SMALL SATELLITE LICENSE

LEGAL NARRATIVE STATEMENT

LYNK GLOBAL, INC.

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LEGAL NARRATIVE STATEMENT

Lynk Global, Inc. ("Lynk"), by its attorneys and pursuant to Sections 308 and 309 of the Communications Act of 1934, as amended,[1] hereby respectfully requests authority to launch and operate a constellation of ten (10), non-geostationary orbit ("NGSO"), low-Earth orbit ("LEO") small satellites for the provision of mobile-satellite services ("MSS").[2] Lynk submits this satellite application pursuant to the Federal Communications Commission's ("Commission") new streamlined licensing procedures for small satellites[3] and requests waivers of certain Commission's rules.[4]

I. Introduction to Lynk

Lynk is a private U.S. company incorporated in Delaware and headquartered in Falls Church, Virginia. In January 2017, Lynk was founded on the idea of using satellites to connect everyone everywhere. Lynk is developing a cellular-based satellite communications network that will provide global GSM and LTE cellular services by operating on most cellular frequencies used globally in the 617-960 MHz band. Lynk's system is designed to extend use of the terrestrial spectrum used by mobile network operators ("MNOs") to remote areas where MNOs cannot profitably provide coverage using typical cell tower technologies. Lynk's patented technology enables it to deploy 3GPP mobile communications fronthaul technologies that

[1] 47 U.S.C. §§ 308 and 309.

[2] Hereinafter "Lynk Smallsat System".

[3] *See* 47 CFR § 25.122; *see also Streamlining Licensing Procedures for Small Satellites*, 34 FCC Rcd 13077 (2019) ("*Streamlined Smallsat Licensing R&O*").

[4] *See, infra,* Section V, A.

consider both geospatial and spectral orthogonality with respect to the MNO terrestrial networks in and around the frequency bands of interest.

Lynk is quickly turning its vision into a reality. Since its founding, Lynk has developed, manufactured, and launched a series of experimental payloads and satellites to demonstrate its patented technology.[5] Lynk has partnered with MNOs to test connecting off-the-shelf cellular devices to Lynk's authorized experimental satellites, and successfully demonstrated that these satellites can connect to off-the-shelf mobile devices using terrestrial mobile frequencies without causing harmful interference. Now Lynk is taking the next step and seeking authorization to launch and operate the Lynk Smallsat System, which will provide Lynk's initial commercial service and pave a new and exciting way to connect those in areas where terrestrial mobile networks cannot reach.

II. Public Interest Statement

Grant of this application is in the public interest. Lynk is creating a last-mile ubiquitous communications solution that will provide satellite connectivity to off-the-shelf mobile devices throughout the world. Lynk's satellites will integrate with terrestrial mobile networks via partnerships with MNOs, effectively operating as mobile base stations of last resort located in space to expand mobile coverage to areas where terrestrial mobile base stations cannot economically or realistically reach. Consequently, Lynk's service will ensure that everyone with a cellphone will have service no matter how remote they are or what disaster impacts them.

[5] *See, infra,* Section V, B.

Lynk's service will enable access to communications services in the three areas where access is most challenging: areas with no basic connectivity, areas on the edge of terrestrial network coverage, and areas where terrestrial infrastructure is degraded or rendered inoperable. Because Lynk's network will operate from space, disasters that threaten, disable, or destroy terrestrial towers and networks will not impact connectivity with Lynk's network. When disasters strike, Lynk will remain available to provide automatic, instantaneous, resilient communications for both first responders and people in affected areas without the need for specialized equipment. Through partnerships with MNOs, Lynk is committed to a reality where no one with a cellphone in their pocket goes without connectivity, especially when they need it the most.

This application seeks authorization for the Lynk Smallsat System, which will enable Lynk's initial commercial service of intermittent coverage to off-the-shelf mobile devices. Lynk's initial commercial service will strictly operate outside of the United States and only in areas of the world where Lynk has partnerships with MNOs and is authorized to provide service. Lynk will not provide service in the United States until it establishes partnerships with domestic MNOs and obtains the necessary authorizations from the Commission.

