

Exhibit A

Request for Modification of ViaSat-2

ViaSat is currently authorized to access the United States market using the ViaSat-2 GSO spacecraft, under the authority of the United Kingdom at 69.9° W.L. using the 18.3-19.3 GHz and 19.7-20.2 GHz downlink band segments, and the 28.1-29.1 GHz and 29.5-30.0 GHz uplink band segments.¹ By this application, ViaSat seeks to modify its market access authorization for the ViaSat-2 satellite to add the 27.5-28.1 GHz and 17.7-18.3 GHz frequencies.² The 27.5-28.1 GHz portion is within the 850 MHz band segment (27.5-28.35 GHz) that is available for fixed-satellite service (“FSS”) under the Commission’s longstanding band plan for the Ka band.³

With ViaSat-2 being almost fully constructed and scheduled for launch by the first quarter of 2017, ViaSat is preparing for the commencement of commercial service during the summer of 2017. Doing so requires the construction of a number of critical broadband aggregation and interconnection earth stations that will operate in the band segments covered by this application, as well as in the other band segments for which market access has been granted. To enable satisfaction of the one-year earth station construction deadline in Section 25.133(a)(1), those applications are being filed in the near term, approximately 16 months before the expected in-service date of ViaSat-2. This modification application is being filed before those earth station applications are submitted.

ViaSat-2 represents the second generation of ViaSat’s advanced satellite broadband technology, which will enable greater capacity and throughput for a range of communications services to both businesses and consumers, with the mix of services and end users being driven by market demand. ViaSat’s advanced satellite broadband technologies already have reduced the “cost per bit” of broadband service to make satellite-delivered broadband service fully competitive, from a performance and a price perspective, with many terrestrial alternatives. This is made possible, in part, by having access to and using the 28.1-28.35 GHz band segment and the corresponding downlink frequencies on ViaSat’s first-generation advanced network.

¹ See IBFS File Nos. SAT-LOI-20130319-00040 (granted Dec. 12, 2013); SAT-MOD-20141105-00121 & SAT-AMD-20150105-00002 (granted Apr. 15, 2015) (“ViaSat-2 Minor Modification”); Call Sign: 2902.

² In the ViaSat-2 Minor Modification, ViaSat disclosed the satellite’s capability of operating on the 17.7-18.3 GHz and 27.5-28.1 GHz frequencies, and indicated that U.S. market access was not being sought at the time. See ViaSat-2 Minor Modification, Exhibit A at 1, n.1.

³ See *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission’s Rules To Redesignate the 27.5-29.5 GHz Frequency Band, To Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 11 FCC Rcd 19005 ¶¶ 42, 44 (1996) (“28 GHz First Report and Order”) (designating the FSS as secondary to LMDS and having “licensing priority vis-a-vis any third service allocated domestically or internationally in the band”).

To illustrate, ViaSat-1, which was brought into operation in 2011, supports a throughput of approximately 150 Gbit/s. When it was launched, ViaSat-1 had more than 10 times the throughput of the other Ka-band satellites in orbit at that time.⁴ By also using the 27.5-28.1 GHz and 17.7-18.3 GHz band segments, and a network of earth stations to aggregate and interconnect traffic in these band segments, ViaSat-2 will have double the throughput of ViaSat-1 (or ~300 Gbit/s), and be able to support speeds well over 100 Mbit/s.⁵ In other words, grant of this application will serve the public interest by further reducing the cost per bit of satellite broadband service, and increasing the bandwidth efficiency and throughput of the services that can be delivered to U.S. customers.

This narrative discussion and the attached Schedule S and Supplemental Technical Annex contain information relevant to adding use of the 27.5-28.1 GHz and 17.7-18.3 GHz frequencies to the current ViaSat-2 market access authorization, as well as updated ownership information. No other changes are being made to other technical specifications previously approved by the Commission for ViaSat-2.⁶

I. SPECTRUM AVAILABILITY

ViaSat seeks to use the 27.5-28.1 GHz band segment for uplinks to ViaSat-2 on a secondary basis to LMDS, and the 17.7-18.3 GHz band segment for downlinks from ViaSat-2 on a non-conforming basis. As discussed below, ViaSat requests a waiver of the U.S. Table of Frequency Allocations in Section 2.106 of the Commission's rules in connection with the proposed operations in the 17.7-18.3 GHz band segment, which is designated in the United States for terrestrial fixed services and, in part, for BSS feeder link (Earth-to-space) operations.

