

Introduction and Executive Summary

Amazon Kuiper Commercial Services LLC (“the Applicant”) will operate as a broadband service provider and offer high-speed connectivity through monthly service plans with customer support options.

Information about the applicant’s general capabilities is available at

<https://www.aboutamazon.com/what-we-do/devices-services/project-kuiper>. The Applicant will connect consumers and small businesses with a high-performance and easy to use broadband service through the combination of its Low Earth Orbit (LEO) satellite constellation, world-class logistics, support capabilities, and customer-centric experiences. The Applicant has assembled the team and resources required to deploy and operate a cutting-edge, global broadband service to help bridge the digital divide. The Applicant will deliver affordable, high-speed, and low-latency broadband to consumers and businesses across the Commonwealth of Virginia.

Company Overview

The Applicant’s team is comprised of more than 4,500 world-class engineers, programmers, business, and support personnel. The Applicant’s team is globally distributed, with concentrations in major cities around the world, and operates facilities including its 219,000-sq-ft research and development center in Redmond, WA; a 172,000-sq-ft satellite manufacturing facility in Kirkland, WA; and a 142,000-sq-ft satellite-processing facility at Space Florida’s Launch and Landing Facility at the Kennedy Space Center. This allows the team to develop a deep understanding of local customer preferences, category dynamics, and operational requirements.

The Applicant’s service plans will deliver convenience and ease-of-use for both fixed and portable services. The Applicant will offer 24/7 customer support and the option for customers to self-install or have a professional technician install the customer terminal. Flexible and expedient support options are fundamental to the Applicant’s approach to customer support. The Applicant will operate field service, inventory management, and forward and reverse logistics to ensure best-in-class customer experience. The Applicant has already demonstrated success through testing of multiple satellites throughout their lifecycle and is on track to deliver a full-scale solution. In October 2023, the Applicant reported 100% success rate for its Protoflight mission, validating key technologies that underpin the network. Every major system and subsystem on board the two prototypes— from flight computers and solar arrays to our propulsion system and advanced radio frequency communications payload—demonstrated nominal or better performance following launch. The Applicant has secured partnerships with ULA, Arianespace, Blue Origin, and SpaceX for over 90 planned launches.

Project Description

Network design: The Applicant’s system uses highly scalable technology architecture that supports continuous expansion and enhancement of the satellite network over time. The Applicant has designed the network with an iterative approach to seamlessly scale and stay ahead of growing bandwidth demands. The Applicant’s constellation operates on the Ka-band, which offers high spectral efficiency, high bandwidth, and low latency to reliably serve more customers within a given coverage area. This also allows the Applicant to deliver superior uplink speeds, which is especially important for applications such as real-time communications, video calling, and gaming. The Applicant’s system enables the use of smaller, more compact customer terminals that are easier for customers to install at a residence or to use portably. The Applicant’s satellite buses and payloads are engineered for rapid production and deployment to ramp up the constellation’s size, coverage, bandwidth, and redundancy as needed. The

initial phase will include the launch of over 3,200 satellites, with successive phases increasing constellation size and density, with advancements in antenna technology, processing capabilities, and efficiency. This iterative hardware design allows for continuous improvement of speed, bandwidth, and resiliency. The Applicant's distributed network topology provides redundancy and resilience, preventing bottlenecks or single points of failure as user demand grows. By leveraging advanced scheduling, routing, and traffic management algorithms, the Applicant's system can intelligently distribute bandwidth and optimize performance in real-time, ensuring an exceptional and consistent user experience even as the network scales. The Applicant's ground infrastructure is designed with diverse redundancies to maximize resiliency and availability and is installed and maintained by a network of skilled technicians.

Provisioning process: Customers will have the option to select self-install or professional installation for customer terminals when they sign-up for service. Professional installation service will be offered through a network of skilled technicians. At scale, the applicant will have technicians performing installations and support visits across the country. All technicians will follow standard operating procedures, producing a consistent and reliable service that meets the Applicant's high-bar. This will ensure that customers have prompt access to installation and service assurance within days of purchase.

Service Plan/Pricing: The Applicant will deliver an affordable, high-performance broadband service to all Broadband Serviceable Locations for which the Applicant plans to submit a bid. [BEGIN CONFIDENTIAL]

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[REDACTED] [END CONFIDENTIAL]. The Applicant will consistently prioritize affordability and reliability to ensure that high-quality broadband is accessible for customers in Virginia.

Managerial and Financial Capabilities

The Applicant plans to develop and operate a global LEO satellite constellation to deliver broadband service to locations across the globe including providing service in the Commonwealth of Virginia. The Applicant's strengths lie in its (i) forthcoming constellation of LEO satellites that will provide scalable high speed broadband to extensive rural and remote areas that would normally require significant and expensive ground infrastructure construction, (ii) its team of more than 4,500 world-class engineers, programmers, business, and support personnel, and (iii) its ample financial resources to quickly scale its operations and provide customer-centric services.

Conclusion

The Applicant will deliver an affordable, high-performance broadband service to consumers and businesses throughout the Commonwealth of Virginia. The Applicant's team has designed its broadband service to continuously iterate and improve, based on customer needs and feedback. The Applicant's scalable design of its satellite and network technologies, combined with a commitment to continuous innovation, positions it well to satisfy the ever-increasing bandwidth demands of customers in the Commonwealth of Virginia.