

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of	)	
	)	
Rivada Space Networks, GmbH	)	File Number: SAT-PDR-20260702-00271
	)	
Petition for Declaratory Ruling	)	Call Sign:
of Rivada Space Networks, GmbH and	)	
its Non-Geostationary Orbit System in	)	
Ka-band Frequencies – the Outernet	)	

PETITION FOR DECLARATORY RULING

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EXECUTIVE SUMMARY

Rivada Space Networks, GmbH (“Rivada”)—a limited liability company organized and headquartered in Germany and a wholly owned subsidiary of Rivada Space Systems, LLC, a Delaware limited liability company that is, in turn, a wholly owned subsidiary of Rivada Networks Inc., a Delaware corporation—requests Federal Communications Commission (“FCC” or “Commission”) authority to provide service in the United States through the operation of its non-geostationary orbit (“NGSO”) fixed-satellite service (“FSS”) system in the Ka-band (the “Outernet”).

The Outernet will provide data connectivity solutions on a wholesale basis to business and government customers through a global satellite network. The system will initially consist of 288 NGSO satellites with pole-to-pole reach operating in 24 orbital planes at an altitude of 1,050 km, with a planned expansion up to 576 total NGSO satellites, and a minimal ground segment.

Rivada is building a space-based private network, purpose-built to meet the secure, resilient, and high-performance communication needs of governments, military organizations, critical infrastructure, and large enterprises. Unlike traditional satellite networks, the Outernet does not rely on terrestrial gateways or backhaul, enabling end-to-end connectivity entirely through space. This infrastructure-level separation enhances data sovereignty and security, aligning with the growing “zero trust” requirements of Western governments, defense agencies, and large enterprise users. Rivada’s low-Earth orbit constellation leverages a proprietary network architecture to deliver secure, low-latency connectivity with fiber-like performance and seamless global coverage.

The Outernet is specifically designed to address the growing demand for secure communications among global enterprises and governments, which is currently influenced by:

- An increasingly complex global geopolitical environment
- Growing concerns regarding terrestrial network vulnerabilities
- The shift toward private networks
- Investment in intelligent infrastructure to power AI data flows

These market shifts are creating unprecedented levels of demand for highly secure, resilient private communications infrastructure in a market that lacks any truly applicable solution. Rivada's Outernet is expected to be the only satellite constellation capable of fully replacing enterprise-grade terrestrial networks for global connectivity. It can deliver unprecedented data sovereignty, security, and resiliency, making it the preferred choice for governments, military organizations, critical infrastructure operators, and large enterprises with mission-critical operations that require resilient, private, and high-performance communication solutions.

Grant of this petition will promote innovation, expand customer choice, and support competition in the provision of satellite communications services in the United States by introducing secure and reliable NGSO FSS capacity for enterprise, government, defense, and other users. For these reasons and as further detailed in these application materials, Rivada respectfully requests the Commission determine that granting this petition would serve the public interest.

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PETITION FOR DECLARATORY RULING

Rivada Space Networks, GmbH (“Rivada”), a German limited liability company, is a global company headquartered in Germany and a wholly owned subsidiary of Rivada Space Systems, LLC, a Delaware limited liability company, that is, in turn, a wholly owned subsidiary of Rivada Networks Inc., a Delaware corporation. In accordance with Section 25.137 of the Federal Communications Commission’s (“FCC” or “Commission”) rules¹ and in response to the Commission’s Public Notice initiating a processing round for additional non-geostationary orbit (“NGSO”) applications and petitions for market access,² Rivada hereby files this Petition for Declaratory Ruling (“Petition”) requesting U.S. market access for its Ka-band NGSO fixed-satellite service (“FSS”) system (the “Outernet”).

A completed Form 312, Schedule S, and Ownership Exhibit are associated with this Petition, as required by the Commission’s rules. As further detailed in these application materials,

¹ 47 C.F.R. § 25.137.

² *Space Bureau Opens Processing Rounds Cut-Off Established for Additional NGSO-Like Satellite Systems in the Ku- and Ka-Bands and V-Band*, Public Notice, DA 26-552 (SB rel. June 5, 2026)

Rivada respectfully requests the Commission determine that granting the Petition would serve the public interest.

I. COMPANY BACKGROUND

Rivada is a communications technology company focused on engineering and deploying the world's first truly point-to-point orbital mesh constellation of laser-linked satellites, purpose-built to deliver secure, sovereign connectivity that never touches the public internet or terrestrial choke points. Rivada is revolutionizing satellite communications through the deployment of its NGSO constellation. Rivada's advanced network is designed to deliver high-speed, low-latency, and secure data services on a global scale, with a unique focus on business-to-business and government applications. Unlike traditional satellite operators that rely on gateways and terrestrial infrastructure to connect user terminals, Rivada's Outernet uses optical links between satellites to create a fully meshed optical network in space. This architecture significantly reduces latency and improves data transmission speeds, making it ideal for mission-critical applications.