ViaSat's request to modify its authorization for ViaSat-2 to include the 27.5-28.1 GHz and 17.7-18.3 GHz frequencies at 69.9° W.L. is fully consistent with Commission precedent⁷ and does not conflict with any previously granted Commission authorization regarding a satellite network in these band segments. No other GSO spacecraft is authorized by the Commission to operate within two degrees of 69.9° W.L. on these frequencies. Nor would ViaSat's proposed

⁴ See *ViaSat-1 FAQ*, available at https://www.viasat.com/sites/default/files/legacy/web/ViaSat-1_FAQ_3_09_V3.pdf (last visited Jan. 27, 2016).

⁵ See *ViaSat Q2 2016 ViaSat Earnings Conference Call* (Nov. 9, 2015), available at <http://investors.viasat.com/events.cfm>.

⁶ See *supra* n.1.

⁷ See, e.g., *Inmarsat Mobile Networks, Inc.*, File Nos. SES-LIC-20120426-00397, SES-AMD-20120823-00781, SES-AMD-20150114-00008, Call Sign E120072, 30 FCC Rcd 2770 ¶ 24 (2015); see also *O3b Limited, IBFS* File Nos. SES-LIC-20100723-00952, Call Sign E100088 (granted Sept. 25, 2012); SES-LIC-20141022-00809, Call Sign E140107 (granted June 5, 2015); SES-LIC-20130124-00089, Call Sign E130021 (granted June 20, 2013); SES-LIC-20130618-00516, Call Sign E130107 (granted June 24, 2015); SES-LIC-20150310-00138, Call Sign E150018 (granted Sept. 30, 2015).

operations in these bands cause harmful interference to other authorized uses of the spectrum, as discussed in more detail in the Supplemental Technical Annex.

A. FSS Designation for 27.5-28.35 GHz

The 27.5-28.35 GHz band segment is designated domestically for LMDS operations on a primary basis and FSS operations on a secondary basis to LMDS.⁸ ViaSat's proposed use of 27.5-28.1 GHz spectrum is consistent with the Commission's intended use of the designation for FSS in this portion of the Ka band.⁹

As ViaSat demonstrated in connection with the previously granted request to operate in the 28.1-28.35 GHz segment of the band designated for LMDS, the earth stations operating in the 27.5-28.1 GHz band segment also will employ interference mitigation techniques, such as shielding, to avoid interference into terrestrial operations that are primary in this band.¹⁰ Applications for those earth stations will include a technical compatibility analysis regarding those terrestrial users.¹¹ The Commission has previously authorized FSS operations in this band, recognizing that such operations successfully may coexist with those terrestrial operations.¹² ViaSat's proposed operations are consistent with the obligations of the FSS to avoid harmful

⁸ 28 GHz Second Report and Order ¶¶ 42, 44.

⁹ See *id.* ¶ 45 (“At 27.5-28.35 GHz we designate 850 MHz for LMDS on a primary basis. GSO/FSS . . . will be permitted on a non-interference basis to the LMDS systems in the 850 MHz band segment, for the purpose of providing limited gateway-type services.”); see also IBFS File No. SAT-LOI-20130319-00040, Call Sign S2902, Attachment ¶ 12 (granted Dec. 12, 2013) (authorizing ViaSat-2 in the 27.1-28.35 GHz band on a secondary basis with respect to LMDS).

¹⁰ ViaSat acknowledges the pendency of the Spectrum Frontiers Notice of Proposed Rulemaking, which proposes to make this band segment available for terrestrial mobile services. See *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, GN Docket No. 14-177, Notice of Proposed Rulemaking, FCC 15-138 (rel. Oct. 23, 2015). ViaSat would accept a grant conditioned upon the outcome of that proceeding.

¹¹ See *Teledesic LLC*, 14 FCC Rcd 2261, at ¶ 19 (1999) (recognizing that in granting space station authority in the LMDS band, issues regarding how earth stations would successfully operate on a secondary, non-interference basis should be resolved as part of future earth station applications).

