

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

In the Matter of	)	
	)	
Kuiper Systems LLC	)	Call Sign S3051
	)	
Application for Modification of	)	File No. SAT-MOD-_____
Authorization for the Kuiper System	)	
	)	

APPLICATION FOR MODIFICATION

Kuiper Systems LLC (“Kuiper”), a wholly owned subsidiary of Amazon.com Services LLC (collectively “Amazon”), pursuant to section 25.117 of the rules of the Federal Communications Commission (“FCC” or “Commission”),¹ hereby requests modification of its authorization to operate a non-geostationary satellite orbit (“NGSO”) fixed-satellite service (“FSS”) constellation (the “Kuiper System”). Specifically, Amazon requests that the Commission modify its authorization to conform the condition set forth in paragraph 59(a) of its license grant (“Condition 59a”) to the parallel condition included in the license for Space Exploration Holdings, LLC’s (“SpaceX”) second-generation NGSO FSS system (“Gen2 System”).² As described herein, modifying Condition 59a would serve the public interest and align Amazon’s condition with those

¹ 47 C.F.R. § 25.117.

² See *Kuiper Systems LLC, Application for Authority to Deploy and Operate a Ka-band Non-Geostationary Satellite Orbit System*, Order and Authorization, 35 FCC Rcd 8324 (2020) (“*Kuiper System Authorization*”); *Space Exploration Holdings, LLC, Request for Orbital Deployment and Operating Authority for the SpaceX Gen2 NGSO Satellite System*, Order and Authorization, Call Sign S3069, IBFS File Nos. SAT-LOA-20200526-00055, SAT-AMD-20210818-00105 (rel. Dec. 1, 2022), ¶ 135w (“*SpaceX Gen2 Authorization*”).

of similarly situated operators, consistent with the requirements of the Administrative Procedure Act (“APA”).

I. INTRODUCTION AND SUMMARY

On July 30, 2020, the Commission authorized Amazon to deploy the Kuiper System, a 3,236-satellite NGSO system to provide service using certain FSS and Mobile-Satellite Service Ka-band frequencies.³ As the basis for that authorization, the Commission determined that Amazon’s system would expand the availability of high-speed broadband, thus serving the public interest.⁴ Since then, Amazon has committed to investing at least \$10 billion to support Kuiper and continues to advance toward its goal of providing affordable, reliable, high-quality connectivity to customers and communities in the United States and around the world.

With this application, Amazon seeks to modify Condition 59a of its license. As outlined in Table 1, below, Condition 59a requires Amazon, prior to commencing operations, to certify that it has completed coordination agreements with other operational systems licensed or granted U.S. market access in certain earlier NGSO FSS processing rounds or make a showing that it will not cause harmful interference to such systems.⁵ In contrast, paragraph 135w of the recent December 1, 2022 SpaceX Gen2 Authorization (“Condition 135w”) contains the same coordination and showing requirements, but it allows SpaceX to proceed with deployment prior to completing coordination and prior to receiving approval from the Commission of its non-interference showing.⁶ Amazon requests that its Condition 59a be modified to mirror the Gen2 System’s Condition 135w by inserting the following concluding sentence: *Kuiper may commence operations*

³ See generally *Kuiper System Authorization*.

⁴ *Id.*, ¶ 9.

⁵ *Id.*, ¶ 59a.

⁶ *SpaceX Gen2 Authorization*, ¶ 135w.

at its own risk, on a non-interference, unprotected basis with respect to any operations authorized in earlier processing rounds for which coordination has not been completed, prior to the approval of its showing by the Commission.

Table 1. Current and Proposed Coordination Conditions

Current Kuiper Condition 59a	Proposed Kuiper Condition 59a	Current SpaceX Gen2 Condition 135w
Prior to commencing operations in the 17.8-18.6 GHz and 18.8-20.2 GHz and 27.5-30 GHz bands, Kuiper must certify that it has completed a coordination agreement with or make a showing that it will not cause harmful interference to any operational system licensed or granted U.S. market access in the NGSO FSS processing rounds referred to in Public Notices DA 16-804, 31 FCC Rcd 7666 (IB 2016) and DA 17-524, 32 FCC Rcd 4180 (IB 2017).	Prior to commencing operations in the 17.8-18.6 GHz and 18.8-20.2 GHz and 27.5-30 GHz bands, Kuiper must certify that it has completed a coordination agreement with or make a showing that it will not cause harmful interference to any operational system licensed or granted U.S. market access in the NGSO FSS processing rounds referred to in Public Notices DA 16-804, 31 FCC Rcd 7666 (IB 2016) and DA 17-524, 32 FCC Rcd 4180 (IB 2017). Kuiper may commence operations at its own risk, on a non-interference, unprotected basis with respect to any operations authorized in earlier processing rounds for which coordination has not been completed, prior to the approval of its showing by the Commission.	Prior to commencing operations in the Ku- and Ka-band frequency bands authorized in this Order, SpaceX must certify that it has made a coordination agreement with, or make a showing to the Commission demonstrating and certifying that its operations will not cause harmful interference to, any operational system licensed or granted U.S. market access in the NGSO FSS processing rounds referred to in Public Notices DA 16-804, 31 FCC Rcd 7666 (IB 2016) and DA 17-524, 32 FCC Rcd 4180 (IB 2017). SpaceX may commence operations at its own risk, on a non-interference, unprotected basis with respect to any operations authorized in earlier processing rounds for which coordination has not been completed, prior to the approval of its showing by the Commission.