Several characteristics set Rivada and the Outernet apart from other NGSO operators:

- Rivada's network will not require connectivity to a gateway with terrestrial backhaul to provide end-to-end connectivity.³ This allows its users to communicate through a single global private network operating entirely over the constellation without any terrestrial touchpoint other than the user terminals or the secure cloud insertion points.
- Each satellite will carry four laser-based intersatellite terminals to connect with neighboring satellites. This will effectively create a single optical mesh network in space through which data can travel faster than using terrestrial fiber across the entire globe.

³ Notwithstanding this design feature, Rivada may install infrastructure gateways in countries outside the U.S. where required by the jurisdiction.

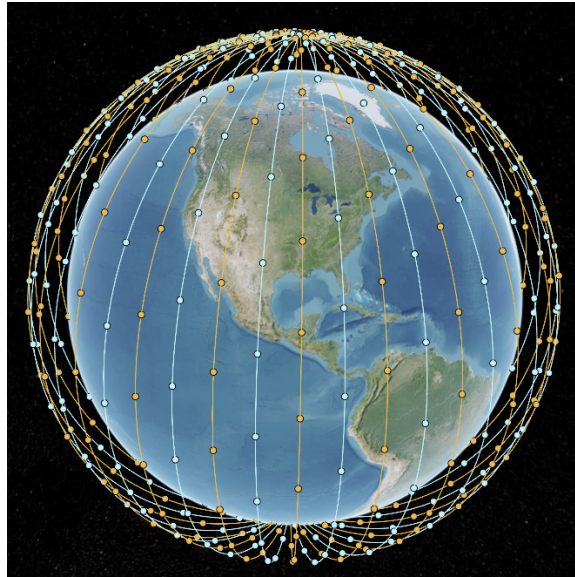
II. SYSTEM DESCRIPTION

The Outernet is a unique NGSO space-based communications network consisting initially of 288 satellites with pole-to-pole reach, with a planned expansion up to 576 satellites and a minimal ground segment.

Rivada's system connects user terminals using Ka-band spectrum for service links, enabling high-capacity data transmission that is well-suited for next-generation satellite services. The Ka-band spectrum provides substantial bandwidth, making it the preferred choice for delivering high data rate services to enterprise customers, government agencies, and other sectors that require secure and dependable connectivity. This frequency range supports the high-throughput capabilities of Rivada's network, enabling seamless communication across even the most remote and underserved areas.

Rivada's Outernet is an innovative leap in global enterprise-grade connectivity. For the first time, a single broadband system will provide pole-to-pole coverage and feature latencies matching terrestrial fiber. The Outernet will leverage the unique capabilities of a constellation deployed in low-Earth orbit (see Figure 1), such as the ability to connect mobile platforms and provide full coverage of the high seas in difficult-to-connect geographies.

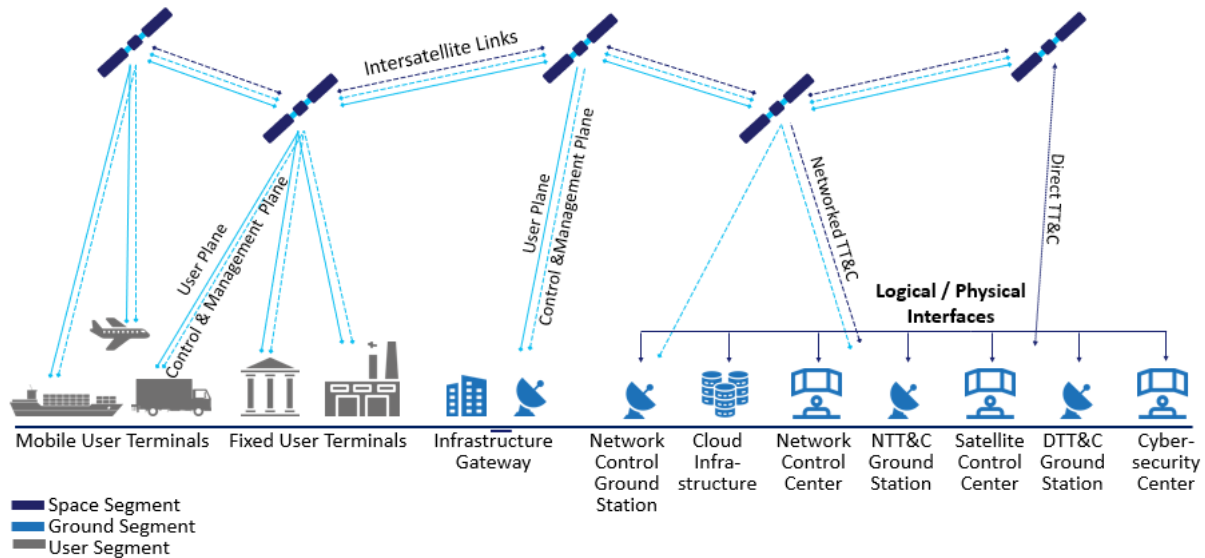
Figure 1: Constellation of the Rivada System



Unlike most existing and planned satellite systems, the Outernet does not rely on a gateway being in sight of each satellite to provide end-to-end connectivity. In fact, it is the first gateway-less system of its kind. The system will allow users to communicate through a single global private network running entirely over Rivada’s space-based infrastructure from user terminal to user terminal without any further terrestrial touchpoints. This physical separation at the infrastructure level significantly improves cybersecurity, end-to-end performance, and data sovereignty, and does so at a global scale. High-priority Ka-band International Telecommunication Union (“ITU”) filings ensure the system has the spectrum for achieving several terabits per second of capacity.

