

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	)	
	)	
Applications of Spectrum Business Trust 2025-1,	)	GN Docket No. 25-302
Space Exploration Technologies Corp., and	)	
EchoStar Corporation for Consent to Assign	)	
Spectrum and Earth Station Licenses	)	

MEMORANDUM OPINION AND ORDER

Adopted: May 12, 2026

Released: May 12, 2026

By the Chief, Wireless Telecommunications Bureau and Chief, Space Bureau

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I. INTRODUCTION

1. In this Memorandum Opinion and Order, we take a major step towards expanding spectrum-based connectivity for Americans by approving the assignment of approximately 65 megahertz of mid-band spectrum to Space Exploration Technologies Corp. (SpaceX) for use in its next generation direct-to-device (D2D) network. Specifically, we grant the applications filed by SpaceX, Spectrum

Business Trust 2025-1 (the Trust), and EchoStar Corporation and its wholly owned subsidiaries (EchoStar) (collectively, the Applicants) to assign EchoStar's AWS-4, AWS-H Block, and unpaired AWS-3 spectrum licenses and several earth station licenses to SpaceX through a two-step transaction.¹ And through a series of waivers² and rigorous buildout conditions, we establish technological flexibility and strong expectations to ensure that SpaceX will unlock this underutilized spectrum to bring transformational benefits for the American people.

2. In the near term, consumers will benefit from supercharged D2D services throughout the United States.³ Even with the small amount of D2D spectrum available to date, supplemental coverage from space has brought ubiquitous and oftentimes lifesaving connectivity to consumers in mobile dead zones. The infusion of approximately 65 megahertz for D2D promises generational upgrades in the quality of D2D services: from text-based services to reliable mobile voice and data. Indeed, according to the Applicants, the wider bandwidth operations enabled by assignment of this dedicated spectrum, combined with SpaceX's next-generation D2D technology, will support a tremendous increase in D2D capacity from SpaceX's earlier system.⁴

3. In the longer term, we expect this transaction to enhance competition to provide spectrum-based services to mobile devices. With a dedicated supply of D2D spectrum, we expect SpaceX to be able to compete with incumbent terrestrial wireless providers with the beneficial result of potentially lowering prices for consumers. Just as fixed wireless access—first slowly, then suddenly—revolutionized the market for in-home broadband, we expect a similar transformation in the market for terrestrial wireless services as the 65 megahertz of spectrum at issue is deployed fully for D2D. To ensure these consumer benefits are real and not merely hypothetical, we impose stringent buildout conditions that will require SpaceX to meet deployment milestones that are on par with a similarly situated terrestrial wireless network.

4. In approving this transaction, we also take decisive steps to fulfill the Commission's policies to advance technological neutrality and intermodal competition. We grant waivers of our service rules that will allow SpaceX to use the spectrum at issue flexibly for terrestrial or D2D services. This transaction reflects a recognition of converging satellite and terrestrial wireless networks that will shape the future of connectivity for mobile devices. The \$17 billion transaction before us is merely one piece of evidence of the growing demand for this new type of connectivity. The D2D market, which is expected

¹ Amended Applications of Spectrum Business Trust 2025-1, Space Exploration Technologies Corp., and EchoStar Corporation for Consent to Assign Spectrum and Earth Station Licenses, GN Docket No. 25-302, ULS File Nos. 0011755472, 0011755474, 0011755481, 0011783085, and 0011783097, and File Number 50000ALAA25 filed in ECFS (filed November 20, 2025) (Amended Spectrum Transaction Applications); ICFS File Nos. SES-ASG-20250918-00146 and SES-ASG-20250918-00147 and Submission ID 1091941380832 filed in ECFS (filed Sept. 18, 2025) (Earth Station Transaction Applications, and together with the Amended Spectrum Transaction Applications, Transaction Applications). The Applicants first filed applications requesting approval for the assignment of EchoStar's spectrum to SpaceX on September 18, 2025, and subsequently amended the applications in ECFS on November 10, 2025, and in ULS on November 20, 2025. *See, e.g.*, ULS File No. 0011755472 (reflecting original Sept. 18, 2025 filing); GN Docket No. 25-302 (reflecting November 10, 2025 amendment).

² *See generally* Transaction Applications, Amended Exh. B, Waiver Requests (Nov. 20, 2025) (Amended Waiver Requests). We grant waiver of the terrestrial buildout requirements, the discontinuance rule, and the 180-day consummation requirements. Requests for waiver of 47 CFR §§ 2.106 and 25.115 will be addressed in GN Docket No. 25-340. *See infra* section VII (Waivers).

³ D2D service is connectivity provided directly to a smartphone or device from next-generation satellites. We note that the filings in the record for this transaction may also refer to this as Direct-to-Cell (D2C) service, which represents a subset of D2D.

⁴ *See* Amended Spectrum Transaction Applications, Amended Description of Transaction, Public Interest Showing, and Related Demonstrations at 4 (Nov. 20, 2025) (Amended Public Interest Statement); *see also* SpaceX, The Future of Starlink Direct to Cell (Sept. 8, 2025), <https://www.spacex.com/updates>.

to grow from \$5.03 billion in 2026 to \$13.80 billion in 2031,⁵ has witnessed an explosion in investment as the technology is iteratively standardized at 3GPP⁶ and global changes are considered at the International Telecommunications Union.

