# Exhibit A

### Description of Proposed Minor Modification and Notification of Change of Satellite Name

ViaSat files this application for a minor modification to its market access authorization for a Ka band satellite at the nominal 89° W.L. orbital location, referred to previously as VIASAT-KA 89W. *See* FCC File Nos. SAT-LOI-20140204-00013, SAT-AMD-20140218-00023, Call Sign: 2917. ViaSat also hereby informs the Commission that it has renamed this satellite "ViaSat-3" and requests that the Commission update its records accordingly.

ViaSat has entered into a contract for the construction of the satellite, and this application seeks to modify the market access authorization to conform the authorized parameters to the corresponding technical parameters in the contract.

ViaSat is currently authorized to access the United States market using the ViaSat-3 GSO spacecraft, under the authority of the United Kingdom at 88.9° 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.<sup>1</sup> The satellite is intended to provide a range of communications services to both businesses and consumers, with the mix of services and end users being driven by market demand.<sup>2</sup> No change in either the authorized frequencies or the orbital location is sought by this modification application.

### Schedule S Technical Information and Waiver Requests

The attached Technical Annex and the associated Schedule S contain the salient technical details of the modified parameters provided in accordance with the Commission's reformed Part 25 requirements.<sup>3</sup>

ViaSat-3 employs a large number of identical spot beams for two beam types that will be used for communications links. For these two beam types ViaSat is providing the predicted antenna gain contours for one transmit and one receive representative spot beam for each of the two beam types. In addition, ViaSat is providing isoline gain contours, in both uplink and downlink directions, that depict, on a composite basis across the entire coverage area, the

<sup>&</sup>lt;sup>1</sup> The ViaSat-3 satellite also is being constructed with the capability of operating in the 17.7-18.3 GHz and 27.5-28.1 GHz band segments, but U.S. market access is not being sought at this time for those band segments. *See, e.g.*, ViaSat, Inc., File Nos. SAT-MOD-20141105-00122; SAT-AMD-20150105-00002, Call Sign S2902, Conditions at n.1 (granted Apr. 15, 2015) ("*ViaSat-2 Modification Grant*").

<sup>&</sup>lt;sup>2</sup> Services provided will not include any direct-to-home ("DTH") services, Direct Broadcast Satellite ("DBS") service or Digital Audio Radio Service ("DARS") not covered by WTO commitments.

<sup>&</sup>lt;sup>3</sup> Comprehensive Review of Licensing and Operating Rules for Satellite Services, Report and Order, 28 CC Rcd 12403 (2013) ("2013 Part 25 Reform Order").

maximum gain of all spot beams that may be operated within that area.<sup>4</sup> Similarly, because these antenna beam types are replicated multiple times to form the coverage area of the satellites, ViaSat is providing antenna beam characteristics for these representative beams in lieu of replicating the beam information for each beam. To the extent necessary, ViaSat seeks a waiver of Section 25.114(c)(4) of the Commission's rules and the Schedule S requirements to depict the antenna gain contours and beam characteristics in this manner.<sup>5</sup> The representative beam information in Table S7 of the Schedule S reflects the maximum EIRP for all identical transmit beams, and the maximum G/T and minimum saturation flux density for all identical receive beams. This information regarding the representative beams, taken with the composite isoline diagram identifying the maximum possible gain across the coverage area, provides the Commission with all data required to assess compatibility with adjacent spacecraft, while reducing the type of filing burdens on applicants that the Commission sought in amending the satellite application requirement in the *2013 Part 25 Reform Order*.

In addition, ViaSat requests a technical waiver of the cross-polarization isolation requirement in Section 25.210(i) of the Commission's rules. More specific information supporting this waiver request is contained in the Technical Annex in Section 13.

# **Orbital Debris Mitigation**

Section A.12.2 of the accompanying Technical Annex describes ViaSat's plan for minimizing accidental explosions, as part of ViaSat's strategy for mitigating orbital debris. Section 25.137 of the Commission's rules requires market access applicants to provide an orbital debris mitigation showing.<sup>6</sup> In the case of applications seeking U.S. market access via non-U.S.-licensed space stations, the Commission has concluded that the orbital debris requirement can be satisfied by showing that the satellite system's debris mitigation plans are subject to direct and effective regulatory oversight by the satellite system's national licensing authority.<sup>7</sup> The Commission has determined that this requirement may be satisfied by referencing an English language version of the debris mitigation rules or regulations of the national licensing authority and indicating the current status of the national licensing authority's review of its debris mitigation plans.<sup>8</sup>

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. § 25.114(c)(4)(vii) (option (iii) for geostationary satellites with large numbers of identical fixed spot beams).