The Outernet architecture is shown in Figure 2. The system is composed of the space segment, the ground segment, the user segment, and the launch segment with its respective launch services.

Figure 2: Rivada System Architecture



The Rivada constellation consists of the following segments:

- **Space Segment:** Composed of up to 576 satellites. The satellites employ laser communication terminals (“LCTs”) that provide optical intersatellite links (“ISLs”) between neighboring satellites, enabling a mesh network to be created in space.
- **Ground Segment:** Composed of the cloud-hosted Satellite Control Center (“SCC”), Network Control Center (“NCC”), Security Operations Center (“SOC”), ground station network, and supporting partners that contribute to flight operations and service delivery.
- **User Segment:** Vertical-specific user terminals connect any user on ground, sea, or air with the space segment using Ka-band frequencies. End-to-end connectivity is provided from user terminal to user terminal.

- **Launch Segment:** Responsible for bringing the constellation to space by deploying satellites into their injection orbits. Satellites propel themselves into their operational orbit by maneuvering from their injection orbit to their destination service orbit.

The Space Segment is connected to the Ground Segment using radiofrequency (“RF”) links. Operations are conducted using direct telemetry, tracking, and control (“TTC” or “D-TTC”) service via a conventional S-band (2025-2110 MHz; 2200-2290 MHz) ground station in which control centers directly operate a satellite (not located in U.S. territory), and by using a networked TTC approach (“N-TTC”) using a Ka-band earth station via the satellite payload and ISL network. In N-TTC, satellite commands are transferred over ISL to enable fleet-wide operations.

A. SPACE SEGMENT

Each satellite is composed of a spacecraft bus and a communication payload, which consists of Ka-band phased array antennas, RF front-end, a payload onboard processor (i.e., channelizer, beamformer, modem, onboard router), and multiple LCTs, providing data rates of at least 10 Gbps per link.

Satellites orbit at an altitude of 1,050 km in 24 near-polar orbital planes (i.e., 24 active satellites per orbital plane) at an inclination of 89°, forming a Walker constellation (see Table 1). The orbital planes are geometrically spaced 7.5 degrees apart (in RAAN) to provide robust coverage for user terminals. Each satellite maintains ISL with four neighboring satellites to provide space-to-space communication and create a mesh network. A regenerative Ka-band communication payload provides full-duplex space-to-ground communications by allocating separate frequencies for receive and transmit channels. The NCC coordinates communications to ensure adequate resources for achieving a high level of performance (e.g., more than 100 Mbps Rx and 100 Mbps Tx).

Table 1: Reference Orbits of the Rivada Constellation

Orbit Characteristics	Orbit Details & Information⁴
Total Number of Orbital Planes	24 planes
Total Number of Satellites per Plane	24 satellites, equally distributed
Semi-Major Axis / Altitude	7,428 km / 1,050 km
Inclination	89.0 deg
Argument of Perigee	0 deg
RAAN (for 24 orbital planes)	{0, 7.5, 15, 22.5, 30, 37.5, 45, 52.5, 60, 67.5, 75, 82.5, 90, 97.5, 105, 112.5, 120, 127.5, 135, 142.5, 150, 157.5, 165, 172.5} deg

The beams set forth in Schedule S define the distinct RF beam types employed by the Rivada system rather than the total number of individual beams that may be formed at any given time. Each Schedule S beam entry is representative of a class of operationally identical beams sharing the same RF characteristics. The actual number of beams the Rivada system generates on the receive and transmit sides may vary depending on the beamforming capacity of the satellites and the real-time distribution of user demand. The number of Schedule S entries therefore should

⁴ Table 1 reflects the full constellation configuration.

not be construed as a limit on the number of beams the system may form. So long as a given beam conforms to the RF characteristics of one of the beam types defined in Schedule S and thereby remains within the interference envelope those parameters establish, it is fully represented by and operates within the bounds of that Schedule S beam type, regardless of how many such beams are active concurrently.

B. GROUND SEGMENT

The Ground Segment is comprised of the on-ground systems, networks, and external teams supporting the day-to-day operations of the Rivada constellation and the corresponding services, including:

- the software and hardware tools, systems, and facilities used by internal entities to control, monitor, plan, and manage the constellation; and
- the interfaces to external operating partners that provide service expertise and technical support to Rivada on an “as needed” or ongoing basis.

