

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

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Application of	)	
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<b>VIASAT, INC.</b>	)	Call Sign: S2985
	)	
For Amendment to Petition for	)	File No. SAT-APL-20180927-00076
Declaratory Ruling Granting Access	)	
to the U.S. for the Viasat System	)	
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**COMMENTS OF SPACE EXPLORATION TECHNOLOGIES CORP.**

Space Exploration Technologies Corp. (“SpaceX”) submits these comments on Viasat Inc.’s proposed Amendment (the “Amendment”) to its Petition for Declaratory Ruling seeking access to the United States for a non-geostationary orbit (“NGSO”) satellite network (the “Petition”). Because Viasat asks to reduce the overall number of satellites in its system while maintaining most other operating parameters, its Amendment should not increase the potential for interference to other systems. Hence, the Commission should deem Viasat’s filing a minor amendment and consider it as part of the current processing round. This consideration would be consistent with Commission policy to encourage the deployment of new communications systems to serve more Americans and maintain certainty for other NGSO systems now in development.

**BACKGROUND**

Viasat filed its original Petition in November 2016, seeking market access to the United States for its NGSO satellite system licensed to operate under the authority of the government of

the Netherlands.<sup>1</sup> Viasat’s Petition described a system consisting of 24 satellites, made up of three orbital planes with eight satellites in each. SpaceX raised concerns about the potential spectrum-related interaction between Viasat’s proposed mid-Earth orbit system and SpaceX’s low-Earth orbit system.<sup>2</sup> Viasat now seeks to amend its Petition, asking to reduce the total number of satellites from 24 to 20, with corresponding changes to its orbital architecture.<sup>3</sup> The proposed Amendment makes no other substantive changes to its Petition, and critically, does not change the frequencies requested, power levels, and other operating parameters that could affect the spectral environment for other satellite operators.

## DISCUSSION

SpaceX agrees with the Commission’s policy to encourage competition and robust broadband deployment by allowing NGSO operators to revise their systems in response to advances in technology and changes in market conditions.<sup>4</sup> This policy supports Chairman Pai’s goal of promoting next generation NGSO systems and expanding broadband access to areas where added connectivity is needed most.<sup>5</sup> To reach this objective, the Commission specifically crafted

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<sup>1</sup> See *Petition for Declaratory Ruling Granting Access to the U.S. for a Non-U.S.-Licensed Nongeostationary Orbit Satellite Network*, IBFS File No. SAT-PDR-20161115-00120, at 3-4 (Nov. 15, 2016) (“Petition”).

<sup>2</sup> See Comments of Space Exploration Technologies Corp., IBFS File No. SAT-PDR-20161115-00120 (June 26, 2017).

<sup>3</sup> See *Exhibit A: Description of Amendment*, IBFS File No. SAT-APL-20180927-00076 (Sep. 27, 2018) (“Amendment”).

<sup>4</sup> See, e.g., *Teledesic LLC*, 14 FCC Rcd. 2261, ¶ 5 (IB 1999) (“In recognition of the several years required to construct a satellite, or constellation of satellites, the rapidly changing technology, and [the] goal of encouraging more efficient use of the radio spectrum, the Commission has tried to allow licensees to modify their satellite systems when possible.”).

<sup>5</sup> Remarks of FCC Chairman Ajit Pai at the Satellite Industry Association’s 21<sup>st</sup> Annual Leadership Dinner at 2 (Mar. 12, 2018) (“Next-generation satellites are bringing new competition to the broadband marketplace and new opportunities for rural Americans who have had no access to high-speed Internet access for far too long. That’s why the FCC under my leadership has moved quickly to give a green light to satellite innovators.”), available at <https://www.fcc.gov/document/chairman-pai-remarks-satellite-industry-association-dinner>.

its NGSO processing round rules to establish clear and common operating rights for the participants in a given processing round. These rules balance the need to allow flexibility for NGSO providers against the benefits of affording the regulatory certainty needed to support investment. SpaceX supports this balance, as it enables the Commission to continue to consider NGSO applications within a given processing round in a fair, efficient, and timely manner so that consumers receive broadband services faster.

Because NGSO operators will need to update their plans over time, they require the flexibility to make adjustments within their designated NGSO processing round. These system changes may be driven by changes in market conditions, or reflect technological innovations or experience gained from actual constellation manufacture and operations.<sup>6</sup> Accommodating such requests can reinforce the public interest, but only when the proposed changes do not harm other applicants or licensees or undermine the processing-round regime itself. To ensure that such requested changes do not result in such harms, the Commission's rules specify that it will reassign to a new processing round any application for a "major amendment" that changes the proposed frequencies to be used or increases the potential for interference.<sup>7</sup> These rules of the road are the foundation of the processing-round system and ensure that amendments do not turn into a never-ending cascade of changes, unduly undermining the certainty surrounding the development of other NGSO systems in a given round. By allowing the Commission to consider a batch of comparable NGSO applications under the same rules and policies, in a fair, efficient, and timely

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<sup>6</sup> For example, SpaceX recently filed for modification of its own NGSO license based, in part, on knowledge it gained from operating two experimental satellites. *See* IBFS File No. SAT-MOD-20181108-00083.

<sup>7</sup> *See* 47 C.F.R. § 25.116(b).

manner, these rules help to speed regulatory review and eventual constellation deployment, and thereby help bring broadband to consumers faster.

Viasat's request meets several notable characteristics of a minor amendment that the Commission anticipated it would consider within a processing round. The request does not disadvantage other systems because it reduces the number of satellites in its constellation, therefore reducing the potential number of in-line interference events for other NGSO systems by proposing fewer satellites in view from a given point on Earth. It does not alter the frequencies to be used or the orbital debris mitigation plan. And it maintains the same overall service coverage area, providing broadband access and communications to Americans throughout the United States and several of its territories. Such adjustments should be considered minor amendments that do not require reassignment to a new processing round to protect the Commission's licensing regime.

## **CONCLUSION**

The Amendment proposed by Viasat reduces the overall number of satellites and does not request additional frequencies or increase the potential for interference to other licensed systems. Amendments with such characteristics are consistent with the Commission's policy of allowing NGSO providers to update their systems when necessary while ensuring the changes do not harm other providers. This balance encourages competition and ultimately leads to better service for consumers. SpaceX therefore encourages the Commission to consider Viasat's Amendment within the current processing round.

Respectfully submitted,

**SPACE EXPLORATION TECHNOLOGIES CORP.**

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**CERTIFICATE OF SERVICE**

I hereby certify that, on this 3<sup>rd</sup> day of December, 2018, a copy of the foregoing  
Comments was served by First Class mail upon:

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