¹² See, e.g., ViaSat-2 Minor Modification; Amended Letter of Intent of ViaSat, Inc., IBFS File No. SAT-AMD-20080623-00131 (granted Aug. 18, 2009); see also ViaSat, Inc., IBFS File No. SES-LIC-20110211-00150, as amended, Call Sign E110015 (granted Oct. 21, 2011).

interference into, and to accept any interference received from, LMDS under the Commission's band plan.¹³

B. Waiver Request for Non-Conforming Use of 17.7-18.3 GHz

The 17.7-18.3 GHz band segment is allocated on a primary basis to the terrestrial fixed service ("FS"). In the United States, 17.7-17.8 GHz also is allocated to the FSS on a co-primary basis, but this FSS allocation is limited by footnote US271 to broadcasting-satellite service ("BSS" or "DBS") feeder links in the Earth-to-space direction.¹⁴ Because the 17.7-18.3 GHz band segment is not allocated to the FSS, ViaSat requests a waiver of the U.S. Table of Frequency Allocations, as codified in Section 2.106 of the Commission's rules,¹⁵ to authorize U.S. market access using this band on ViaSat-2 on a non-conforming, non-interference basis. As a non-conforming user of this frequency band, ViaSat would cease operations in the affected frequencies in the event of any harmful interference into any FS or DBS operations (as discussed below), and ViaSat would accept interference from FS or DBS operations in this band segment.

The Commission has granted waivers for non-conforming spectrum uses where a demonstration is made that the non-conforming operations would not likely cause harmful interference into the services allocated in Section 2.106 and where the non-conforming operator accepts any interference from conforming spectrum users.¹⁶

Good cause exists for the Commission to grant the requested waivers.¹⁷ ViaSat seeks to use the additional capacity enabled by the addition of the 17.7-18.3 GHz band segment to supplement the capacity of its existing satellite broadband network. Grant of this waiver thus would allow ViaSat to increase the overall capacity of its satellite broadband network, thereby supporting the expected increase in broadband usage by end-users, the demand for faster broadband speeds, and the ability to support additional broadband subscribers, and thereby facilitating competition. Therefore, such grant "would better serve the public interest than strict adherence to the general rule,"¹⁸ in that the requested waivers would facilitate more intensive use of scarce spectrum resources to enable the provision of advanced satellite broadband services that are competitive with terrestrial alternatives.

¹³ See *28 GHz Second Report and Order* ¶ 44 (designating the FSS as secondary to LMDS and having "licensing priority vis-a-vis any third service allocated domestically or internationally in the band").

¹⁴ 47 C.F.R. § 2.106 n.US271.

¹⁵ 47 C.F.R. § 2.106.

¹⁶ See, e.g., *contactMEO Communications, LLC*, 21 FCC Rcd 4035 ¶ 34 (2006) ("*AtContact Order*"); *Northrop Grumman Space & Mission Systems Corp.*, 24 FCC Rcd 2330 ¶¶ 76, 90 (2009) ("*Northrop Grumman Order*"); *Hughes Network Systems, LLC*, 26 FCC Rcd 8521 ¶ 13 (2011).

¹⁷ See 47 C.F.R. § 1.3.

¹⁸ See *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

At the same time, grant of the requested waivers “would not undermine the policy objective of the rule in question and would otherwise serve the public interest.”¹⁹ As explained below, ViaSat would ensure that its operations do not cause harmful interference into primary operations in this band. ViaSat also would accept any harmful interference into its operations caused by the allocated uses in the 17.7-18.3 GHz band segment.

1. Fixed Service in 17.7-18.3 GHz

As demonstrated in the Supplemental Technical Annex, downlinks from ViaSat-2 would not cause harmful interference into FS operations. ViaSat’s downlinks in this band segment would meet the power-flux density (“PFD”) limits at the earth’s surface set forth in Article 21 of the ITU Radio Regulations, which is applicable to the international allocation for FSS operations in Region 2.²⁰ The PFD limits prescribed by the ITU were established to protect terrestrial services in the 17.7-18.3 GHz band segment, and the existence of the spectrum uses permitted by ITU radio regulations means that FS licensees should anticipate the need to operate in an environment that includes satellite downlinks at corresponding PFD levels.²¹ In particular, the potential always exists for FSS systems that are deployed to serve Canada, Mexico, or the Atlantic or Pacific Oceans to have “spill-over” coverage of the United States. Thus, ViaSat’s proposed operations in this band would not change the expected operating environment for FS receivers.

2. BSS in 17.7-17.8 GHz

As demonstrated in the Supplemental Technical Annex, downlinks from ViaSat-2 in this band segment would not cause harmful interference into adjacent BSS spacecraft. The off-axis PFD of the ViaSat-2 downlinks would be significantly lower than the levels triggering a

¹⁹ *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1166 (D.C. Cir. 1990); *see also Fugro-Chance, Inc.*, 10 FCC Rcd 2860, at ¶ 2 (1995) (waiver of U.S. Table of Frequency Allocations appropriate “when there is little potential for interference into any service authorized under the Table of Frequency Allocations and when the non-conforming operator accepts any interference from authorized services.”).