1. Satellite Control Center

The SCC is responsible for satellite operations, constellation management, and space situational awareness. The main tasks of the SCC are real-time mission control operations, covering complete operations of the constellations, individual satellites, their payloads, and S-band Ground Stations (not located in U.S. territory), complemented by mission planning and scheduling of routine operations, and data management. The SCC is cloud-hosted, allowing for access from both a primary and backup operation location. Operations will primarily occur from an SCC located in Germany with a backup SCC in a geographically separate location in Europe. The SCC is co-located with the NCC and SOC.

The SCC will be connected to a ground station network comprised of multiple S-band and Ka-band ground stations to increase the system's resilience and allow simultaneous contact with multiple satellites.⁵ The ground station network will be distributed worldwide to provide redundancy and near-real-time access to all nominal satellites (via D-TTC and N-TTC architectures).

During nominal operations, the SCC uses N-TTC via a Ka-band ground station. This enables commands and telemetry to be routed from satellite to satellite across ISL. Each connected satellite can then be monitored and controlled in real time whenever at least one satellite in the constellation is in contact with the N-TTC ground station. Unlike traditional satellite systems, which provision dedicated antenna beams and often dedicated frequency assignments for TTC, the Rivada system does not employ separate beams for N-TTC. Nominal command and telemetry are conducted in-band, within the assigned FSS frequency bands, using the same operational beams that carry user traffic. The control plane (command uplinks and telemetry downlinks) and the user plane (user-data traffic) share identical RF operational characteristics, for example, the same antenna beams, gain and coverage contours, polarizations, emission bandwidths, and power flux-density profiles, and are differentiated only at the protocol level, not through physically distinct RF resources. N-TTC therefore introduces no emission, and occupies no beam, that is not already present and fully characterized as part of normal user-plane operation. Since these emissions are a strict subset of the operational user-beam emissions already defined, the RF parameters governing N-TTC are entirely captured by the operational beam definitions set forth in Schedule S. Provisioning separate N-TTC beam entries would merely duplicate those definitions and would

⁵ The S-band earth stations will be limited to outside the U.S. and will be coordinated consistent with ITU coordination procedures.

misrepresent an architecture in which control-plane and user-plane signals are indistinguishable at the RF layer.

During early operations and in contingency situations, commanding and monitoring of spacecraft will be conducted using D-TTC, where a ground station communicates directly with an individual satellite over S-band. D-TTC provides assured command and telemetry connectivity during launch and early-orbit phase (“LEOP”) operations and during anomaly, safe-mode, and other off-nominal conditions in which a satellite may be unable to support in-band N-TTC through its operational payload beams. S-band operations in 2025-2110 MHz (Earth-to-space) and 2200-2290 MHz (space-to-Earth) frequency bands will be coordinated as needed.

2. Network Control Center

The NCC performs management, operation, and configuration of end-to-end connectivity services offered to customers by maintaining both short- and long-term plans for network configuration. The NCC authenticates, registers, and monitors network access of all user terminals. This includes N-TTC and network control ground stations.

The NCC is comprised of the following elements:

- **Software Defined Network (“SDN”)**: Configures and optimizes available radio and network resources for the spacecraft payload;
- **Business Support Systems (“BSS”)**: Provides an interface to customer and billing capabilities;
- **Operational Support Systems (“OSS”)**: Service management (e.g., inventory, activation, reservation, and service level agreements);
- **System Monitoring**: Collects and displays all information regarding the status of the system; and

- **System Management:** Manages various network elements (e.g., user terminal management and payload management).

The NCC orchestrates all service offerings and requires very high operational availability. The NCC is cloud-hosted, allowing for access from both a primary and backup operations location. Operations will primarily occur from an NCC located in Germany with a backup NCC in a geographically distinct location in Europe. The NCC is co-located with the SCC and SOC.

A local NCC may also be required to secure market access in specific jurisdictions and would be hosted locally in that jurisdiction. This local NCC features a subset of OSS/BSS elements to support local storage of customer data and perform lawful interception and disclosure of call records where required. Additionally, a local NCC is used to support a Virtual Network Operator concept for customers that require more control over their local coverage area.

3. Security Operations Center

Security-related system operations are conducted from a dedicated SOC, which is co-located with the SCC and NCC.

The SOC is comprised of a set of functions that enable the following capabilities:

- **Event management:** The SOC is responsible for identifying and mitigating security threats. Such threats may compromise integrity and availability of Rivada services or affect the integrity of configuration items (e.g., software, algorithms, databases, and procedures).
- **Orchestration capabilities:** The SOC orchestrates security incident management and response strategies, ensuring close collaboration among operators of the SOC, SCC, and NCC.
- **Key management:** Storage and distribution of cryptographic keys that enable protection and security of communications.

- **Access control and firewalls:** The SOC enforces security policies to protect against operational risks.

C. USER SEGMENT OVERVIEW

User Terminals (“UT”) are the customer endpoints for a link across the Rivada constellation. They feature a variety of antenna technologies (e.g., dish, flat-panel, or phased arrays) with the accompanying RF front-end, modem, and router to enable full-duplex connectivity with the satellite constellation.

Rivada will operate the satellite system, while local operators will provide services to end users. Rivada will not directly interconnect end-user traffic to the internet.