III. Streamlined Smallsat Licensing Certifications

Under the Streamlined Smallsat Licensing process in Section 25.122,[6] Lynk hereby certifies that all satellites in the Lynk Smallsat System meet all requirements.

Rule Section		Lynk Smallsat System	
		Cert.	Compliance
25.122(c)(1)	NGSO operations	Yes	The Lynk Smallsat System is an NGSO system.
25.122(c)(2)	In-orbit lifetime 6 years or less	Yes	*See* Orbital Debris Assessment Report.
25.122(c)(3)	Orbital Altitude 600 km or below	Yes	Maximum orbital altitude of 550 km +/- 25 km. *See, infra,* Section IV, A.
25.122(c)(4)	Identifiable by a unique signal-based telemetry marker	Yes	*See* Orbital Debris Assessment Report.
25.122(c)(5)	Satellites will release no operational debris	Yes	*See* Orbital Debris Assessment Report.
25.122(c)(6)	Accidental Explosions Probability	Yes	Lynk assessed and limited probability. *See* Orbital Debris Assessment Report.
25.122(c)(7)	Collision Probability is 0.001 or less during orbital lifetime	Yes	*See* Orbital Debris Assessment Report.
25.122(c)(8)	Human Casualty Probability is zero with space station disposal via atmospheric re-entry	Yes	*See* Orbital Debris Assessment Report.

[6] 47 CFR § 25.122. In April 2020, the Commission adopted changes to portions of Section 25.122. *See Mitigation of Orbital Debris in the New Space Age*, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 4156 (2020) ("*Orbital Debris R&O*"). Although these changes are not yet in effect and remain under review by the Office of Management and Budget, Lynk is voluntarily complying with the version of Section 25.122 adopted in the *Orbital Debris R&O*.

Rule Section		Lynk Smallsat System	
		Cert.	Compliance
25.122(c)(9)	Satellite operations compatible with existing operations in requested frequency bands; satellite operations will not "materially constrain" future space station entrants from using the requested frequencies	Yes	*See, infra,* Section IV, A and B. and Technical Narrative.
25.122(c)(10)	Ground command to immediately cease satellite transmissions and Licensee capable of eliminating harmful interference	Yes	*See* Technical Narrative.
25.122(c)(11)	Satellites are 10 cm or larger in smallest dimension	Yes	The smallest dimension of the satellites is 15 cm (0.15 m). *See, infra,* Section IV, A.
25.122(c)(12)	Satellites are 180 kg or less, including any propellant	Yes	The maximum mass of the satellites is 85 kg. *See, infra,* Section IV, A.
25.122(c)(13)	Debris Source Probability is 0.01 (1 in 100) or less by collision with small debris or meteoroids that would cause loss of control and prevent disposal	Yes	*See* Orbital Debris Assessment Report.
25.122(c)(14)	Upon receipt of a space situational awareness conjunction warning, the licensee or operator will review and take all possible steps to assess the collision risk, and will mitigate the collision risk if necessary	Yes	*See* Orbital Debris Assessment Report.

IV. System Description

The proposed Lynk Smallsat System will contain both a space and ground component. The space component will consist of ten (10) small satellites operating in the NGSO MSS. The ground component will be made up of fixed earth stations at specific locations in-and-outside the United States for operation of feeder links and Telemetry, Tracking, and Command ("TT&C"). Also comprising the ground component are the service links connecting off-the-shelf mobile devices with Lynk's satellites utilizing UHF bands. In this application, Lynk is not requesting authority to operate service links in any UHF band in the United States. Operations in the UHF bands will be strictly limited to outside the United States and will be subject to agreements with administrations and partnerships with MNOs where Lynk seeks to provide commercial service. To operate the Lynk Smallsat System, which is designed in a manner that will not cause any harmful interference with other services, Lynk respectfully requests authorization for the following frequency bands in a full duplex fashion:

Requested Frequencies							
Links	UHF	L-band	S-band			Ka-band	
	Up & Down	Tx to Globalstar	Up	Down	Rx from Globalstar	Down	Up
	617-960 MHz	1613.75-1616.88 MHz	2025-2110 MHz	2200-2290 MHz	2483.5-2500 MHz	20.1-20.2 GHz	29.9-30.0 GHz
TT&C			x*	x*		x	x
TT&C via ISLs**		x			x		
Feeder						x	x
Service***	x						

* Transmissions to and from international earth station sites only

** Inter-satellite links ("ISLs") with Globalstar constellation via simplex and duplex modems

*** The Lynk Smallsat System will only utilize ***service links outside of the United States*** and use of these service links will be limited solely to the frequencies, bandwidths, and technologies assigned and requested by present and future terrestrial MNO service partners. Lynk will separately seek an authorization to operate in these bands in the United States once it has reached an agreement with one or more domestic MNOs.