5. Today's decision, combined with recent action by the Space Bureau, also serves the public interest by bringing finality to disputes over the AWS-3, AWS-4, and AWS-H Block spectrum bands previously held by EchoStar.⁷ Confirming SpaceX's exclusive rights to these bands throughout the United States will stimulate investment in D2D. Terminating ongoing controversy over EchoStar's utilization of this spectrum, one that has persisted for more than a decade, will resolve years-long uncertainty about the status of these bands. We expect that the definitive resolution that our decision provides will result in more intensive use of valuable spectrum. Indeed, approval of this transaction, combined with upcoming mid-band auctions⁸ and recent approval of other transactions,⁹ continues this agency's execution of President Trump's ambitious plan to bring a pipeline of additional spectrum to facilities-based providers with the incentive and ability to build American networks that benefit American consumers.

6. Accordingly, based on our analysis, and in light of the stringent conditions we place on SpaceX's deployment of this spectrum, we find that granting these applications and the accompanying waiver requests serves the public interest, convenience, and necessity.

II. BACKGROUND

A. Description of the Applicants

1. Space Exploration Technologies Corp.

7. SpaceX is a private Texas corporation that operates two primary businesses: a space launch business and a global satellite-based broadband service.¹⁰ SpaceX also recently acquired X.AI Corp., an artificial intelligence and social media company.¹¹ SpaceX's satellite business designs, manufactures, launches, and operates advanced communications satellites.¹² This business includes

⁵ Mordor Intelligence, Direct-to-Device Satellite Connectivity Market Size & Share Analysis-Growth Trends and Forecast (2026-2031), <https://www.mordorintelligence.com/industry-reports/direct-to-device-satellite-connectivity-market>.

⁶ 3GPP, or the 3rd Generation Partnership Project, is a collaboration of seven international standard development organizations for mobile telecommunications. See 3GPP, Introducing 3GPP, <https://www.3gpp.org/about-us/introducing-3gpp> (last visited May 4, 2026).

⁷ See *Space Exploration Holdings LLC et al.*, Order, DA 26-398 (SB, April 23, 2026) (*MSS Spectrum Clarification Order*).

⁸ See generally *Upper C-Band (3.98-4.2 GHz)*, GN Docket No. 25-59, Notice of Proposed Rulemaking, FCC 25-78 (Nov. 21, 2025); *Enhancing National Security Through the Auction of AWS-3 Spectrum Licenses, Applying New Average Annual Gross Revenue Benchmarks for Small Business Bidding Credit, Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*, GN Docket Nos. 25-70, 25-71, 13-185, Report and Order and Second Report and Order, 40 FCC Rcd 5544 (2025).

⁹ See, e.g., *Applications of T-Mobile US, Inc. and United States Cellular Corporation for Consent to Transfer Control of Licenses, Authorizations, and Leases*, GN Docket No. 24-286, Memorandum Opinion and Order, 40 FCC Rcd 4776 (WTB/OIA July 11, 2025) (*T-Mobile-USCellular Order*); *Applications of New Cingular Wireless PCS, LLC and United States Cellular Corporation for Consent to Assign Licenses*, WT Docket No. 25-150, Memorandum Opinion and Order, DA 25-1006 (WTB Dec. 3, 2025).

¹⁰ Amended Public Interest Statement at 1.

¹¹ See Press Release, SpaceX, xAI joins SpaceX to Accelerate Humanity's Future (Feb. 2, 2026), <https://www.spacex.com/updates#xai-joins-spacex>.

¹² Amended Public Interest Statement at 1-2.

Starlink, a satellite-based broadband service, which uses a low Earth orbit satellite constellation and ground infrastructure to deliver low-latency, high-speed broadband capable of supporting Internet access, streaming, video calls, and more, as well as service directly to user handsets in cooperation with terrestrial mobile operators.¹³ According to SpaceX's application, as of November 2025, it had over 17,000 employees based in the United States and served more than two million subscribers in the United States and over six million globally.¹⁴ SpaceX and its wholly owned subsidiaries, Space Exploration Holdings, LLC and SpaceX Services, Inc., currently hold multiple Commission licenses and authorizations, including space station licenses, earth station licenses, private land mobile radio licenses, and experimental licenses.¹⁵

2. Spectrum Business Trust 2025-1

8. On September 7, 2025, SpaceX and The Bank of New York Mellon Trust Company, N.A.,¹⁶ a subsidiary of The Bank of New York Mellon Corporation, a global financial services firm that provides custody, asset management, and other services,¹⁷ entered into a Trust Agreement to establish the Spectrum Business Trust 2025-1, a Statutory Trust formed under Nevada law.¹⁸ SpaceX is the sole beneficiary of the Trust.¹⁹

3. EchoStar Corporation

9. EchoStar Corporation, a Nevada corporation, is a publicly traded holding company that provides technology, networking services, television entertainment, and connectivity.²⁰ Through its subsidiaries, EchoStar operates in three primary business segments: (1) pay-TV; (2) wireless; and (3) broadband and satellite services.²¹ EchoStar's pay-TV business offers satellite services as well as multichannel, live linear and on-demand streaming over-the-top Internet-based video programming services; its wireless business provides wireless communications services and products under its Boost Mobile and Gen Mobile brands; and its broadband and satellite services business provides broadband services to consumers, small- to medium-sized businesses, government customers, and enterprise customers.²² As of December 31, 2025, EchoStar had approximately 7.5 million wireless subscribers.²³

¹³ Amended Public Interest Statement at 2.