III. FREQUENCY PLAN

Table 2 sets forth the Outernet frequency plan.

Table 2: Frequency Plan

Frequency Band	Link Direction	Activity
17.3-20.2 GHz	space-to-Earth	Downlink
27.5-30 GHz	Earth-to-space	Uplink

A. 17.3-20.2 GHz (Space-to-Earth)

The 17.3-20.2 GHz band hosts primary space operations service allocations (space-to-Earth) in the international and U.S. frequency allocation tables.⁶

B. 27.5-30 GHz (Earth-to-Space)

The 27.5-30 GHz band hosts a space operations service allocation (Earth-to-space) in the international and U.S. frequency allocation tables.

⁶ See 47 C.F.R. § 2.106.

IV. SPECTRUM SHARING CAPABILITIES

Rivada's proposed NGSO FSS system has been designed to operate in full compliance with the spectrum-sharing framework set forth in Section 25.261 of the Commission's rules. Rivada recognizes that the Ka-band is increasingly shared among multiple authorized NGSO FSS systems and that the Commission's regulatory framework is intended to maximize spectrum efficiency while ensuring that operators can coexist without causing harmful interference.

The Commission's rules require NGSO FSS licensees and market access recipients operating in commonly authorized frequency bands to coordinate in good faith, regardless of the processing round in which their systems were authorized. Rivada fully embraces this cooperative framework and is committed to engaging proactively and constructively with all affected operators to facilitate compatible operations and efficient spectrum utilization.

The constellation's network management capabilities enable the implementation of operational measures, including traffic management, frequency assignment strategies, and other coordination mechanisms, to facilitate coexistence with other authorized Ka-band NGSO FSS systems while maintaining reliable service to customers.

Consistent with Section 25.261(b), Rivada will coordinate in good faith with all NGSO FSS operators authorized to use commonly assigned spectrum. Such coordination may include the exchange of technical information, operational planning, and mutually agreed implementation procedures designed to prevent harmful interference and maximize simultaneous spectrum use whenever feasible. Rivada expects that cooperative coordination will remain the primary mechanism through which NGSO operators efficiently utilize shared spectrum resources.

Rivada further recognizes the Commission's processing-round framework applicable to NGSO systems. As required, Rivada will satisfy all applicable coordination obligations with

operational systems authorized in earlier processing rounds, including submission of any required certifications or compatibility demonstrations where appropriate. Rivada will likewise comply with any continuing obligations associated with the Commission's processing-round and sunset provisions governing spectrum sharing among NGSO systems.

Rivada's proposed operations will also remain fully compliant with all applicable technical limitations contained in Part 25, including power, emission, equivalent power flux-density, and other interference protection requirements established by the Commission and incorporated into Rivada's authorization.⁷ Compliance with these technical standards, together with good-faith coordination among operators, provides the foundation for successful coexistence among multiple NGSO FSS systems.

The Commission has consistently recognized that dynamic spectrum sharing among NGSO systems promotes innovation, competition, and more intensive use of valuable spectrum resources. Rivada supports these objectives and the regulatory framework that encourages cooperation among operators while preserving regulatory certainty, protecting existing services, and facilitating the deployment of advanced satellite broadband networks.

Accordingly, Rivada respectfully submits that its proposed operations fully comply with the spectrum sharing requirements of Section 25.261 and are designed to enable efficient, equitable, and interference-free coexistence with other authorized Ka-band NGSO FSS systems. Rivada stands ready to coordinate constructively with other operators and to implement all operational measures necessary to ensure continued compliance with the Commission's rules.

⁷ 47 C.F.R. § 25.146.

V. GRANT OF THIS PETITION WILL SERVE THE PUBLIC INTEREST

The Commission has made clear that there is a need to promote secure networks.⁸ Rivada's Outernet is uniquely positioned to serve this need by delivering a solution that combines both security and data sovereignty to enterprises and governments. Accordingly, grant of the Petition will serve the public interest by promoting competition, encouraging continued investment and innovation in U.S. satellite infrastructure, supporting the Commission's space innovation agenda, and advancing the United States' leadership in the rapidly growing commercial space economy.

Secure Networks. The gateway-less architecture of the Outernet system is a defining feature that removes any dependency on vulnerable terrestrial and subsea cable infrastructures, allowing Rivada to provide highly reliable and secure connectivity.

Innovative Connectivity Solutions. As the Administration calls for "America's continued space dominance,"⁹ the U.S. market would benefit greatly from having innovative and cutting-edge solutions such as Outernet available to the respective user groups who are interested in its unique propositions.

Expanding Competition. Grant of the Petition will promote competition in the provision of advanced satellite communications services in the United States by introducing additional NGSO FSS capacity targeted at enterprise, government, and business users. The proposed system will expand the availability of high-quality Ka-band satellite connectivity for customers requiring secure, resilient, and high-performance communications, including operators of critical

⁸ See, e.g., Remarks of FCC Chairman Brendan Carr, "A Build Agenda for America," <https://docs.fcc.gov/public/attachments/DOC-412663A1.pdf> (July 2, 2025) ("It is more important than ever that the FCC remain vigilant to keep America's networks secure.").