²⁰ ITU Rad. Reg., Article 21, Table 21-4.

²¹ By way of illustration, in adopting PFD limits in 17.7-17.8 GHz band segment, the Commission recognized that the footprint of satellite beams serving nearby Region 2 countries could illuminate portions of the United States. *Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, 22 FCC Rcd 8842 ¶ 55 (2007). Thus, FS users should construct and operate their systems in a manner that can coexist with satellite downlinks operating within these PFD limits.

coordination requirement for the BSS satellite located at 61.5° W.L., which is the nearest U.S. BSS Region 2 Plan orbital location to ViaSat-2 at 69.9° W.L.²²

II. OTHER TECHNICAL WAIVER REQUESTS

In the ViaSat-2 Minor Modification application, ViaSat requested waivers of certain technical requirements, which the Commission granted in the current authorization of ViaSat-2. As discussed in the attached Supplemental Technical Annex, ViaSat incorporates by reference the representative spot beam diagrams and the composite isoline gain contour on file with the Commission in the ViaSat-2 Minor Modification application, subject to the waiver of Section 25.114(c)(4) that the Commission has granted to allow the beam contour information to be provided in this manner.²³

In addition, ViaSat requests to the extent necessary a technical waiver of the cross-polarization isolation requirement in Section 25.210(i) of the Commission's rules. The Commission has granted a waiver of the 30 dB cross-polarization isolation requirement in Section 25.210(i) in the ViaSat-2 Minor Modification to allow a cross-polarization isolation of 24 dB. To the extent required, ViaSat requests the same waiver with respect to the frequencies covered in this application.

III. SECTION 304 WAIVER

In accordance with Section 304 of the Communications Act of 1934, as amended, ViaSat hereby waives any claim to the use of any particular frequencies or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

IV. OWNERSHIP INFORMATION

ViaSat is a Delaware corporation and a publicly traded company headquartered at 6155 El Camino Real, Carlsbad, California 92009. As a publicly traded company, the stock of ViaSat is widely held. Based on publicly available SEC filings, the following entities and their respective affiliates beneficially owned 10 percent or more of ViaSat's voting stock as of May 13, 2016:

²² The 17.7-17.8 GHz band segment has an international allocation in Region 2 for BSS in the space-to-Earth direction. Because there is no U.S. allocation for BSS downlinks in the U.S. in this band segment, the sharing analysis in this application addresses only sharing with BSS feeder links (Earth-to-space) within the U.S., consistent with Commission precedent. *See Inmarsat Mobile Networks, Inc., Application to Operate a Fixed-Satellite Service Gateway Earth Station Facility in Lino Lakes, Minnesota with the Inmarsat-5 F2 Space Station*, Order and Authorization and Declaratory Ruling, 30 FCC Rcd 2770 ¶ 25 (2015). Compatibility with reverse band BSS downlinks outside of the U.S. will be ensured through applicable ITU rules and the international coordination process.

²³ *See* ViaSat-2 Minor Modification, Conditions ¶ 2.

Beneficial Owner	Citizenship	Voting Percentage
The Baupost Group, L.L.C. 10 St. James Avenue Suite 1700 Boston, MA 02116	Massachusetts	24.58%
FPR Partners LLC 199 Fremont Street 25 th Floor San Francisco, CA 94105- 2261	Delaware	12.2%

No other stockholders are known by ViaSat to hold 10 percent or more of ViaSat's voting stock.

The following are the officers and directors of ViaSat, all of whom can be reached c/o ViaSat, Inc., 6155 El Camino Real, Carlsbad, CA 92009.

Directors

Mark D. Dankberg, Chairman, CEO
Frank J. Biondi Jr.
Robert Bowman
Dr. Robert W. Johnson
B. Allen Lay
Dr. Jeffrey M. Nash
John P. Stenbit
Harvey P. White

Officers/Senior Management

Mark D. Dankberg, Chairman, CEO
Richard A. Baldrige, President, COO
Bruce Dirks, Senior VP, Treasury & Corporate Development
Shawn Duffy, Senior VP, CFO, CAO
Kevin Harkenrider, Senior VP – Broadband Services
Steven R. Hart, Executive VP – Chief Technical Officer
Keven K. Lippert, Executive VP, General Counsel, Secretary
Mark J. Miller, Executive VP, Chief Technical Officer
Ken Peterman, Senior VP – Government Systems
Melinda Del Toro, Senior VP – Human Resources