¹⁴ Amended Public Interest Statement at 2. At the end of February 2026, Starlink reported it had increased its number of active users to 10 million. See Will Robinson-Smith, *SpaceX reaches 10,000 Simultaneous Starlink Satellites in Orbit Following Falcon 9 Launch from California*, Spaceflight Now (Mar. 16, 2026), <https://spaceflightnow.com/2026/03/16/live-coverage-spacex-to-launch-25-starlink-satellites-on-falcon-9-rocket-from-california> ("As of February 13, 2026, SpaceX said its Starlink service had more than 10 million active customers . . ."); @Starlink, X, (Feb. 13, 2026, 6:04 pm), <https://x.com/Starlink/status/2022446814591615013>.

¹⁵ Amended Public Interest Statement at 2.

¹⁶ The Applicants note that the Bank of New York Mellon Trust Company, N.A. is "the nation's first professional trustee, leveraging over 200 years of expertise in managing trusts." Amended Public Interest Statement at 2.

¹⁷ Amended Public Interest Statement at 2.

¹⁸ Amended Public Interest Statement at 2.

¹⁹ Amended Public Interest Statement at 2.

²⁰ Amended Public Interest Statement at 3; EchoStar Corporation, SEC Form 10-K at F-9 (filed Mar. 2, 2026) (EchoStar 10-K).

²¹ EchoStar 10-K at 6.

²² EchoStar 10-K at 6-13; see also Amended Public Interest Statement at 3-4.

²³ EchoStar 10-K at 6.

EchoStar reported 2025 consolidated revenues of approximately \$15 billion, with an operating loss of approximately \$17.7 billion.²⁴

10. EchoStar's wholly owned licensee subsidiaries, DBSD Corporation (DBSD) and Gamma Acquisition L.L.C. (Gamma),²⁵ hold the AWS-4 licenses and earth station licenses at issue in this transaction, as well as the U.S. market access grants issued for 2 GHz Mobile Satellite Service (MSS) from non-U.S.-licensed satellites.²⁶ EchoStar's wholly owned licensee subsidiary, American H Block Wireless LLC (AHB Wireless), holds the AWS-H Block licenses at issue in this transaction.²⁷ EchoStar's wholly owned licensee subsidiaries, Northstar Wireless, LLC (Northstar) and SNR Wireless LicenseCo, LLC (SNR) hold the AWS-3 licenses at issue in this transaction.²⁸

B. Description of the Transaction and Transaction Review Process

11. On September 7, 2025, SpaceX, EchoStar, and the Trust entered into a License Purchase Agreement, which they further amended on November 5, 2025, pursuant to which EchoStar's AWS-4, AWS-H Block, and unpaired AWS-3 spectrum licenses and several earth station licenses would ultimately be assigned to SpaceX.²⁹ Under the proposed transaction, EchoStar will assign the 10 megahertz of AWS H-Block, 40 megahertz of AWS-4 spectrum, and 5-15 megahertz of AWS-3 spectrum in all Economic Areas (BEAs) except for BEA 174: Puerto Rico and the U.S. Virgin Islands.³⁰

12. The Applicants propose a two-step transaction, both steps of which they seek approval for now. In step one, the licenses will be assigned from EchoStar's wholly owned licensee subsidiaries to the Trust for the benefit of SpaceX.³¹ In step two, these licenses will be assigned from the Trust to SpaceX.³² The Applicants expect the final closing and assignments in step two to occur on or about November 30, 2027, with the possibility of either an accelerated closing or limited extensions.³³ As

²⁴ EchoStar 10-K at 74.

²⁵ See *DBSD North America, Inc., Debtor-in-Possession; New DBSD Satellite Services G.P., Debtor-in-Possession; Pendrell Corporation, Transferor; and TerreStar License, Inc., Debtor-in-Possession; Assignor, and DISH Network Corp., Transferee; and Gamma Acquisition L.L.C.; Assignee*, IB Docket Nos. 11-149, 11-150, Order, 27 FCC Rcd 2250 (IB 2012).

²⁶ See Amended Public Interest Statement at 3-4; Transaction Applications, Amended Exh. A (Licenses). In a separate order, the Space Bureau recently confirmed that EchoStar holds the exclusive terrestrial and MSS licenses over the AWS-4/2 GHz MSS spectrum. See *MSS Spectrum Clarification Order*, paras. 19-24.

²⁷ See Amended Public Interest Statement at 3; Amended Exh. A (Licenses).

²⁸ See Amended Public Interest Statement at 3; Amended Exh. A (Licenses).

²⁹ See Amended Public Interest Statement at 1; Amended Spectrum Transaction Applications, Attach., Amended and Restated License Purchase Agreement By and Among Space Exploration Technologies Corp., EchoStar Corporation and Spectrum Business Trust 2025-1, at 1, 12 (dated Nov. 5, 2025) (filed Nov. 20, 2025); Amended Spectrum Transaction Applications Attach., Spectrum Trust Agreement and Amendment 1 (dated Nov. 5, 2025) (filed Nov. 20, 2025). DBSD and Gamma's U.S. market access grants issued for 2 GHz MSS from non-U.S.-licensed satellites located at 93° W.L. and 111° W.L., respectively, will also be assigned by EchoStar but are not part of these applications because no prior Commission consent is required for such assignments. As required under section 25.137(g) of the Commission's rules, the Applicants state they will notify the Commission within 30 days after consummation of the assignment of these grants to both the Trust and to SpaceX. Amended Public Interest Statement at 4 & n.4 (citing 47 CFR § 25.137(g)).