⁹ Memorandum from Russell T. Vought, Dir., Office of Mgmt. & Budget, & Michael J. Kratsios, Dir., Office of Sci. & Tech. Pol'y, for the Heads of Executive Departments and Agencies, on Fiscal Year (FY) 2027 Administration Research and Development Budget Priorities and Cross-Cutting Actions (Sept. 23, 2025).

infrastructure, commercial enterprises, government agencies, and other organizations with demanding operational requirements. The Commission has long recognized that robust competition in satellite services promotes innovation, improves service quality, expands customer choice, and encourages more efficient use of spectrum and orbital resources.¹⁰ Grant of the Petition will further these objectives by enabling an additional NGSO operator to compete in the rapidly evolving satellite marketplace while complementing existing terrestrial and satellite communications networks.

U.S. Space Leadership. The Petition also advances the Commission’s broader objective of promoting U.S. leadership in the next generation of space-based communications. FCC Chairman Brendan Carr has emphasized that the Commission’s space agenda is intended to accelerate deployment of satellite systems, expand access to spectrum, reduce unnecessary regulatory barriers, and ensure that the United States remains the global leader in the space economy.¹¹ Likewise, the Space Bureau has identified fostering a competitive and innovative communications marketplace, streamlining licensing processes, and enabling efficient use of spectrum as central priorities.¹² Grant of this Petition is fully consistent with those objectives by authorizing additional next-generation satellite infrastructure capable of serving mission-critical communications requirements across the United States.

¹⁰ See FCC Space Bureau, *Space*, <https://www.fcc.gov/space> (last visited July 6, 2026) (stating that the Bureau promotes a “competitive and innovative global communications marketplace” and “fosters the efficient use of scarce spectrum and orbital resources”); see also *Single Network Future: Supplemental Coverage From Space*; *Space Innovation*, Report and Order and Further Notice of Proposed Rulemaking, 39 FCC Rcd 2622 (2024) (promoting expansion of the reach of communications services and innovative and efficient use of spectrum resources).

¹¹ See News Release, FCC, Office of Chairman Brendan Carr, *Carr Proposes Streamlined Space Processes, Boosts Innovation*, (July 16, 2025) <https://docs.fcc.gov/public/attachments/DOC-413025A1.pdf>.

¹² See FCC Space Bureau, *Space*, <https://www.fcc.gov/space>.

Increased Customer Choice. The proposed system will strengthen competition in market segments that increasingly depend upon resilient satellite connectivity. Enterprise customers, government users, and operators of critical infrastructure require diverse communications solutions capable of supporting continuity of operations, network redundancy, and geographically distributed operations. By increasing supplier diversity and expanding available capacity, the proposed system will improve customer choice and enhance the resilience of communications services available to these sectors.

Infrastructure Resilience. Grant of the Petition will enhance the resilience of the nation's communications infrastructure by increasing the diversity of available satellite communications providers and network architectures. As businesses, government agencies, and operators of critical infrastructure increasingly depend upon uninterrupted connectivity, the availability of additional NGSO satellite capacity strengthens the redundancy of communications paths that are essential to continuity of operations.

The proposed system will provide an additional source of resilient communications for enterprise and institutional users that require highly available connectivity across geographically diverse locations. By complementing terrestrial networks and existing satellite systems, the proposed NGSO constellation will help reduce single points of failure, support network redundancy, and improve the ability of customers to maintain critical communications during natural disasters, infrastructure outages, cybersecurity incidents, or other disruptions. Increased infrastructure diversity enhances the overall robustness of the nation's communications ecosystem and advances the Commission's objective of promoting secure, reliable, and resilient communications networks.

For government agencies and operators of critical infrastructure—including energy, transportation, utilities, and emergency response organizations—access to multiple independent satellite providers strengthens operational resilience and provides greater flexibility in designing communications architectures that meet mission-critical reliability requirements. Authorizing an additional NGSO operator therefore serves the public interest by improving the diversity and resilience of communications capabilities available throughout the United States.

As satellite communications become an increasingly integral component of the nation’s communications infrastructure, authorizing additional NGSO systems enhances not only competition among providers but also the diversity, flexibility, and resilience of the communications ecosystem as a whole. Enterprise and government users increasingly rely on multi-network architectures that integrate terrestrial and multiple satellite platforms to achieve greater reliability and operational continuity. Grant of this Petition will expand those capabilities and further the Commission’s goal of fostering a competitive and innovative satellite communications marketplace.

Economic Competitiveness. Grant of the Petition will also strengthen the competitiveness of the U.S. economy by expanding the availability of advanced satellite communications services for enterprise, government, and commercial users operating in sectors that increasingly rely upon secure, high-performance connectivity. Modern industries depend upon resilient communications to support digital operations, distributed workforces, cloud applications, industrial automation, remote asset management, and real-time data exchange.