A. The Space Component

The space component of the Lynk Smallsat System is made up of ten (10) small satellites meeting EELV Secondary Payload Adapter ("ESPA") classification. Lynk will utilize ridesharing opportunities offered by launch providers to place the small satellites in orbit. All satellites will operate in circular orbits around the earth in one of two altitudes of approximately 500 and 550 kilometers depending upon launch.

Current ridesharing opportunities offer a flexible launch manifest schedule, which provides Lynk the ability to launch satellites as they become ready and available for launch, at which time the inclination of the satellites will be determined. Consequently, the launch manifest schedule for the Lynk Smallsat System will solidify as satellites are manufactured and become ready for launch. Lynk's anticipated launch schedule and orbital parameters are provided in the Technical Narrative and Schedule S accompanying this application. However, depending upon availability of satellite readiness and the ridesharing opportunity, the Lynk Smallsat System may populate only mid-inclination, only SSO, or both.

The satellites in the Lynk Smallsat System will come in two sizes: the smaller form factor will be 0.15 meters by 1 meter by 1 meter, and the larger form factor will be 0.15 meters by 1.5 meters by 1.5 meters. The satellites will maintain the same shape and thickness, while only varying in surface area and volume. The increased surface area provides improved power capabilities and directivity of the antennas. The satellites in the Lynk Smallsat System are technically identical except as otherwise noted in this application. Lynk's current planned launch schedule is that the first four (4) satellites in SSO will be of the smaller size and the remaining six (6) satellites in mid-inclination orbit will be of the larger size. However,

depending upon availability of satellite readiness and the ridesharing opportunity, all satellites could be of the smaller size, the larger size, or a mixture of both sizes.

The satellites may contain propulsion to further aid in maneuverability and deorbiting. The satellite's wet mass will be fifty-five (55) kilograms for the smaller size and eighty-five (85) kilograms for the larger size. The dry mass is fifty (50) and eighty (80) kilograms respectively. Notably, the Lynk Smallsat System will operate below 600 kilometers, so propulsion is not required for the immediate application.[7] Nevertheless, the separate ODAR addresses both the presence and absence of propulsion capabilities.

1. Ka-band Feeder and in-band TT&C Downlinks

Satellites in the Lynk Smallsat System will transmit in the 20.1-20.2 GHz portion of the Ka-band for feeder link and in-band TT&C downlink operations. The 20.1-20.2 GHz band is allocated to non-federal MSS and FSS on a co-primary basis and to federal FSS on a primary basis. To ensure no harmful interference, Lynk will coordinate with all co-primary federal and non-federal services. The Streamlined Smallsat Licensing process places smallsat licensees on a non-interference basis relative to traditional Part 25 satellite licensees in the same service.[8] Accordingly, Lynk will operate on a non-interference basis in the 20.1-20.2 GHz band. Moreover, as analyzed in the separately attached Technical Narrative, Lynk's operations will not materially constrain current and future operators.

[7] The ODAR also details the specifics of orbital lifetime, satellite identification and tracking, maneuverability and deorbit systems, as well as anticipated orbital evolution.

[8] *See Streamlined Smallsat Licensing R&O*, 34 FCC Rcd at 13112, ¶ 92.

2. S-band TT&C Downlinks

The satellites will transmit to specific international locations in the 2200-2290 MHz portion of the S-band for backup TT&C operations in cases where Lynk cannot transmit in the Ka-band. Although allocated to Space Operations in all three of the ITU regions, the 2200-2290 MHz band is only allocated to federal services in the United States. Accordingly, Lynk only seeks authorization to operate in these frequencies outside the United States. Just like under Lynk's experimental authorizations in this band, Lynk will coordinate with Federal users prior to any operations to ensure no harmful interference.[9] Likewise, Lynk's S-band operations will not materially constrain current and future operators as illustrated in the separate Technical Narrative.