³⁰ Amended Spectrum Transaction Applications, Amended Exh. C.

³¹ See Amended Public Interest Statement at 3-4; Amended Exh. A (Licenses).

³² Amended Public Interest Statement at 4-5.

³³ Amended Public Interest Statement at 5.

described in more detail below,³⁴ the Applicants say that this two-step process will allow them time to receive necessary regulatory approvals outside the United States and will allow an orderly transition in the bands, all in an “efficient and consumer-friendly manner.”³⁵

13. To facilitate SpaceX’s plans to deploy a hybrid satellite and terrestrial network with the licenses subject to the instant transaction, the Applicants request a number of waivers and extensions, including, as relevant to this transaction, (1) waiver of the terrestrial construction requirements currently applicable to EchoStar’s AWS-4, AWS-H Block, and unpaired AWS-3 licenses;³⁶ (2) waiver and extension of the discontinuance rule in section 1.953;³⁷ and (3) waiver of the consummation period under sections 1.948(d) and 25.119(f) to extend the consummation deadline for step two of the transaction through November 30, 2027.³⁸

14. The Applicants state that granting the transaction and the associated waivers will allow SpaceX to deploy a hybrid satellite and terrestrial network and provide satellite service direct to consumer handsets nationwide.³⁹ They also state that as part of the transaction, EchoStar will have access to SpaceX’s D2D services, which will facilitate its transition to a “hybrid mobile network operator” (hybrid-MNO) model, benefit its Boost Mobile customers, and enhance its ability to compete.⁴⁰

15. On May 30, 2025, EchoStar announced that it elected not to make an approximately \$326 million cash interest payment due on May 30, 2025 on certain secured notes and that such non-payment was a default, and that it had a 30-day grace period to make the payments.⁴¹ On June 2, 2025, EchoStar made a similar announcement with respect to approximately \$183 million in cash interest payments due on June 2, 2025 on other secured notes.⁴² On June 6, 2025, the Wall Street Journal reported that EchoStar was considering a Chapter 11 bankruptcy filing.⁴³ On June 27, 2025 EchoStar announced that it would make both sets of interest payments, but that it would not pay approximately \$114 million of cash interest payments on other notes due July 1, 2025.⁴⁴ In its August 26, 2025 statement announcing the proposed

³⁴ See section VII.B.

³⁵ Amended Public Interest Statement at 9-10.

³⁶ Amended Waiver Requests at 2-5.

³⁷ Letter from William Wiltshire, Counsel to SpaceX, and Pantelis Michalopoulos, Counsel to EchoStar, to Marlene H. Dortch, GN Docket No. 35-302, at 2 (filed Apr. 14, 2026) (*Applicants’ Discontinuance Rule Waiver/Extension Request Letter*).

³⁸ Amended Waiver Requests at 9; Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 25-302, at 1 (filed Oct. 21, 2025) (SpaceX Oct. 21, 2025 *Ex Parte*) (“SpaceX clarified that its request for waiver of the consummation period . . . should extend through the date of final closing and assignments to SpaceX expected to occur on November 30, 2027, rather than November 16, 2027.”).

³⁹ See Amended Public Interest Statement at i, 1, 15, 20. SpaceX has separately filed an application for a new non-geostationary orbit (NGSO) system license for authority to use the spectrum to deploy the next generation D2D system discussed herein. See Amended Public Interest Statement at 13 & n.38; see also *infra* section II.C (SpaceX D2D Application); Application, ICFS File No. SAT-LOA-20250916-00282 (filed Sept 19, 2025) (SpaceX D2D Application) and Amended Application, ICFS File No. SAT-AMD-20251125-00339 (filed Nov. 25, 2025) (SpaceX D2D Amended Application). We use the acronym D2D to refer to SpaceX’s planned operations and satellite application. SpaceX seeks MSS and SCS authorizations in its NGSO application in order to provide D2D service.

⁴⁰ Amended Public Interest Statement at 10, 13, 17, 20.

⁴¹ EchoStar Corp., SEC Form 8-K at Item 2.04 (filed May 30, 2025).

⁴² EchoStar Corp., SEC Form 8-K at Item 2.04 (filed June 2, 2025).

⁴³ Alexander Gladstone and Drew Fitzgerald, Wall Street Journal, EchoStar Prepares Potential Bankruptcy Filing Amid FCC Review (June 6, 2025).

