Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
)	
Viasat, Inc.)	IBFS File No. SES-LIC-20200811-00852
)	
Application for Blanket License to Operate Ka-)	
Band Very Small Aperture Terminals)	

REPLY COMMENTS OF KUIPER SYSTEMS LLC

Kuiper Systems LLC, a wholly owned subsidiary of Amazon.com Services LLC (collectively, "Amazon"), submits this reply to the Consolidated Opposition to Petition and Response to Comments filed by Viasat, Inc. ("Viasat") in the above-referenced proceeding. Amazon renews its request that any grant of Viasat's blanket license application for very small aperture terminals ("VSATs")² include a condition requiring that prior to commencing operations Viasat either complete coordination with Amazon or demonstrate with sufficient technical detail that Viasat's earth station operations will not cause harmful interference to Amazon's nongeostationary orbit ("NGSO") fixed satellite service ("FSS") Kuiper System in the 18.8-19.3 GHz and 28.6-29.1 GHz bands ("NGSO FSS Primary Bands"). Amazon's previous comments have already explained why this condition is necessary to ensure geostationary orbit ("GSO") operations do not cause harmful interference to, or claim protection from, NGSO operations in this spectrum. Viasat offers no substantive objection to this reasonable condition; instead, Viasat argues only that

¹ See Consolidated Opposition to Petition and Response to Comments of Viasat, File No. SES-LIC-20200811-00852 (filed July 29, 2021) ("Viasat Comments").

² Viasat has requested authority to operate 1.8-meter and 2.4-meter VSATs on a blanket licensed basis in the NGSO FSS Primary Bands, among others. *See generally* Application, Viasat, File No. SES-LIC-20200811-00852 (filed Aug. 11, 2020) ("Application").

³ See Comments of Amazon, File No. SES-LIC-20200811-00852 (filed July 16, 2021) ("Amazon Comments").

its existing licensing conditions and technical showings render it "unnecessary and moot."⁴
Amazon disagrees for the reasons explained below.

At the outset, it is notable the extent to which Amazon and Viasat agree. Both acknowledge that the Commission's rules protect NGSO FSS systems operating in the NGSO FSS Primary Bands.⁵ Both acknowledge that Viasat's existing space station authorization requires that Viasat protect NGSO systems in these bands by, among other things, coordinating with NGSO FSS operators or demonstrating that Viasat will not cause them harmful interference.⁶ Both acknowledge that Viasat and Amazon have initiated coordination discussions but that these discussions are incomplete.⁷ And both parties are optimistic about the prospect of successfully concluding these coordination discussions.⁸

Amazon does not agree, however, that the conditions imposed on Viasat's *space station* authorization obviate the need for similar conditions on its *earth station* authorization.⁹ These

⁴ Viasat Comments at 2.

⁵ See Viasat Comments at 6 ("[T]he Commission's rules already protect NGSO systems operating in the Shared Bands."); Amazon Comments at 2, n.2 (citing 47 C.F.R. § 2.106 n.NG165).

⁶ See Viasat Comments at 2-3 ("[T]he authorization for the ViaSat-3 satellite was issued after Viasat provided technical analysis specifically demonstrating that it could and would protect such [NGSO] systems, and the subsequent ViaSat-3 authorization incorporates conditions designed to ensure that the ViaSat-3 network operates in a manner consistent with that demonstration."); Amazon Comments at 2.

⁷ See Viasat Comments at 6; Amazon Comments at 3. Of course, Viasat is required to notify the Commission upon completion of these coordination discussions, which has not occurred. See, e.g., Stamp Grant, Viasat, File No. SES-LIC-20170401-00357, at Condition 90447 (granted Nov. 9, 2017); see also, e.g., Stamp Grant, Viasat, File No. SES-LIC-20190411-00503, at Condition 90257 (granted Nov. 15, 2019).

⁸ See Viasat Comments at 6 ("Toward that end, Viasat notes that it has reinitiated coordination discussions with Kuiper and fully expects to continue these discussions until coordination is complete."); Amazon Comments at 3.

⁹ See Viasat Comments at 6.

authorizations are independent and distinct from one another.¹⁰ As the Commission recently explained, "[t]he goal of these decades-old, dual licensing paths is to provide for interference-free operation of both the ground component and space component of the satellite network."¹¹ Far from mooting the need for an earth station condition, the adoption of a condition on the space segment reinforces the importance of adopting a similar condition on the ground segment since only by doing so can the Commission ensure both space and ground segments provide the same level of protection to licensees.

Nor does Amazon agree that Viasat's previous technical demonstrations render Amazon's request "moot." Exhibit 1 to Viasat's comments is a 2017 technical demonstration, which could not have captured the Kuiper System because Amazon did not seek related FCC authority until 2019. Exhibits 2 to 4 consider only SpaceX's NGSO FSS system. Finally, developments since 2017 have to some extent rendered these technical showings stale: new entrants have arrived, such as Amazon, and early departures, such as Boeing and Leosat, have occurred.

Viasat faults Amazon for failing to provide "technical analysis showing that there would be a risk of harmful interference to its system from Viasat's proposed earth station operations."¹⁴ Amazon, however, as a primary licensee in the NGSO FSS Primary Bands, bears no burden to make such a showing. This burden rests with Viasat, the party seeking access on a secondary basis

¹⁰ See Further Streamlining Part 25 Rules Governing Satellite Services, Notice of Proposed Rulemaking, 33 FCC Rcd 11502 ¶ 4 (2018).

¹¹ *Id*.

¹² Viasat Comments at 6.

¹³ See Application of Amazon, File No. SAT-LOA-20190704-00057 (filed July 4, 2019).

¹⁴ Viasat Comments at 6.

in the NGSO FSS Primary Bands.¹⁵ Indeed, a benefit of Amazon's requested condition is that it would dispel precisely the confusion that this argument reflects by making clear that the burden of demonstrating non-interference rests with Viasat—and not with Amazon.

In sum, both Viasat and Amazon agree that Amazon's requested condition is consistent with the Commission's rules, consistent with Viasat's existing authorizations, and readily achievable by Viasat. Given the importance of the NGSO FSS Primary Bands and the incomplete status of the necessary technical demonstration and coordination, Amazon therefore renews its request that any grant of the Application require Viasat to complete coordination or submit a technical demonstration.

Respectfully submitted,

/s/ Mariah Dodson Shuman

Mariah Dodson Shuman Corporate Counsel

Kuiper Systems LLC, an Amazon subsidiary

August 10, 2021

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¹⁵ See Stamp Grant, Viasat, File No. SES-LIC-20170401-00357, at Condition 90447 (granted Nov. 9, 2017); see also Stamp Grant, Viasat, File No. SES-LIC-20190411-00503, at Condition 90257 (granted Nov. 15, 2019).

CERTIFICATE OF SERVICE

I, Mariah Dodson Shuman, hereby certify that on August 10, 2021, a true and correct copy of this pleading was served via First Class mail upon:

Daryl T. Hunter, P.E. 6155 El Camino Real Carlsbad, CA 92009

> /s/ Mariah Dodson Shuman Mariah Dodson Shuman