC

Good cause exists to waive the international-only requirement for the 11.45-11.7 GHz band on Intelsat 9. The purpose of NG52 is to limit the number of the FSS earth stations with which the co-primary Fixed Service ("FS") station would need to coordinate.[25] The International Bureau has found that waiving NG52 would not undermine the purpose of the rules if the party seeking waiver: (1) will be utilizing earth stations that are receive-only in these bands and thus "not capable of causing interference into FS stations" operating in the bands; and (2) agrees to "accept any level of interference from FS stations" in these bands.[26]

With respect to the 11.45-11.7 GHz band, grant of the requested waiver satisfies these criteria and would be consistent with precedent, including prior waiver of NG52 for Intelsat 29e at 50.0° W.L.[27] The earth stations communicating with Intelsat 9 will not transmit in this band, and Intelsat agrees to accept any level of interference into those earth stations from FS stations in the band. Intelsat will provide services in the 11.45-11.7 GHz frequency band in the United States and its territories only on a non-interference/non-protected basis. Accordingly, the FSS

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Rcd 13952, ¶ 11 (1996) (authorizing service to fixed terminals in bands allocated for mobile satellite service).

[25] *See Amendment of Part 2 of The Commission's Rules to Conform, to the Extent Practicable, with the Geneva Radio Regulations, as revised by the Space WARC, Geneva*, Report and Order, 26 RR 2d 1257, ¶¶ 35-38 (1973). *See also EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 83º W.L. Orbital Location*, Order and Authorization, 20 FCC Rcd 919, ¶ 9 (2004) ("*EchoStar Order*").

[26] *EchoStar Order* ¶ 13 (waiving the international-only restriction for passive, receive-only earth station operations in the 11.45-11.7 GHz band).

[27] *See Intelsat License LLC Application to Modify Authorization for Intelsat 29e*, Stamp Grant, File No. SAT-MOD-20160916-00091, Condition 20 (Jan. 26, 2017). *See accord*, *DIRECTV Enterprises, LLC, Fleet Management Notice for SKY-B1 Satellite*, Stamp Grant, File No. SAT-MOD-20170221-00019, Condition 10 (May 11, 2017).

earth stations operating in these bands pose no interference concerns with respect to, and need not be coordinated with, co-frequency FS stations located within United States and its territories.

Intelsat also agrees to abide by customer notification requirements that the International Bureau has previously imposed when granting waivers of NG52.[28] Intelsat will inform its customers in writing, including any customers receiving end-user services from resellers accessing capacity on Intelsat 9, of the potential for interference from FS operations in the 11.45-11.7 GHz band.

## VI. INTELSAT ACCEPTS SECTION 316 PETITION CONDITIONS

Intelsat understands and accepts that its license to operate Intelsat 9 at 50.0° W.L. in the 3700-4200 MHz, 5925-6425 MHz, 11.45-11.7 GHz, 11.7-11.95 GHz, and 14.0-14.5 GHz bands will be conditioned as follows:

- Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the ITSO that was approved by the ITSO Twenty-Fifth Assembly of Parties, as amended.

- No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-Fifth Assembly of Parties, as amended.[29]

## VII. 11.45-11.7 GHZ FREQUENCY BAND

Intelsat understands that operations in the 11.45-11.70 GHz frequency band are subject to certain limitations and obligations, which Intelsat accepts and will fulfill. Specifically, Intelsat accepts the following condition:

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[28] *See, e.g., id.*; *Intelsat North America Request for Waiver*, Stamp Grant, File No. SAT-MOD-20050610-00122, Condition 3 (Sept. 30, 2005); *EchoStar Order* ¶ 13.

[29] *See Petition of the International Telecommunications Satellite Organization under Section 316 of the Communications Act, as Amended*, Order of Modification, 23 FCC Rcd 2764, ¶¶ 11-13 (2008).

- Intelsat's use of the 11.45-11.70 GHz band (space-to-Earth) is subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.

## VIII. REQUEST FOR GRANT WITHOUT MILESONES OR A BOND

Because Intelsat 9 is already in-orbit and operating, grant of this modification application is not subject to milestone conditions, and Intelsat is not required to post a bond under Sections 25.164(a) and 25.165 of the Commission's rules.[30]

## IX. CONCLUSION

For the reasons set forth above, Intelsat respectfully requests that the Commission grant this modification application.

Respectfully submitted,

Intelsat License LLC

By: */s/ Susan H. Crandall*

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February 26, 2020

[30] *See* 47 C.F.R. §§ 25.164(a) and 25.165.

## Exhibit A

## FCC Form 312, Response to Question 34: Foreign Ownership

The Commission previously approved Intelsat's ownership structure, including foreign ownership.[1] There have been no material changes to Intelsat's ownership since the *2018 Pro Forma*.

[1] *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-20180627-00048, SAT-T/C-20180627-00049, SES-T/C-20180627-01430, SES-T/C-20180627-01436, SES-T/C-20180627-01433 (granted Jun. 29, 2018), 0008216564 (granted Jun. 28, 2018) and 0037-EX-TU-2018 (granted Jun. 29, 2018) ("*2018 Pro Forma*").

**Exhibit B**

**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: | Board of Managers: |
|---|---|
| David Tolley, Chairman | David Tolley |
| José Toscano, Deputy Chairman | José Toscano |
| Michelle Bryan, Secretary | Michelle Bryan |
| Mirjana Hervy, Director, Finance | |

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 indirectly wholly owned by Intelsat S.A. Specifically, Intelsat License LLC is wholly owned by Intelsat License Holdings LLC, also a Delaware limited liability company. Intelsat License Holdings LLC is wholly owned by Intelsat Ventures S.à r.l., a Luxembourg company, which is in turn wholly owned by Intelsat Alliance LP, a Delaware limited partnership. Intelsat Alliance LP is indirectly wholly owned by Intelsat Jackson Holdings S.A., a Luxembourg company. Intelsat Jackson Holdings S.A. is wholly owned by Intelsat Connect Finance S.A., a Luxembourg company, which in turn is wholly owned by Intelsat Envision Holdings LLC, a Delaware limited liability company. Intelsat Envision Holdings LLC is wholly owned by Intelsat (Luxembourg) S.A., a Luxembourg company. Intelsat (Luxembourg) S.A. is wholly owned by Intelsat Investments S.A., a Luxemburg company, which in turn is wholly owned by Intelsat Holdings S.A., a Luxembourg company. Intelsat Holdings S.A. is wholly owned by 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. is a publicly traded company. To the best of Intelsat's knowledge, and with the exception of BC Partners Holdings Limited ("BCP"), described below, no person or entity holds a ten percent or greater ownership interest in Intelsat S.A. as of October 16, 2019.

Name: BCP
Address: Heritage Hall, Le Marchant Street, St Peter Port, Guernsey, Channel Islands
Citizenship: Guernsey
Indirect Interest: Approximately 39-40%[1]

[1] The exact indirect interest held by BCP is subject to fluctuation as Intelsat S.A.'s stock is publicly traded.