Modification of Condition 59a would serve the public interest and be consistent with the APA.

Both the Kuiper System and the SpaceX Gen2 System are similarly situated for purposes of the condition noted above and should thus be treated in an equivalent manner.

II. MODIFICATION OF CONDITION 59a

A. Modifying Amazon’s Condition 59a to Mirror the SpaceX Gen2 System’s Condition 135w Serves the Public Interest

Under Section 25.117 of the Commission’s rules, modification requests “will be granted” unless one of several exceptions are present, including that “[g]ranting the modification request would not serve the public interest, convenience, and necessity.”⁷ This public interest standard necessarily incorporates the directives of the Communications Act, which includes the advancement of competition.⁸ Indeed, the Commission has recognized the importance of “promot[ing] competition among NGSO FSS system proponents, including the market entry of new competitors,”⁹ and of ensuring that its satellite rules “create a level playing field for new competitors.”¹⁰ But Kuiper’s Condition 59a, as written, disadvantages its constellation in comparison to SpaceX’s constellation under Condition 135w, despite the fact that these systems will provide similar services, are subject to the same protection obligations as part of the 2020 processing round, and are otherwise subject to the same coordination requirements at issue.

⁷ 47 C.F.R. § 25.117. *See also Teledesic LLC*, Order and Authorization, 14 FCC Rcd 2261, ¶ 5 (1999) (“*Teledesic*”) (concluding that a modification should be granted if it “does not present any significant interference problems and is otherwise consistent with Commission policies.”). The Commission has also confirmed that a modification consistent with Section 25.117 and *Teledesic* is entitled to retain its processing round status. *Space Exploration Holdings, LLC, Request for Modification of the Authorization for the SpaceX NGSO Satellite System*, Order and Authorization and Order on Reconsideration, 36 FCC Rcd 7995, ¶¶ 1, 3 (2021).

⁸ 47 U.S.C. § 521.

⁹ *See, e.g., In the Matter of Revising Spectrum Sharing Rules for Non-Geostationary Orbit, Fixed-Satellite Service Systems Revision of Section 25.261 of the Commission's Rules to Increase Certainty in Spectrum Sharing Obligations Among NGO FSS Systems*, Notice of Proposed Rulemaking, 36 FCC Rcd 17871, ¶ 1 (2021) (“*2021 Spectrum Sharing NPRM*”) (citing Executive Order No. 14036, Promoting Competition in the American Economy, 86 FR 36987 (July 9, 2021)).

¹⁰ *2021 Spectrum Sharing NPRM*, Statement of Chairwoman Jessica Rosenworcel, at 1.

When the Commission originally authorized the Kuiper System, it “conclude[d] that grant of Kuiper’s application would advance the public interest” because the Kuiper System was “designed to increase the availability of high-speed broadband service to consumers, government, and businesses.” The same public interest considerations that supported grant of the original application also support granting this modification application. Modifying Condition 59a to allow Amazon to begin deployment at its own risk on a non-interference, unprotected basis would facilitate Amazon’s planned rapid deployment schedule for the Kuiper System. In the three years since its license was granted, Amazon has made steady progress towards deployment. In addition to its substantial financial commitment, Amazon has designed an innovative phased-array antenna to provide customer terminals at a substantially lower cost; secured significant heavy-lift capacity for its satellites;¹¹ and invested in state-of-the-art facilities—including a 219,000 square foot research and development facility in Redmond, Washington, and a dedicated 172,000 square foot satellite production facility in Kirkland, Washington.¹² Amazon will be launching the first of its Kuiper System satellites for testing and demonstration in the near future.

As it awaits a decision by the Commission on the modification of Condition 59a, Amazon will continue making progress coordinating with other NGSO FSS operators. Indeed, Amazon has signed coordination agreements with some NGSO FSS providers,¹³ and is engaged in good-faith

¹¹ *Amazon’s Project Kuiper satellites will fly on the new Vulcan Centaur rocket in early 2023*, Amazon (Oct. 12, 2022), available at <https://www.aboutamazon.com/news/innovation-at-amazon/amazons-project-kuiper-satellites-will-fly-on-the-new-vulcan-centaur-rocket-in-early-2023>.

