

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of )  
 )  
Viasat, Inc. ) File Nos. SAT-PDR-20161115-00120 &  
 ) SAT-APL-20180927-00076  
Petition for Declaratory Ruling Granting Access )  
to the U.S. Market for the Viasat NGSO FSS ) Call Sign S2985  
System )

**CONSOLIDATED REPLY**

Pursuant to 47 C.F.R. § 25.154(d), Hughes Network Systems, LLC (“Hughes”) submits this consolidated reply to filings from Viasat, Inc. (“Viasat”) and Space Exploration Technologies Corp. (“SpaceX”) regarding Viasat’s above-captioned U.S. market access petition, as amended (“Petition”), for a non-geostationary orbit (“NGSO”) fixed satellite service (“FSS”) system.<sup>1</sup> Both Viasat and SpaceX fail to demonstrate that Viasat’s September 27 amendment (“Amendment”) qualifies as a minor amendment under 47 C.F.R. § 25.116(b)(1) or is otherwise eligible for consideration in the ongoing Ku/Ka-band NGSO processing round under 47 C.F.R. § 25.116(c)(1)-(4). Accordingly, the Commission should dismiss the Petition from consideration in the current processing round or defer consideration until commencement of a new processing round.

As a threshold matter, Viasat’s proposed use of an additional orbital plane, on its face, results in either a change in orbital locations or an increase in interference potential, thus

---

<sup>1</sup> See Viasat, Opposition to Petition to Dismiss or Defer and Reply Comments, File Nos. SAT-PDR-20161115-00120 & SAT-APL-20180927-00076 (Dec. 18, 2018) (“Viasat Opposition”); SpaceX, Comments, File No. SAT-APL-20180927-00076 (Dec. 3, 2018) (“SpaceX Comments”).

qualifying as a major amendment under 47 C.F.R. § 25.116(b)(1). Contrary to Viasat’s claim,<sup>2</sup> Section 25.116(b)(1)’s reference to “changes ... [in] orbital locations” is not inherently limited to GSO satellites, but rather applies to NGSO and GSO satellites alike. Indeed, nothing in the Part 25 rules suggests that a change in orbital planes is somehow excluded from Section 25.116(b)(1)’s reference to “changes ... [in] orbital locations.”

Moreover, although the Commission has found that certain changes in orbital configurations may occur without any increase in interference potential,<sup>3</sup> it has *not* found that an increase in orbital planes, as Viasat proposes, categorically qualifies as such a change with no increase in interference potential. The Commission previously found that Orbcomm’s proposed changes in orbital parameters, consisting of an increase in orbital altitude and an increase in orbital inclination, will have no impact on the amount of spectrum shared with other NGSO systems and further will reduce power flux density (“PFD”) levels, thus decreasing the potential for interference to other systems.<sup>4</sup> Contrary to Viasat’s and SpaceX’s contention,<sup>5</sup> however, Viasat’s Amendment is not limited to such benign changes in orbital parameters. Rather, Viasat’s Amendment seeks a number of technical changes, notably including an additional orbital plane, which the Commission to date has not found to be a minor change.

Additionally, although Viasat’s revised equivalent PFD (“EPFD”) calculations suggest compliance with applicable EPFD limits, they do not demonstrate that PFD and EPFD levels will

---

<sup>2</sup> See Viasat Opposition at 5-6.

<sup>3</sup> See, e.g., *Orbital Communications Corporation*, Order and Authorization, 13 FCC Rcd 10828, ¶ 24 (IB 1998) (“*Orbcomm*”).

<sup>4</sup> See *id.*

<sup>5</sup> See Viasat Opposition at 6-7; SpaceX Comments at 4.

remain the same or decrease as a result of the proposed changes.<sup>6</sup> In fact, Viasat's revised calculations show increases in both downlink and uplink EPFD levels.<sup>7</sup> The calculations further fail to show that the proposed changes will have no impact on the amount of spectrum shared with other NGSO systems.<sup>8</sup> Thus, Viasat's proposed changes are distinguishable from those found to be minor in prior Commission decisions.<sup>9</sup>

Furthermore, contrary to its claim,<sup>10</sup> Viasat's amended NGSO FSS proposal will directly impact Hughes' authorized Ka- and V-band GSO operations, particularly with respect to Viasat's proposed inter-satellite links ("ISLs").<sup>11</sup> As Viasat is well aware, Hughes has strenuously, and repeatedly, voiced serious concerns regarding potential interference from Viasat's proposed ISLs to Hughes' GSO satellites, and these concerns remain unresolved to date.<sup>12</sup>

---

<sup>6</sup> See Viasat, Amendment, File No. SAT-APL-20180927-00076, Exh. A (Description), at 7-14 (Sept. 27, 2018).

<sup>7</sup> See *id.*

<sup>8</sup> Viasat also reiterates the argument that its proposed reduction in number of active satellites reduces the potential for in-line events with other NGSO systems, but again offers no interference analysis or meaningful technical support, and further remains silent as to whether its proposed increase in orbital planes reduces the potential for in-line events. See Viasat Opposition at 7.

<sup>9</sup> See, e.g., *Orbcomm* ¶ 24.

<sup>10</sup> See Viasat Opposition at 4.

<sup>11</sup> See, e.g., Hughes, Stamp Grant, IBFS File Nos. SAT-LOA-20170621-00092 & SAT-AMD-20170908-00128 (Mar. 20, 2018).

<sup>12</sup> See, e.g., Letter from Jennifer A. Manner & Brennan T. Price, Hughes, to Marlene H. Dortch, Secretary, FCC, File Nos. SAT-PDR-20161115-00120 & SAT-APL-20180927-00076 (Oct. 11, 2018).

Accordingly, Viasat's Amendment should be deemed a major amendment and thus newly filed outside of the ongoing Ku/Ka-band NGSO processing round. The Commission therefore should dismiss the Petition or defer consideration until commencement of a new processing round.

Respectfully submitted,

**HUGHES NETWORK SYSTEMS, LLC**

*/s/ Jennifer A. Manner*

---

Jennifer A. Manner

Senior Vice President, Regulatory Affairs

Fernando Carrillo

Senior Principal Engineer, Regulatory Affairs

Jodi Goldberg

Associate Corporate Counsel, Regulatory Affairs

11717 Exploration Lane

Germantown, MD 20876

December 28, 2018

## CERTIFICATE OF SERVICE

I, Karla E. Huffstickler, hereby certify under penalty of perjury that the foregoing Consolidated Reply was served on December 28, 2018, by depositing a true copy thereof with the United States Postal Service, first class postage pre-paid, addressed to the following:

Daryl T. Hunter  
Viasat, Inc.  
6155 El Camino Real  
Carlsbad, CA 92009

Tim Hughes  
Patricia Cooper  
Space Exploration Technologies Corp.  
1155 F Street, NW  
Suite 475  
Washington, DC 20004

John P. Janka  
Latham & Watkins LLP  
555 Eleventh Street, NW, Suite 1000  
Washington, DC 20004  
*Counsel to ViaSat, Inc.*

William M. Wiltshire  
Paul Caritj  
Harris, Wiltshire & Grannis LLP  
1919 M Street, NW  
Suite 800  
Washington, DC 20036  
*Counsel to SpaceX*

/s/ Karla E. Huffstickler

Karla E. Huffstickler