

EXHIBIT 1

DESCRIPTION OF PROPOSED GATEWAY OPERATIONS

AST & Science, LLC (“AST SpaceMobile”), pursuant to Section 25.115 of the Commission’s rules,¹ submits this application (“Application”) for authority to operate a V-band gateway earth station in Iowa Falls, IA, for feeder-link and telemetry, tracking, and command (“TT&C”) communications at 47.2-50.2 GHz / 50.4-51.4 GHz (Earth-to-space) and 37.5-42.0 GHz (space-to-Earth) with its authorized 248-satellite non-geostationary orbit (“NGSO”) constellation, including six in-orbit satellites and additional authorized satellites.²

Grant of the Application will serve the public interest without causing any harmful interference to other authorized operations. Specifically, the proposed gateway operations will enable crucial feeder-link and TT&C communications with AST SpaceMobile’s authorized NGSO satellite constellation.³ Authorizing these key gateway operations will facilitate deployment and operation of groundbreaking direct-to-device broadband connectivity across the United States and the world, including underserved and unserved areas. This, in turn, will further advance the Commission’s leadership in establishing a regulatory framework for new Supplemental Coverage from Space (“SCS”) services. Indeed, the Commission has found that AST SpaceMobile’s NGSO SCS system, including the proposed V-band gateway feeder-link and TT&C operations, offers substantial public interest benefits.⁴

The proposed gateway will operate with technical parameters specified in the accompanying Schedule B, in compliance with Sections 25.208(r)-(t), 25.289, and other applicable technical limits to ensure interference protection of other authorized operations.⁵ AST SpaceMobile also will coordinate with co-primary radio astronomy operations prior to commencing any gateway operations in the 48.94-49.04 GHz band.⁶ Additionally, as the attached Comsearch report (Exhibit 2) demonstrates, coordination with terrestrial licensees in V-band spectrum shared with upper microwave flexible use services (“UMFUS”) has been completed.

¹ See 47 C.F.R. § 25.115.

² See *AST & Science, LLC*, ICFS File No. SAT-MOD-20250612-00145, Stamp Grant (Apr. 21, 2026). AST SpaceMobile is also concurrently filing a request for 180-day special temporary authorization (“STA”) to operate this gateway on an unprotected, non-interference basis.

³ AST SpaceMobile has been operating similar V-band gateways for feeder-link and TT&C communications with its authorized NGSO constellation on a non-interference STA basis, without any interference complaints received to date. See, e.g., *AST & Science LLC*, ICFS File Nos. SES-STA-20251118-00364 (granted Dec. 4, 2025) (Midland, TX); SES-STA-20251119-00815 (granted Jan. 6, 2026) (Homestead, FL).

⁴ See *AST & Science, LLC*, Order and Authorization, 39 FCC Rcd 8558, para. 7 (rel. Aug. 2, 2024) (“AST BB1 Authorization”).

⁵ See 47 C.F.R. §§ 25.208(r)-(t), 25.289; see also *AST & Science, LLC*, ICFS File Nos. SAT-MOD-20250612-00145 & SAT-AMD-20250718-00181, Stamp Grant at Condition Nos. 10-12 (Aug. 29, 2025); AST BB1 Authorization, at para. 27(o)-(z).

⁶ See AST BB1 Authorization, at para. 27(y).

No additional UMFUS-related showing is required under Section 25.136, as the proposed gateway will operate, at least initially, on a secondary, non-interference basis.⁷

As demonstrated in the attached Exhibit 3 (Radiofrequency Exposure Analysis), the proposed gateway operations will comply with the Commission's radiofrequency exposure requirements. Furthermore, Federal Aviation Administration notification is not required, as the proposed antenna structure is less than 6.1 meters in height above ground level or otherwise not subject to notification requirements.⁸

Based upon the foregoing, AST SpaceMobile urges an expeditious grant of license to operate the proposed gateway to support prompt deployment of its authorized 248-satellite NGSO SCS system.

⁷ See 47 C.F.R. § 25.136(b)-(e). AST SpaceMobile, however, may later seek additional Commission authorization, and provide the UMFUS-related showing required under Section 25.136, to commence gateway operations with additional interference protection rights in any UMFUS-shared frequency bands.

⁸ See 47 C.F.R. § 17.7(a)-(d), (e)(3).