3. TT&C Intersatellite Links

Outside of reach of the remotely located earth stations operating in the S-band and Ka-band, Lynk's small satellites will have a transmit and receive capability for TT&C communications via space-to-space intersatellite service links ("ISS" or "ISL") with the Globalstar constellation and its ground network pursuant to agreement with Globalstar.[10] Lynk's experimental satellites already successfully utilize the Globalstar constellation and operate on Globalstar-authorized and assigned frequencies for TT&C communications under its

[9] *See, infra,* Section V, B. Lynk would also commit to the same federal coordination condition for operations in the United States in this frequency band as the FCC recently imposed in a grant for R2 Space. *See* R2 Space, Inc., IBFS File No. SAT-LOA-20200511-00042, Condition 3 (Grant Stamp Dec. 18, 2020).

[10] Globalstar has been briefed on Lynk's intention to apply for use of these ISLs in this application.

experimental authorizations.[11] Accordingly, Lynk seeks authorization for the Lynk Smallsat System satellites to transmit to the Globalstar constellation on the following Globalstar-authorized and assigned frequencies 2483.5-2500 MHz and receive on the following Globalstar-authorized and assigned frequencies 1613.75-1616.88 MHz. Although the Lynk Smallsat System and Globalstar constellation are MSS systems for which these bands are allocated, these bands are not allocated to ISS, so Lynk respectfully requests to the extent necessary a waiver for operating ISLs with the Globalstar constellation.[12] Similarly, the Technical Narrative provides that Lynk's operations in these bands will not materially constrain current and future operators.

4. UHF Service Downlinks

Lynk will operate a cellular-based satellite communications network that will provide global GSM and LTE cellular services by operating on most mobile terrestrial frequencies used globally in the 617-960 MHz band. Lynk's small satellites will communicate with off-the-shelf mobile devices in portions of the 617-960 MHz band, with the specific frequencies depending on agreements reached by Lynk with MNOs and any requisite regulatory approvals. Lynk is not seeking access to any UHF bands to operate the Lynk Smallsat System service links in the United States at this time. Nevertheless, Lynk separately includes a UHF Interference Mitigation Analysis demonstrating that Lynk's operations will not cause harmful interference to terrestrial services in the band. Moreover, the Technical Narrative explains that Lynk's UHF operations will not materially constrain current and future operators.

[11] *See, infra,* Section V, B.

[12] *See, infra,* Section V, A.

B. The Ground Component

The ground component of Lynk's system will contain service links connecting mobile terrestrial devices to Lynk's satellites, feeder links with in-band TT&C, and backup TT&C-only links. Lynk will monitor and control all aspects of satellite operations at its office located in Falls Church, VA. Accordingly, Lynk can command its satellites from the ground to immediately cease transmissions, and Lynk will have the capability to eliminate harmful interference when required under the terms of the license, other applicable regulations, and coordination conditions on operation.

1. Ka-band Feeder and in-band TT&C Uplinks

In the 29.9-30.0 GHz band, Lynk intends to build and operate its own domestic and international fixed ground stations for feeder link operations with in-band TT&C. Lynk may supplement this capability by contracting with duly authorized and licensed third-party ground station operators around the world to communicate with Lynk's satellites. The 29.9-30.0 GHz band (Earth-to-space) is allocated to non-federal MSS and FSS on a co-primary basis. To ensure no harmful interference, Lynk will coordinate its feeder link operations, including its in-band TT&C operations, with all co-primary services. Lynk will ensure that all operational conditions are fully performed with the operation of the earth stations in the band. As illustrated in the Technical Narrative, Lynk's uplink operations in the band will not materially constrain current and future operators.