⁴⁴ EchoStar Corp., SEC Form 8-K at Item 8.01, Item 2.04 (filed June 27, 2025).

transaction, EchoStar stated that the transaction “puts [its] business on a solid financial path, further facilitating EchoStar’s long-term success, and enhancing [its] ability to innovate and compete as a hybrid network operator. The proceeds of this transaction will be used for, among other things, retiring certain debt obligations and funding EchoStar’s continued operations and growth initiatives.”⁴⁵

16. *Transaction Review Process.* On September 18, 2025, the Applicants filed two sets of applications pursuant to section 310(d) of the Communications Act of 1934, as amended,⁴⁶ seeking Commission consent to the two-step assignment described above: (1) EchoStar to the Trust, filed electronically in the Commission’s Universal Licensing System (ULS) and the International Communications Filing System (ICFS) databases; and (2) the Trust to SpaceX, filed on paper in the Commission’s Electronic Comment Filing System (ECFS).⁴⁷ The Applicants explain that because the Trust is only an interim step for the licenses “on their way to SpaceX,” step two is “practically speaking, *pro forma*,” and they seek authority for both steps of the transaction now.⁴⁸ On September 30, 2025, the Wireless Telecommunications Bureau (WTB) and the Space Bureau (SB, and together with WTB, the Bureaus) accepted both sets of applications for filing and established a pleading cycle for the transaction and the accompanying waiver requests.⁴⁹ In November 2025, the Applicants amended their pending applications to add EchoStar’s unpaired AWS-3 licenses to the spectrum assignment applications from EchoStar ultimately to SpaceX.⁵⁰ On November 25, 2025, the Bureaus accepted the amended applications for filing and established an updated pleading cycle for the transaction and accompanying waiver requests.⁵¹

17. *Record.* Frequency Forward filed a petition to deny the transaction on October 30, 2025, before the initial pleading cycle closed.⁵² On December 3, 2025, the Information Technology and Innovation Foundation (ITIF) filed comments opposing the Frequency Forward petition and supporting the transaction.⁵³ On December 15, 2025, one petition to condition the transaction⁵⁴ and six comments or

⁴⁵ News Release, EchoStar, EchoStar Announces Spectrum Sale and Hybrid Mobile Network Operator (MNO) Agreement, Steps Toward Resolving Federal Communications Commission’s (FCC) Inquiries (Aug. 26, 2025), <https://ir.echostar.com/news-releases/news-release-details/echostar-announces-spectrum-sale-and-hybrid-mobile-network>.

⁴⁶ 47 U.S.C. § 310(d).

⁴⁷ Due to the two-step nature of the transaction, the Applicants filed paper applications for the second step of the transaction so that both steps could be considered by the Commission at the same time. Amended Waiver Requests at 10-11. By accepting the paper applications for filing and establishing a pleading cycle for both steps of the transaction, the Bureaus waived the electronic filing requirements of sections 1.913(b) and 25.110(b). *See Revised Pleading Cycle Established for Applications of Space Exploration Technologies Corp., Spectrum Business Trust 2025-1, and EchoStar Corporation, as Amended, to Assign Certain Spectrum and Earth Station Licenses Held by EchoStar to SpaceX*, Public Notice, GN Docket No. 25-302, Public Notice, DA 25-989, 2 & n.9 (WTB/SB Nov. 25, 2025) (*SpaceX-EchoStar Amendment Public Notice*).

⁴⁸ Amended Public Interest Statement at 4-5.

⁴⁹ *Spectrum Business Trust 2025-1, Space Exploration Technologies Corp., and EchoStar Corporation Seek FCC Consent to the Proposed Assignment of Certain Spectrum and Earth Station Licenses Held by EchoStar to SpaceX*, GN Docket No. 25-302, Public Notice, DA 25-917 (WTB/SB Sept. 30, 2025).

⁵⁰ *See* Amended Spectrum Transaction Applications.

⁵¹ *SpaceX-EchoStar Amendment Public Notice*.

⁵² Frequency Forward Petition to Deny (Oct. 30, 2025).

⁵³ Letter from Joe Kane, Director of Broadband and Spectrum Policy, ITIF, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 25-302, WT Docket No. 25-303 (Dec. 3, 2025) (ITIF Comments).

⁵⁴ DQE Communications LLC, Petition to Condition (Dec. 15, 2025) (DQE Communications Petition).

letters were timely filed under the updated pleading cycle.⁵⁵ On December 29, 2025, SpaceX and EchoStar each filed consolidated oppositions to petitions and responses to comments.⁵⁶ In January 2026, five reply comments were timely filed.⁵⁷ In the period from December 2025 through May 2026, multiple parties filed letters and *ex parte* submissions concerning EchoStar subsidiary DISH Wireless LLC's (DISH Wireless) contractual obligations.⁵⁸ On May 12, 2026, SpaceX submitted buildout commitments in support of its terrestrial buildout waiver requests.⁵⁹

C. SpaceX D2D Application

18. On September 19, 2025, the day after the Applicants first filed the Transaction Applications, SpaceX applied for a new non-geostationary orbit (NGSO) system license—which SpaceX later amended on November 25, 2025—to use the spectrum at issue in this transaction, as well as other spectrum, to deploy a D2D system.⁶⁰ In its D2D Application, SpaceX requests authority to provide Supplemental Coverage from Space (SCS), to perform MSS operations, and to perform related Fixed-Satellite Service (FSS) and telemetry, tracking, and control operations.⁶¹

⁵⁵ Comments of Liberty Latin America Ltd. (Dec. 15, 2025) (LLA Comments); Comments of the Open Technology Institute at New America and Public Knowledge (Dec. 15, 2025) (OTI and Public Knowledge Comments); Comments of the Rural Wireless Association, Inc. (Dec. 15, 2025) (RWA Comments); Comments of Satelio IoT Services USA, Inc. (Dec. 15, 2025) (Satelio Comments); Comments of Syndicat CFE-CGC Télécom (Dec. 15, 2025) (Syndicat CFE-CGC Télécom Comments); Wireless Infrastructure Association Comments, WT Docket No. 25-303, GN Docket No. 25-302 (rec. Dec. 15, 2025) (WIA Comments). RWA, Syndicat CFE-CGC Télécom, and LLA filed their submissions as comments or a letter. Accordingly, any oppositions to the proposed transaction raised in their filings will be given the weight of comments and not petitions to deny. *See* 47 CFR § 1.931 (requirements for petitions to deny spectrum assignment applications).

