

EXHIBIT 1

DESCRIPTION OF PROPOSED MODIFICATION

I. INTRODUCTION

Pursuant to Section 25.117 of the Commission’s rules,¹ AST & Science, LLC (“AST SpaceMobile”) hereby submits this application for license modification of its 248-satellite non-geostationary orbit (“NGSO”) system² to provide additional authorization for the following: (i) international mobile satellite service (“MSS”) use outside the United States of additional spectrum above 1 GHz identified by the International Telecommunications Union (“ITU”) for International Mobile Telecommunications (“IMT”); and (ii) feeder-link and telemetry, tracking, and command (“TT&C”) use of additional V-band spectrum at 45.5-47 GHz (U.S. uplinks),³ 42-42.5 GHz (U.S. and non-U.S. downlinks), and 47-47.2 GHz (U.S. and non-U.S. uplinks).⁴ AST SpaceMobile will utilize the additional IMT and V-band spectrum to support direct-to-device (“D2D”) services, including supplemental coverage from space (“SCS”), in partnership with mobile network operators (“MNOs”) pursuant to appropriate local authority. AST SpaceMobile will seek additional authorization from the relevant national licensing administrations before commencing operations outside the United States.

II. PROPOSED MODIFICATION AND REQUESTED WAIVERS

AST SpaceMobile is seeking modification authorization to access additional IMT and V-band spectrum only, as further specified in the accompanying Attachment A (Technical

¹ 47 C.F.R. § 25.117.

² See *AST & Science, LLC*, Authorization and Order, DA 26-391 (SB/WTB/OET/PHSHB rel. Apr. 21, 2026) (“*SCS Authorization*”).

³ AST SpaceMobile is currently authorized for feeder and TT&C uplink operations at 45.5-47 GHz outside the United States only. See *id.*, Attachment (Grant).

⁴ See, e.g., ITU Radio Regulations No. 5.217A.

Statement) and Schedule S.⁵ Accordingly, AST SpaceMobile certifies that all other authorized technical parameters remain unchanged.⁶

AST SpaceMobile is actively working to partner with MNOs across the globe to make productive use of this additional spectrum. As the communications ecosystems evolve abroad, AST SpaceMobile's service will complement terrestrial mobile and MSS networks to deliver enhanced broadband connectivity and seamless service continuity for consumers, enterprises, and government users. By integrating satellite-enabled capabilities with existing terrestrial infrastructure, AST SpaceMobile's service will help extend coverage, improve network resilience, and support more reliable communications in areas where terrestrial-only networks may be limited or unavailable. This is especially important as the United States faces increasing competition in space from foreign adversaries, such as China.

AST SpaceMobile will utilize the requested additional spectrum to support D2D communications, consistent with applicable service allocations and waivers, and further "subject to the laws, regulations, and requirements of any country in connection with communications with that country."⁷ Specifically, the proposed D2D service-link operations on additional IMT frequencies outside the United States will be on a non-interference basis, consistent with ITU Radio Regulation No. 4.4.⁸ Additionally, the proposed feeder-link and

⁵ See *SCS Authorization*. With this application AST SpaceMobile is requesting modification authority for its entire 248-satellite NGSO constellation to access additional spectrum, regardless of whether individual satellites are equipped with transponders capable of operating on that spectrum.

⁶ See 47 C.F.R. § 25.117(c).

⁷ *Single Network Future: Supplemental Coverage from Space*, Report & Order, 39 FCC Rcd. 2622, ¶ 232 (2024) ("SCS Order").

⁸ See ITU Radio Regulation No. 4.4; see also *SCS Order* ¶¶ 224-225.

TT&C operations at 45.5-47 GHz within the United States⁹ and at 42-42.5 GHz outside the United States¹⁰ are consistent with applicable domestic and international service allocations.

Any proposed feeder-link and TT&C operations that are inconsistent with domestic and international service allocations (*i.e.*, downlinks at 42-42.5 GHz within the United States and uplinks at 47-47.2 GHz within and outside the United States) will be on a non-conforming, non-interference basis. To the extent required, AST SpaceMobile requests a waiver¹¹ to allow any non-conforming use of the 42-42.5 GHz and 47-47.2 GHz bands. As demonstrated in Attachment A (Technical Statement), the proposed use of the bands will comply with relevant power limits and ensure interference protection of incumbent operations. Thus, grant of the requested allocations waiver, to the extent required, is consistent with the Commission's waiver precedent.¹²

AST SpaceMobile further requests a waiver, to the extent required, of the Commission's processing round requirements for use of additional V-band frequencies, as such use does not preclude future market entrants' use of the spectrum. Specifically, AST SpaceMobile will operate in the 42-42.5 GHz and 47-47.2 GHz bands on a non-conforming,

⁹ See 47 C.F.R. § 2.106 (U.S. and International Tables) (allocating the 45.5-47 GHz band domestically and internationally for MSS on a primary basis and further permitting use of the band, pursuant to international footnote 5.554, for "satellite links connecting land stations at specified fixed points ... when used in conjunction with the mobile-satellite service").