<sup>&</sup>lt;sup>5</sup> The Commission has granted such a waiver in connection with the ViaSat-2 satellite, which has the same technical design as ViaSat-3 as described in this application. *See ViaSat-2 Modification Grant*, Condition 2.

<sup>&</sup>lt;sup>6</sup> See 47 C.F.R. §§ 25.114(d)(14), 25.137(b).

Mitigation of Orbital Debris, Second Report and Order, 19 FCC Rcd 11567 ¶¶ 94, 95 (2004) ("Orbital Debris Second Report and Order").

<sup>&</sup>lt;sup>8</sup> *Id.* at ¶ 95; *Globalstar Licensee LLC, GUSA Licensee LLC, GCL Licensee LLC*, Order, DA 11-520 ¶¶ 30-32 (rel. Mar. 18, 2011) (concluding that French Space Operations law and technical regulations provide for direct and effective regulation of debris mitigation measures by France, resulting in a finding that Globalstar provided adequate orbital debris mitigation showing); O3b Limited, IBFS File No. SES-LIC-20100723-00952, Call

The ViaSat-3 satellite will be operated under the authority of the United Kingdom, and will be subject to the United Kingdom Outer Space Act 1986 ("Outer Space Act"). The Outer Space Act ensures compliance with the U.K.'s obligations under international treaties and principles covering the use of outer space and specifies that the U.K. licensing authority has the power to require licensees to conduct operations in such a manner as to "prevent the contamination of outer space," to "avoid any breach of the United Kingdom's international obligations," and to impose conditions "governing the disposal of the payload in outer space on the termination of operations under the license."<sup>9</sup> In addition, the UK Space Agency, the U.K. agency charged with licensing activities in outer space, including the launch and operation of space objects, has issued published guidance on the Outer Space Act requirements, which requires applications for a space activities license to provide information regarding the plans for disposal of the space object at the end of life, including whether the propellant and pressurant tanks are vented.<sup>10</sup> The UK Space Agency evaluates such applications pursuant to published standards, including the IADC Space Debris Mitigations Guidelines.

ViaSat is planning to prepare the application for launch and operating authority for filing with the UK Space Agency well ahead of the scheduled launch. The application will describe the end-of-life plan for ViaSat-3 as described above. ViaSat submits that the foregoing demonstration of the U.K.'s authority over ViaSat-3 provides direct and effective regulatory oversight regulation of the space activities of ViaSat-3, and thus satisfies the requirements of Section 25.114(d)(14) and Section 25.283(c).<sup>11</sup>

### **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

Sign E100088, Condition 90045 (granted Sept. 25, 2012) (determining that O3b's request for a waiver of Section 25.283(c) for unvented pressure vessels was unnecessary, finding that O3b is subject to direct and effective regulation by the United Kingdom concerning orbital debris mitigation) ("*O3b Grant*"); see also ViaSat-2 Modification Grant, Condition 4.

- <sup>9</sup> Outer Space Act 1986, 1986 Ch. 38, § 5(2)(e) (1986) (U.K.).
- <sup>10</sup> See Revised Guidance for Applicants, Outer Space Act 1986, Annex A, Section 1.3 available at https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/320158/G uidance\_for\_applicants\_-\_June\_2014.pdf.
- See O3b Grant; ViaSat-2 Modification Grant. Out of an abundance of caution, and to the extent necessary, ViaSat respectfully seeks a waiver of this one aspect of Section 25.283(c) as it applies to the helium tanks on ViaSat-3, given the direct and effective oversight of the U.K. and given that the very low pressure in the helium tanks at the satellite's end-of-life and their enclosure in the spacecraft body makes the potential for release of orbital debris extremely unlikely.

is widely held. Based on publicly available SEC filings, the following entity and its affiliates beneficially owned 10 percent or more of ViaSat's voting stock as of June 11, 2015:

Beneficial Owner	Citizenship	Voting Percentage
The Baupost Group, L.L.C.	Massachusetts	24.58%
10 St. James Avenue		
Suite 1700		
Boston, MA 02116		

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. Baldridge, President, COO Bruce Dirks, Senior VP, Treasury & Corporate Development Shawn Duffy, Senior VP, CFO, CAO Kevin Harkenrider, Senior VP – Broadband Services H. Stephen Estes, Senior VP – Enterprise Services Steven R. Hart, Executive VP – Engineering, Chief Technical Officer Keven Lippert, Executive VP, General Counsel, Secretary Mark J. Miller, Executive VP, Chief Technical Officer Ken Peterman, Senior VP – Government Systems John Zlogar, VP – Commercial Networks