2. S-band TT&C Uplinks

For operations in the 2025-2110 MHz band, Lynk will contract with third-party ground station operators around the world outside of the United States for TT&C communications with the Lynk Smallsat System. These third-party operators will obtain the necessary authorizations from regulators in their respective jurisdictions for TT&C communications with the Lynk Smallsat System. Although allocated to Space Operations in all three of the ITU regions along with other co-primary allocations, in the United States the Fixed and Mobile services are the only non-federal allocations. Consistent with the rest of this application, Lynk's proposed services and use of this band will be coordinated, including with Federal users, where necessary, ensuring that Lynk's operations will not cause harmful interference.

3. UHF Service Uplinks

Transmissions to the Lynk satellites in portions of the 663-915 MHz band will be conducted with unmodified, off-the-shelf mobile terrestrial devices on specific frequencies depending on agreements reached by Lynk with local MNOs and any requisite regulatory approvals. Lynk is not seeking access to any UHF bands to operate the Lynk Smallsat System service links in the United States at this time but included with this application is a UHF Interference Mitigation Analysis demonstrating that Lynk's operations will not cause harmful interference to terrestrial services in the band.

V. Other Considerations

A. Waivers

Lynk seeks waivers of certain Commission rules. The Commission may grant waivers of its rules where the applicant demonstrates good cause for such action,[13] and good cause may be found where "particular facts would make strict compliance inconsistent with the public interest."[14] To satisfy the public interest requirement, "the waiver cannot undermine the purposes of the rule, and there must be a stronger public interest benefit in granting the waiver than in applying the rule."[15] The waivers requested by Lynk satisfy these criteria.

1. U.S. Table of Frequency Allocations

2200-2290 MHz Band. Lynk respectfully requests a waiver, to the extent necessary, of the U.S. Table of Frequency Allocations, 47 CFR § 2.106, to conduct backup TT&C downlink operations in the 2200-2290 MHz band on a non-harmful interference basis. This band is allocated to Space Operations (space-to-Earth) on a co-primary basis across all ITU regions. In the United States, satellite service allocations in this band are limited to Federal use. Lynk's

[13] *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969) ("*Northeast Cellular*").

[14] *Northeast Cellular*, 897 F.2d at 1166; *see also ICO Global Communications v. FCC*, 428 F.3d 264, 269 (quoting *Northeast Cellular*); *WAIT Radio*, 418 F.2d at 1157-59; *Deere & Company Request for Limited Waiver of Part 15 Rules for Fixed White Space Device*, Order, 31 FCC Rcd 2131, 2134 ¶ 8 (OET 2016) ("*Deere Order*") (quoting *Northeast Cellular*).

[15] *Deere Order*, 31 FCC Rcd at 2134 ¶ 8; *see also WAIT Radio*, 418 F.2d at 1157 (stating that even though the overall objectives of a general rule have been adjudged to be in the public interest, it is possible that application of the rule to a specific case may not serve the public interest if an applicant's proposal does not undermine the public interest policy served by the rule); *Kyma Medical Technologies Ltd.*, Order, 31 FCC Rcd 9705, 9707 ¶ 5 (OET 2016).

backup S-band transmitter would only be used to communicate with earth stations outside the United States. Lynk's S-band earth stations will be located in high-latitude (greater than 30 degrees North or South), non-U.S. locations. Prior to beginning operations in this band, Lynk will coordinate use with Federal agencies, consistent with conditions placed on other satellite licenses where the Commission authorized operations in this band.[16] For these reasons, grant of this waiver request is appropriate, consistent with Commission precedent, and serves the public interest.

2025-2110 MHz band. Lynk requests a waiver, to the extent necessary, of the U.S. Table of Frequency Allocations, 47 CFR § 2.106, to conduct backup TT&C uplink operations in the 2025-2110 MHz band on a non-harmful interference basis. The band is allocated to Space Operation Service (space-to-Earth) on a primary basis in all ITU regions. In the United States, satellite service allocations in this band are generally limited to Federal use, with use by non-Federal satellite services limited to space research service and the Earth exploration-satellite service ("EESS"). Lynk's S-band transmitter would only be used to communicate with earth stations outside the United States. Lynk's S-band earth stations will be located in high-latitude (greater than 30 degrees North or South), non-U.S. locations. Prior to beginning operations in this band, Lynk will coordinate with Federal agencies, consistent with conditions placed on