¹⁰ See *id.* (International Table) (allocating the 42-42.5 GHz band internationally for FSS downlinks on a primary basis).

¹¹ The Commission may waive any rule for good cause shown and take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis. Waiver is appropriate if: (i) special circumstances warrant a deviation from the general rule; and (ii) such deviation better serves the public interest. See *NetworkIP, LLC v. FCC*, 548 F.3d 116, 125-128 (D.C. Cir. 2008) (citing *Northeast Cellular Telephone Co.*, 897 F.2d 1164, 1166 (1990)); *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), cert. denied, 409 U.S. 1027 (1972).

¹² See, e.g., Logos Space Services, Inc., *Stamp Grant*, ICFS File Nos. SAT-LOA-20241030-00243 *et al.*, Conditions 5 & 6 (Jan. 30, 2026) (granting allocations waiver for FSS downlink use of 42-42.5 GHz and uplink and downlink use of 47-47.2 GHz within and outside United States).

non-interference basis. AST SpaceMobile also will coordinate with any existing or future users of the 45.5-47 GHz band and, to the extent required, participate in any future processing round that the Commission may open for the band. Accordingly, the proposed use of additional V-band spectrum is not mutually exclusive with existing or future operations, and thus may be authorized outside of a processing round, consistent with the Commission’s waiver precedent.¹³

III. GRANT OF THE PROPOSED MODIFICATION WILL SERVE THE PUBLIC INTEREST

As the Commission recognized, “the electric growth of the American space economy has ushered generational improvements and renewed enthusiasm in direct-to-device technology. Unprecedented investment, globally harmonized standards, and ubiquitous adoption in consumer handsets confirm that the frontier of possibilities for direct-to-device services is rapidly expanding.”¹⁴ AST SpaceMobile has been at the forefront of that electric growth and unprecedented investment. This application represents the next step in AST SpaceMobile’s mission to connect the unconnected around the world and ensure U.S. leadership in space.

Authorizing access to additional IMT spectrum for D2D services outside the United States, along with additional V-band spectrum for related feeder-link and TT&C operations, will serve the public interest by advancing U.S. interests in boosting the space economy and ensuring the competitiveness of American companies abroad, especially as they face increasing competition from China and other countries. Additionally, grant of the requested authority will enable AST SpaceMobile to provide services outside the United States in a manner that

¹³ See, e.g., *Space Exploration Holdings, LLC*, Authorization and Order, DA 26-36, ¶¶ 13-14 (SB rel. Jan. 9, 2026).

¹⁴ *Space Exploration Holdings LLC*, Order, DA 26-398, ¶ 1 (rel. Apr. 23, 2026).

promotes efficient global spectrum use, advances harmonized international operations, and strengthens U.S. leadership in next-generation satellite-enabled services. Authorizing these operations will also enhance service continuity for Americans living or working abroad, support innovation and economies of scale, and contribute to the competitiveness of U.S. providers in the global communications marketplace.

IV. ITU COST RECOVERY

AST SpaceMobile is aware that, as a result of the actions taken at the 1998 Plenipotentiary Conference, as modified by the ITU Council in 2005, the ITU now charges processing fees for satellite network filings. Consequently, Commission applicants are responsible for any and all fees charged by the ITU. AST SpaceMobile confirms that it is aware of this requirement and accepts responsibility to pay any ITU cost recovery fees associated with this application. Invoices for such fees may be sent to the contact representative listed in the accompanying FCC Form 312.

V. CONCLUSION

For the foregoing reasons, AST SpaceMobile respectfully requests that the Commission grant this application expeditiously to bolster deployment of new, groundbreaking broadband connectivity across the globe. Authorizing access to additional IMT and V-band spectrum will advance ubiquitous connectivity, American competitiveness, and innovation in the emerging SCS/D2D ecosystem. These additional frequencies will improve the upload and download speeds available to users and will promote the reliable, high-quality connectivity necessary to participate in the modern, Internet-enabled economy.

Respectfully Submitted,

AST & Science, LLC

By: /s/ Jennifer A. Manner

Kathryne C. Dickerson
Greenberg Traurig, LLP
2101 L Street N.W., Suite 1000
Washington, D.C. 20037
(202) 331-3100
Its Counsel

Jennifer A. Manner
SVP, Regulatory Affairs & Int'l Strategy
Phuong N. Pham
VP, Regulatory Affairs
Benjamin J. Wagner
Director, Regulatory Engineering

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