The proposed system will support a broad range of industries, including energy, utilities, manufacturing, transportation, logistics, maritime, aviation, financial services, agriculture, and other sectors whose operations extend beyond the reach or resilience of terrestrial communications

networks. By expanding the availability of high-capacity satellite connectivity, the system will enable these industries to improve operational efficiency, enhance business continuity, and deploy innovative digital services that contribute to economic growth.

Increased competition among NGSO satellite operators will also encourage continued private investment in advanced satellite infrastructure and innovative communications solutions. The availability of additional providers promotes customer choice, encourages technological innovation, and helps ensure that U.S. businesses have access to world-class communications capabilities that enhance productivity and international competitiveness. Grant of the Petition is therefore consistent with the Commission's objective of fostering a competitive communications marketplace that supports American innovation, investment, and economic leadership.

VI. ADDITIONAL LEGAL MATTERS

A. Eligibility and Operational Requirements

1. System Deployment Milestones (47 C.F.R. § 25.164)

Rivada agrees to comply with the Commission's milestone rules for space station deployment.

2. Posting of Surety Bond (47 C.F.R. § 25.165)

Rivada acknowledges that it will be required to post the performance surety bond required by Section 25.165 of the Commission's rules upon grant of this Petition.

3. Ownership Information

Rivada's ownership information is provided in an attachment.

B. REQUESTS FOR WAIVER

The Commission may waive its rules, in whole or in part, “for good cause shown.”¹³ Good cause for a waiver may be found if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest.¹⁴ A waiver is appropriate where the particular facts make strict compliance inconsistent with the public interest.¹⁵

Section 25.112. Rivada respectfully requests that the Commission accept the Petition for filing and, to the extent necessary, seeks waiver of Section 25.112 of the Commission’s rules.¹⁶ Some information cannot yet be provided due to certain satellite design activities that remain in progress. Good cause exists because Rivada has provided sufficient information for the Commission to evaluate and act on its Petition. Strict application of this rule would not serve the public interest given the public interest benefits in considering this Petition and the other sufficient detail already provided. Rivada will supplement the record as additional information becomes available.

Section 25.114(d)(14). Rivada also seeks waiver of Section 25.114(d)(14) of the Commission’s rules, requiring applicants to submit a description of the design and operational strategies used to mitigate orbital debris.¹⁷ Specifically, Rivada is still finalizing its satellite design, making it premature to provide an orbital debris mitigation plan. Rivada will provide the plan prior to commencing service, as the Commission has permitted other operators to do in the past.¹⁸

¹³ 47 C.F.R. § 1.3.

¹⁴ *See Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (citing *WAIT Radio v. FCC*, 418 F.2d 1153, 1157-59 (D.C. Cir. 1969), cert. denied, 93 S.Ct. 461 (1972)).

¹⁵ *Id.*

¹⁶ 47 C.F.R. § 25.112.

¹⁷ *See id.* § 25.114(d)(14).

¹⁸ *See, e.g., 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 ¶ 32 (rel. Jul. 30, 2020).

Section 25.114(c). For the same reasons, Rivada respectfully requests waiver of Section 25.114(c) to the extent necessary because certain information contained in Schedule S may change as design and launch plans progress.¹⁹ The Schedule S includes representative values for two parameters. The eccentricity value listed is <0.003 but may shift slightly if launch plans change. The beams show four different link profiles but do not reflect the total number of beams that may be on each satellite.²⁰ The information provided is sufficient to permit Commission review of the proposed system, and Rivada will supplement the record with updated technical parameters as needed.

Sections 2.102(a), 2.106. Rivada requests waiver of Sections 2.102(a) and 2.106 of the rules and the associated Ka-band plan to the extent necessary to permit operations in the band consistent with the frequency plan proposed herein.²¹ Specifically, Rivada seeks waiver to permit NGSO FSS user-terminal operations in the specific Ka-band segments identified below. These waivers are necessary because portions of Rivada’s proposed user-terminal frequency plan are designated for other uses or are subject to service-specific limitations, including GSO FSS use, passive-service sharing constraints, or NGSO mobile satellite service (“MSS”) feeder-link limitations. Grant of the requested waivers would allow Rivada’s gateway-less system to make efficient use of contiguous Ka-band service-link spectrum while protecting incumbent and future users through operating on an unprotected, non-interference basis, compliance with applicable technical limits, and good-faith coordination. Grant of this waiver is warranted because deviation from the rule will enable the public interest benefits described above.

¹⁹ See 47 C.F.R. § 25.114(c)(4).

²⁰ See Section II.A.

²¹ See 47 C.F.R. §§ 2.102(a), 2.106.

1. 18.6 – 18.8 GHz

The 18.6-18.8 GHz band is allocated to the FSS (space-to-Earth) but designated for GSO FSS use and is shared on a co-primary basis with the Earth exploration-satellite service (“EESS”) (passive) and space research service (passive). Rivada requests a waiver to permit NGSO FSS space-to-Earth transmissions to user terminals throughout this 200 MHz segment.