[16] HawkEye 360, Inc. IBFS File Nos. SAT-LOA-20190102-00001, SAT-AMD-20200728-00090 (Grant Stamp Dec. 17, 2020)) ("HawkEye 360 Grant"); Loft Orbital Solutions Inc., IBFS File Nos. SAT-LOA-20190807-00072 and SAT-AMD-20200527-00063 (Grant Stamp Oct. 8, 2020) ("Loft Orbital Grant").

other satellite licenses where the Commission authorized operations in this band.[17] For these reasons, grant of this waiver request is appropriate, consistent with Commission precedent, and serves the public interest.

1613.75-1616.88 MHz and 2483.5-2500.0 MHz bands. As discussed in Section IV.A.3 of this application, Lynk requests waiver of the U.S. Table of Frequency Allocations to conduct TT&C operations over ISLs with the Globalstar constellation in the 1613.75-1616.88 MHz and 2483.5-2500.0 MHz bands. The 1613.75-1616.88 MHz band is allocated for MSS (Earth-to-space) and the 2483.5-2500.0 MHz band is allocated for MSS (space-to-Earth) operations, but these allocations do not include ISL operations. Lynk intends use Globalstar approved modems to communicate with the Globalstar satellites to send extremely limited data transmissions which will be indistinguishable from expected communications from identical ground equipment. Lynk intends to use its modems only for TT&C and only when its ground stations are unavailable. Lynk's planned ISS operations are consistent with those operations previously granted by the Commission and are within a frequency range that does not overlap with any other authorized system.[18] As demonstrated in the Technical Narrative, these transmissions will not cause harmful interference to other authorized operations, including Iridium L-band operations and Radioastronomy operations. For these reasons, grant of this waiver request is appropriate, consistent with Commission precedent, and serves the public interest.

[17] HawkEye 360 Grant, Conditions 7 & 10; Loft Orbital Grant; Capella Space Corp., IBFS File No. SAT-LOA-20200914-00108 (Grant Stamp Dec. 17, 2020).

[18] Loft Orbital Grant, n.5, Condition 9; Astro Digital U.S., Inc., IBFS File No. SAT-LOA-2017-0508-00071, n.3 (Grant Stamp Dec. 14, 2017).

2. Ka-band Plan

20.1-20.2 GHz and 29.9-30.0 GHz. To the extent necessary, Lynk seeks waiver of the Commission's Ka-band Plan to provide MSS feeder link operations with in-band TT&C in the 20.1-20.2 GHz (space-to-Earth) and 29.9-30.0 GHz (Earth-to-space) bands. Although these frequencies are allocated for FSS and MSS domestically and internationally, FCC service rules do not currently exist for MSS. The Commission has nevertheless found it in the public interest to authorize space stations to provide MSS in the broader 19.7-20.2 and 29.5-30.0 GHz bands.[19] Good cause exists to permit Lynk to conduct the proposed MSS operations in these bands under the same conditions that the Commission placed on other licensees to provide MSS in these bands, modified to reflect the more limited frequency bands in which Lynk proposes to operate: (i) "MSS operations in the 20.1-20.2 GHz and 29.9-30 GHz bands are authorized up to the applicable power flux-density ("PFD") and equivalent power-flux density ("EPFD") limits contained in Section 25.208, 47 CFR § 25.208, and Articles 21 and 22, as well as Resolution 76 of the ITU Radio Regulations[;]" (ii) Lynk will "cooperate with other NGSO FSS operators in order to ensure that all authorized operations, including MSS operations in the 19.7-20.2 GHz band, jointly comport with the applicable limits for aggregate EPFD in the space-to-Earth direction (EPFD down) contained in Article 22 of the ITU Radio Regulations, as well as Resolution 76 of the ITU Radio Regulations[;]" and (iii) "MSS operations in the 20.1-20.2 GHz and 29.9-30 GHz

[19] *O3b Limited, Request for Modification of U.S. Market Access for O3b Limited's Non-Geostationary Satellite Orbit System in the Fixed-Satellite Service and in the Mobile-Satellite* Service, Order and Declaratory Ruling, 33 FCC Rcd 5508, 5516, ¶¶ 21-22 (2018) ("*O3b Order*"); *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, 8329-30, ¶¶ 21-23 (2020) ("*Kuiper Order*").