⁵⁶ Consolidated Opposition to Petition and Reply Comments of EchoStar Corporation (Dec. 29, 2025) (EchoStar Consolidated Response); Consolidated Opposition to Petitions and Response to Comments of Space Exploration Technologies Corp. (Dec. 29, 2025) (SpaceX Consolidated Response).

⁵⁷ FirstLight Fiber, Inc. Reply (Jan. 7, 2026) (FirstLight Fiber Reply); DQE Communications LLC Reply (Jan. 8, 2026) (DQE Communications Reply); Frequency Forward Reply (Jan. 8, 2026) (Frequency Forward Reply); Liberty Latin America Ltd. Reply (Jan. 8, 2026) (LLA Reply); Rural Wireless Association, Inc. Reply (Jan. 8, 2026) (RWA Reply).

⁵⁸ Appendix A lists all submissions filed in this docket from December 2025 through May 2026. *See infra* Appendix A, Petitioners and Commenters. A broad range of parties, including the Wireless Infrastructure Association, NATE the Communications Infrastructure Contractors Association, the Michigan Coalition to Protect Public Rights-of-Way (representing municipalities), and individual property owners, submitted comments or *ex partes* requesting that the FCC take action to address DISH Wireless's contractual obligations to its infrastructure partners. The filings in Appendix A that were submitted after the January 8, 2026 close of the pleading cycle for this transaction by their respective filers are accorded consideration as *ex parte* filings under the Commission's rules. 47 CFR §§ 1.1200 *et seq.*; *see generally* 47 CFR § 1.419(b). We decline Nikolai G. Bakken's request for consolidation of this docket with other SB proceedings. *See* Nikolai Bakken Comments, GN Docket Nos. 23-65, 23-135, 25-302, and 25-340; CG RM-11861; IB Docket No. 18-313; SB Docket No. 26-54 (rec. Mar. 15, 2026). Mr. Bakken's request was filed after the close of the comment cycle and is thus treated as an *ex parte* filing under our rules, and Mr. Bakken accordingly does not qualify for party in interest status under our rules.

⁵⁹ Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 25-302 (May 11, 2026), attached to this Order as Appendix C (Appx. C: SpaceX Buildout Commitments).

⁶⁰ SpaceX D2D Application.

⁶¹ SpaceX D2D Application. SpaceX requests to launch and operate a new NGSO MSS and SCS system of up to 15,000 satellites operating at altitudes as low as 226 kilometers and as high as 435 kilometers and at various inclinations to provide connectivity to mobile devices. SpaceX D2D Application.

19. By way of background, Commission rules provide two distinct regulatory frameworks that providers can use to provide satellite mobile connectivity directly to consumer devices in the United States—SCS and conventional MSS. Under the SCS framework, a provider uses spectrum that is allocated on a primary basis for terrestrial wireless and on a secondary basis for MSS for the provision of space-based coverage to terrestrial consumer devices domestically.⁶² Satellite operators derive the right to operate SCS on wireless-licensed frequencies from a terrestrial wireless provider via a leasing arrangement.⁶³ By comparison, MSS providers operate on spectrum allocated on a primary basis to MSS to communicate directly with consumer devices that are licensed pursuant to the Commission’s part 25 earth station licensing rules.⁶⁴ The primary MSS spectrum is also harmonized globally.

20. SpaceX requests to provide SCS and MSS on the spectrum it seeks to acquire from EchoStar. Specifically, in its D2D Application, SpaceX requests to provide SCS in the United States in the 1915-1920 MHz (Earth-to-space) and 1995-2000 MHz (space-to-Earth) bands using the AWS-H Block licenses.⁶⁵ SpaceX also seeks to provide SCS in the 1695-1710 MHz (Earth-to-space) on the unpaired AWS-3 licenses.⁶⁶ In addition, SpaceX seeks authority to perform NGSO MSS operations in the United States in the 2 GHz MSS bands—2000-2020 MHz (Earth-to-space) and 2180-2200 MHz (space-to-Earth)⁶⁷—with a request for waiver of the Table of Allocations to have the option to use 2000-2020 MHz for space-to-Earth on a Geographically Independent Area (GIA)-by-GIA basis,⁶⁸ SpaceX also requests various waivers of the Commission’s rules in its D2D Application.⁶⁹ The application remains pending.

⁶² 47 CFR § 2.106(d)(33)(i).

⁶³ 47 CFR §§ 1.9047, 25.103, 25.125; *Single Network Future: Supplemental Coverage from Space; Space Innovation*, GN Docket No. 23-65; IB Docket No. 22-271, Report and Order and Further Notice of Proposed Rulemaking, 39 FCC Rcd 2622, 2623-24, 2630-31, 2643-45, 2646, 2649-50, 2652-54, 2660-65, 2669-83, paras. 4, 7, 18, 50, 52, 55, 63, 69-73, 88-104, 113-39 (2024) (*SCS Report and Order*).