¹² *Amazon expands satellite manufacturing at newly acquired Project Kuiper facility*, Amazon (Oct. 27, 2022), available at <https://www.aboutamazon.com/news/innovation-at-amazon/amazon-expands-satellite-manufacturing-at-newly-acquired-project-kuiper-facility>.

¹³ See Letter from Julie Zoller, Global Head of Regulatory Affairs, Kuiper Systems LLC and Elisabeth Neasmith, Director, ITU and Regulatory, Telesat LEO Inc., to Marlene Dortch, Secretary, FCC, IBFS File Nos. SAT-LOA-20190704-00057; SAT-PDR-20161115-00108; SAT-MPL-20200526-00053; SAT-APL-20210104-00002; and SAT-APL-20220616-00059 (Sept. 21,

negotiations with the remaining NGSO FSS operators that received authority to use Ka-band frequencies in a prior processing round. Amazon would continue to actively work towards successfully coordinating with these operators under a revised Condition 59a.

Amazon stands ready to deliver the future of broadband satellite service, and modification of Condition 59a will facilitate deployment. The current requirement to complete coordination or receive approval from the Commission of its non-interference showing could result in undue delay, negatively impacting not only the competitive broadband satellite market, but also the ability of Americans to obtain high-speed broadband. Allowing Amazon to proceed at its own risk on a non-interference basis would ensure Amazon can meet its rapid deployment goals, preserve parity among NGSO FSS competitors, and help bridge the digital divide.

B. Modifying Amazon’s Condition 59a to Mirror the SpaceX Gen 2 System’s Condition 135w Is Consistent with the APA

The APA requires that an agency decision be both reasonable and reasonably explained.¹⁴ Thus, the FCC must “give a reasoned analysis to justify the disparate treatment of regulated parties that seem similarly situated, and its reasoning cannot be internally inconsistent.”¹⁵ To do otherwise would be arbitrary, capricious, and an abuse of discretion in violation of the APA.¹⁶

2022); Letter from Julie Zoller, Global Head of Regulatory Affairs, Kuiper Systems LLC and Torstein Losnedahl, Group Legal Counsel/Contract Manager, Space Norway AS, to Marlene Dortch, Secretary, FCC, IBFS File Nos. SAT-LOA-20190704-00057; SAT-PDR-20161115-00111; SAT-MPL- 20220311-00029 (Nov. 18, 2022).

¹⁴ See 5 U.S.C. 706(2)(A) (providing that a reviewing court shall “hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law”).

¹⁵ *ANR Storage Co. v. Fed. Energy Regul. Comm’n*, 904 F.3d 1020, 1024 (D.C. Cir. 2018) (internal citations and quotations omitted).

¹⁶ 5 U.S.C. § 706(2)(A). See also *ANR Storage Co.*, 904 F.3d at 1025 (requiring the FERC to “provide some reasonable justification for any adverse treatment relative to similarly situated competitors”). See also *Motor Vehicle Mfrs. Ass’n of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 43 (1983); *Shaw’s Supermarkets, Inc. v. NLRB*, 884 F.2d 34,

In its order granting SpaceX's second-generation NGSO FSS constellation, the Commission states that it will require SpaceX to share spectrum with earlier-round systems in accordance with the procedures previously applied to the Kuiper System Authorization, except for "some slight modifications to address the specific circumstances presented by SpaceX's operations."¹⁷ Here, the Commission points to SpaceX's "rapid deployment schedule planned for its Gen2 Starlink satellites" and explains that "it would serve the public interest to allow SpaceX to begin providing its next generation broadband service without undue delay."¹⁸

Amazon and SpaceX filed applications for their respective 2020 processing round systems within months of one another. In the time since, Amazon has made substantial progress towards coordinating with other NGSO FSS operators, and is likewise poised for rapid deployment of the Kuiper System. Thus, just as completing coordination and obtaining FCC approval of its non-interference showing could cause SpaceX "undue delay" in its deployment, so too could completing coordination and obtaining FCC approval of its non-interference showing cause Amazon "undue delay." SpaceX and Amazon are similarly situated, and Condition 59a should be modified to fulfill the APA's requirement that similarly situated licensees be treated similarly.

37 (1st Cir. 1989).

¹⁷ *SpaceX Gen2 Authorization*, ¶ 60.

¹⁸ *Id.*, ¶ 63.

III. CONCLUSION

Prompt grant of this application will accelerate the deployment of the Kuiper System and its ability to expand broadband access across the United States.

Respectfully submitted,

/s/ Catherine Kuersten

Catherine Kuersten
Corporate Counsel
Kuiper Systems LLC

February 1, 2023