frequency bands shall be conducted on a non-interference, non-protected basis with respect to other satellite operations in these bands."[20]

3. Limitations of Schedule S

Lynk requests, to the extent necessary, limited waiver of Section 25.114(c) of the Commission's rules, which requires submission of certain technical information using Schedule S. Due to restrictions of the required Schedule S software, Lynk is unable to convey certain information as detailed in the attached Technical Narrative.[21] Limited waiver of Section 25.114(c) is warranted as it would enable Lynk to submit its application for the Lynk Smallsat System for consideration without undermining the rule's intent that the Commission receive all necessary information to evaluate the application. Lynk has provided all necessary information in this Legal Narrative, Technical Narrative, and, to the extent possible, Schedule S. The Commission has granted similar waivers to other NGSO system applicants that were unable to sufficiently describe their satellite system in Schedule S.[22] Accordingly, grant of limited waiver of Section 25.114(c) is appropriate, consistent with precedent, and would serve public interest.

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[20] *O3b Order,* 33 FCC Rcd at 5525, ¶ 46 (a), (b), (d); *Kuiper Order*, 35 FC Rcd at 8344-45, ¶ 59 (d) (f), (j). Although the Commission authorized Kuiper and O3b to operate on a non-interference basis only with regard to FSS systems, Lynk acknowledges that, as a licensee under Section 25.122, its operations in the Ka-band will be on a non-interference basis relative to all other satellite operators.

[21] *See* Technical Narrative at 14-15, 22, 27 and 31

[22] *See*, *e.g.*, Space Exploration Holdings, LLC Request for Modification of the Authorization for the SpaceX NGSO Satellite System, Order and Authorization, 36 FCC Rcd 122, 133, ¶ 23 (2021); *ViaSat, Inc. Petition for Declaratory Ruling Granting Access for a Non-U.S.-Licensed Non-Geostationary Orbit Satellite Network*, Order, 35 FCC Rcd 4324, 4343, ¶ 60 (2020); *Kuiper Order*, 35 FC Rcd at 8343, ¶ 56.

B. Related Licensed Operations

As noted above, Lynk has been experimenting with its patented technologies to test and prove its network design to bring mobile connectivity everywhere in a considered and incremental fashion. The following table outlines Lynk's related experimental missions.

Mission	Satellite	Call Sign	File Number
Hosted Payload	Professor De-La Paz	WN9XQS	1247-EX-ST-2018
	UbiquitiLink-1	W09XPA	0646-EX-ST-2019
			1435-EX-ST-2019
	Lynk the World	XP9XOE	1862-EX-ST-2019
			2218-EX-ST-2019
Free Flying Payload	Lynk the World	WQ9XDP	2130-EX-ST-2019
			0849-EX-ST-2020
			1433-EX-ST-2020
			1184-EX-ST-2020
		WR9XKE	1783-EX-ST-2020
		WL2XJO (pending)	0931-EX-CN-2020
		Unassigned (pending)	0207-EX-CN-2021
			0210-EX-CN-2021
	Shannon	WL2XOT (pending)	0088-EX-CN-2021

C. ITU Filings

Pursuant to 47 CFR § 25.111 for space systems, Lynk understands that the Commission will submit filings to the ITU on its behalf pursuant to international obligations for the coordination and registration of space network systems. Lynk will provide the Commission with the appropriate electronic files for submission to the ITU. Lynk acknowledges that it is responsible for any ITU cost recovery fees associated with this application.[23] Pursuant to 47 CFR § 25.111(d), Lynk will separately file a declaration of unconditional acceptance of all

[23] 47 CFR § 25.111(d).

consequent ITU cost-recovery responsibility in the "Other Filings" tab of the application file in the FCC's IBFS database.

VI. Conclusion

For the reasons set forth herein and in accompanying materials, Lynk respectfully requests the Commission expeditiously grant Lynk the authority to launch and operate the Lynk Smallsat System.

Respectfully submitted,

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