⁶⁴ *SCS Report and Order*, 39 FCC Rcd at 2724-25, paras. 237-38.

⁶⁵ SpaceX D2D Amended Application Attach. 3, Legal Narrative at i, 1-2.

⁶⁶ SpaceX D2D Amended Application Attach. 3, Legal Narrative at i, 1. In the D2D Application, SpaceX requests rule waivers to use the unpaired AWS-3 band for SCS. SpaceX D2D Amended Application Attach. 3, Legal Narrative at ii, 4-5. The user equipment (UE) for the SCS uplink bands would be “ordinary handsets” that meet the applicable part 27 rules for devices that operate in the 1695-1710 MHz and 1915-1920 MHz bands. SpaceX D2D Amended Application Attach. 3, Legal Narrative at i.

⁶⁷ SpaceX D2D Amended Application Attach. 3, Legal Narrative at 2-3. The other frequencies for which SpaceX seeks MSS and SCS authorizations to operate its NGSO MSS and SCS system in the United States are as follows: PCS G Block (1910-1915 MHz (Earth-to-space) and 1990-1995 MHz (space-to-Earth)) for SCS and, with a request for waiver of section 2.106, the 2020-2025 MHz band for MSS (space-to-Earth). SpaceX also seeks authorization to operate MSS in various frequency bands outside the United States and to use certain FSS bands for backhaul and telemetry, tracking, and command. For a complete list of frequencies requested, see SpaceX D2D Amended Application, Legal Narrative at 4, Table A.2.2.

⁶⁸ SpaceX D2D Amended Application Attach. 3, Legal Narrative at 2-3. SpaceX filed the GIA-by-GIA clarification in this docket as well as the SpaceX D2D Application docket. See Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 25-302, at 1 (Jan. 16, 2026) (SpaceX Jan. 16, 2026 *Ex Parte*); SpaceX Consolidated Opposition and Response, GN Docket No. 25-340, at 19 (filed Jan. 15, 2026), <https://www.fcc.gov/ecfs/document/10115637204420/1> (SpaceX MSS Consolidated Opposition). SpaceX then filed a further clarification regarding this waiver request for its D2D application. See Letter from Joseph Bissonnette, Principal, Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, General Docket No. 25-340, ICFS File Nos. SAT-LOA-20250916-00282 and SAT-AMD-20251125-00339 (April 24, 2026).

⁶⁹ SpaceX D2D Amended Application Attach. 2, Waiver Requests; see also *Space Bureau and Wireless Telecommunications Bureau Accept for Filing Application of SpaceX Requesting NGSO MSS Authorization and Supplemental Coverage from Space Authorization and Seek Comment on Waivers*, Public Notice, GN Docket No.

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III. STANDARD OF REVIEW AND PUBLIC INTEREST FRAMEWORK

21. Pursuant to section 310(d) of the Communications Act of 1934, as amended (the Act),⁷⁰ we must determine whether the proposed assignment of licenses held and controlled by EchoStar to the Trust and ultimately to SpaceX will serve the public interest, convenience, and necessity. In making this determination, we first assess whether the proposed transaction complies with the specific provisions of the Act, other applicable statutes, and the Commission's rules.⁷¹

22. If the proposed transaction does not violate a statute or rule, we then consider whether the transaction could result in public interest harms by substantially frustrating or impairing the objectives or implementation of the Act or related statutes.⁷² Our competitive analysis, which forms an important part of the public interest evaluation, is informed by, but not limited to, traditional antitrust principles.⁷³ The United States Department of Justice has independent authority to examine the competitive impacts of proposed mergers and transactions involving transfers of Commission licenses, but the Commission's competitive analysis under the public interest standard is somewhat broader, and often takes a more extensive view of potential and future competition and its impact on the relevant markets.⁷⁴ Notably, the Commission has determined it may impose and enforce transaction-related conditions to ensure that the public interest is served by the transaction.⁷⁵

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25-340, ICFS File Nos. SAT-LOA-20250916-00282 and SAT-AMD-20251125-00339 (SB/WTB Dec. 5, 2025). The comment cycle closed on January 22, 2026, with a number of comments filed and five petitions to deny or dismiss the application. See GN Docket No. 25-340.

⁷⁰ 47 U.S.C. § 310(d). Section 310(d) of the Act requires that the Commission consider applications for transfer or assignment of Title III licenses under the same standard as if the proposed transferee or assignee were applying for licenses directly under section 308 of the Act, 47 U.S.C. § 308. See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4783-84, para. 13 & n.43; *Applications of Level 3 Communications, Inc. and CenturyLink, Inc. for Consent to Transfer Control of Licenses and Authorizations*, WC Docket No. 16-403, Memorandum Opinion and Order, 32 FCC Rcd 9581, 9585, para. 8 & n. 26 (2017) (*CenturyLink-Level 3 Order*); *Applications of GCI Communication Corp., ACS Wireless License Sub, Inc., ACS of Anchorage License Sub, Inc., and Unicom, Inc. for Consent to Assign Licenses to the Alaska Wireless Network, LLC*, WT Docket No. 12-187, WC Docket No. 09-197, Memorandum Opinion and Order and Declaratory Ruling, 28 FCC Rcd 10433, 10442, para. 23 & n.71 (2013) (*Alaska Wireless-GCI Order*).