Grant of this waiver is supported by recent precedent. In the SpaceX Gen2 V3 Upgrade Order, released January 9, 2026, the Space Bureau granted SpaceX’s request for waiver of the U.S. Table and the Ka-band Plan to permit NGSO FSS downlink operations in the 18.6-18.8 GHz band, on an unprotected, non-interference basis.²²

Rivada’s space station emissions in the 18.6-18.8 GHz band will comply with the power flux density limits of Article 21 of the ITU Radio Regulations applicable to NGSO FSS systems in this band, which were established specifically to protect passive sensor operations of the EESS and space research services. Rivada will operate on an unprotected, non-interference basis in this band. Waiver will permit Rivada to operate across a contiguous downlink band, materially improving spectral efficiency and channelization flexibility for its point-to-point user terminal links.

2. 19.3 – 19.7 GHz

The 19.3-19.7 GHz band is allocated to the FSS (space-to-Earth) on a primary basis, but footnote NG166 to the U.S. Table limits that FSS allocation to feeder links for non-geostationary systems in the mobile-satellite service.²³ Rivada requests a waiver of footnote NG166 to permit NGSO FSS space-to-Earth transmissions to its user terminals throughout the 19.3-19.7 GHz band.

²² Space Exploration Holdings, LLC, *Request for Deployment and Operating Authority for the SpaceX Gen2 NGSO Satellite System*, Authorization and Order, DA 26-36 (Jan. 9, 2026).

²³ 47 C.F.R. § 2.106.

The Rivada system’s gateway-less architecture makes the request particularly appropriate. The 19.3-19.7 GHz band is reserved for NGSO MSS feeder-link earth station complexes licensed under Section 25.250. A gateway-less system operates no feeder-link earth station complexes and therefore cannot use the band for its designated purpose; the only means by which Rivada can place this 200 MHz of otherwise-unusable spectrum into service is through user-terminal FSS operation under waiver. Rivada commits that it will not cause harmful interference and will accept interference from incumbent and future NGSO MSS feeder-link operations in the band and coordinate in good faith with such operators. Since the Rivada system’s user terminals employ directional tracking antennas and its space stations employ steerable beams, the system can avoid transmitting toward the fixed locations of MSS feeder-link earth station complexes. On these conditions, grant of the waiver will not undermine the purpose of the NG166 feeder-link limitation — protection of MSS feeder-link operations — while permitting spectrum that a gateway-less system could not otherwise use to be placed into intensive broadband service. Operations would be undertaken at Rivada’s own risk and would immediately cease upon notification of harmful interference to protected feeder-link operations.

3. 29.1 – 29.5 GHz

The 29.1-29.5 GHz band is the Earth-to-space counterpart to the 19.3-19.7 GHz downlink segment and is likewise limited under footnote NG166 to feeder links for non-geostationary systems in the MSS. For the same reasons set forth above with respect to 19.3-19.7 GHz, Rivada requests a waiver of footnote NG166 (47 C.F.R. § 2.106) to permit NGSO FSS user-terminal uplink transmissions throughout the 29.1-29.5 GHz band. Rivada commits that it will not cause harmful interference to and will accept interference from incumbent and future NGSO MSS feeder-link operations in the band.

Sections 2.106, 25.136. Rivada seeks waiver of Sections 2.106, 25.136, and any other Commission rule to the extent necessary, to permit Earth Stations in Motion (“ESIMs”) communicating with the Outernet system in any frequency band for which Rivada receives authority. The Outernet is designed to provide secure, resilient, low-latency communications to governmental, enterprise, maritime, aviation, transportation, and other mobile users worldwide. Limiting service to fixed earth stations would materially undermine the utility of the system for many of the customers and use cases the network is specifically designed to support.

Grant of the requested waiver would not undermine the purpose of any underlying service allocation or earth-station restriction. ESIM operations would employ the same network management, beam control, power control, and interference-mitigation capabilities used throughout the Rivada system. Rivada’s operations would also remain subject to all applicable technical limits and coordination obligations. Rivada will ensure that any ESIM operations are compatible with incumbent and authorized users of the relevant bands and will comply with any conditions the Commission may impose to protect such operations.

To the extent ESIM operations are conducted in frequency bands that are subject to allocation limitations, priority rights, coordination requirements, or other restrictions, Rivada will conduct such operations on a non-interference basis with respect to protected services and will accept any interference from operations entitled to protection under the Commission’s rules and the Table of Frequency allocations.

VII. CONCLUSION

For the foregoing reasons, Rivada respectfully requests that the Commission grant its Petition for Declaratory Ruling for Market Access for Ka-band Frequencies and Services.

Respectfully submitted,

/s/ Andrea Hols

Andrea Hols

Vice President Regulatory & Market Access

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July 6, 2026

Attachments:

- Form 312
- Form 312, Schedule S
- Ownership Exhibit

ENGINEERING CERTIFICATION

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this application, that I am familiar with Part 25 of the Commission's rules, that I have either prepared or reviewed the engineering information submitted in this application, and that it is complete and accurate to the best of my knowledge and belief.

/s/ Murat Cetin

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