⁷¹ 47 U.S.C. § 310(d); *T-Mobile-UScellular Order*, 40 FCC Rcd at 4784, para. 13; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9585, para. 8; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10442, para. 23.

⁷² See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4784, para. 14; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9585, para. 9; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10442, para. 23.

⁷³ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4784, para. 14; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9585, para. 9; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10443, para. 25; see also *Northeast Utils. Serv. Co. v. Fed. Energy Regulatory Comm'n*, 993 F.2d 937, 947 (1st Cir. 1993) (public interest standard does not require agencies "to analyze proposed mergers under the same standards that the Department of Justice . . . must apply").

⁷⁴ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4784, para. 14; *Applications for Consent to the Transfer of Control of Licenses, XM Satellite Radio Holdings Inc., Transferor to Sirius Satellite Radio Inc., Transferee*, MB Docket No. 07-57, Memorandum Opinion and Order and Report and Order, 23 FCC Rcd 12348, 12365-66, para. 32 (2008); *AT&T Inc. and BellSouth Corporation Application for Transfer of Control*, WC Docket No. 06-74, Memorandum Opinion and Order, 22 FCC Rcd 5662, 5673-74, para. 21 (2007) (*AT&T-BellSouth Order*); *Application of EchoStar Communications Corp., (A Nevada Corp.), General Motors Corp., and Hughes Electronics Corp. (Delaware Corps.) (Transferors) and EchoStar Communications Corp. (A Delaware Corp.) (Transferee)*, CS Docket No. 01-348, Hearing Designation Order, 17 FCC Rcd 20559, 20575, para. 27 (2002).

⁷⁵ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4784, para. 14; *Applications of AT&T Inc. and DIRECTV for Consent to Assign or Transfer Control of Licenses and Authorizations*, MB Docket No. 14-90, Memorandum Opinion and Order, 30 FCC Rcd 9131, 9141, para. 22 (2015) (*AT&T-DIRECTV Order*); *Applications of Comcast Corp., General Electric Co. and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of*

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23. If we determine that a transaction raises no public interest harms or that any such harms have been ameliorated by the Commission-imposed conditions or voluntary commitments, we next consider a transaction's public interest benefits. Applicants bear the burden of proving those benefits by a preponderance of the evidence.⁷⁶ As part of our public interest authority, we may impose conditions to ensure for the public the transaction-related benefits claimed by the applicants.⁷⁷

24. Finally, if we are able to find that transaction-related conditions are able to ameliorate any public interest harms and the transaction is in the public interest, we may approve the transaction as so conditioned or agreed.⁷⁸ In contrast, if we are unable to find that a proposed transaction even with such conditions serves the public interest or if the record presents a substantial and material question of fact, then we must designate the application for hearing.⁷⁹

IV. QUALIFICATIONS OF THE APPLICANTS AND COMPLIANCE WITH COMMUNICATIONS ACT AND COMMISSION RULES AND POLICIES

25. Section 310(d) of the Act requires that we determine whether the Applicants have the requisite qualifications to hold Commission licenses.⁸⁰ Among the factors the Commission considers in its public interest review is whether the applicant for a license has the requisite "citizenship, character, financial, technical, and other qualifications."⁸¹ Therefore, as a threshold matter, the Commission must determine whether the applicants to a proposed transaction meet the requisite qualification requirements to hold and transfer licenses under section 310(d) of the Act and the Commission's rules.⁸²

26. SpaceX will acquire certain EchoStar spectrum and earth station licenses, with the Trust holding the licenses for up to two years for the benefit of SpaceX. No issues were raised regarding the basic qualifications of EchoStar, the Trust, or the Trustee. We have previously found EchoStar to be qualified to hold Commission licenses and authorizations.⁸³ Further, there is nothing in the record that

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Licenses, MB Docket No. 10-56, Memorandum Opinion and Order, 26 FCC Rcd 4238, 4249, para. 25 (2011); *see also Application of WorldCom, Inc. and MCI Commc'ns Corp. for Transfer of Control of MCI Commc'ns Corp. to WorldCom, Inc.*, CC Docket No. 97-211, Memorandum Opinion and Order, 13 FCC Rcd 18025, 18032, para. 10 (1998) (stating that the Commission may attach conditions to the transfers); *Applications of T-Mobile US, Inc., and Sprint Corp., for Consent to Transfer Control of Licenses and Authorizations, Applications of American H Block Wireless L.L.C., DBSD Corp., Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, WT Docket No. 18-197, Memorandum Opinion and Order, Declaratory Ruling, and Order of Proposed Modification, 34 FCC Rcd 10578, 10596, para. 42 (2019) (*T-Mobile-Sprint Order*).

⁷⁶ 47 U.S.C. § 309(e); *T-Mobile-UScellular Order*, 40 FCC Rcd at 4785, para. 15; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9586, para. 10; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10442, para. 23.

⁷⁷ *See, e.g., T-Mobile-UScellular Order*, 40 FCC Rcd at 4785, para. 15; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10443, para. 26; *Applications of AT&T Inc. and Centennial Communications Corp. for Consent to Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements*, WT Docket No. 08-246, Memorandum Opinion and Order, 24 FCC Rcd 13915, 13929, para. 30 (2009) (*AT&T-Centennial Order*).

⁷⁸ *See, e.g., T-Mobile-UScellular Order*, 40 FCC Rcd at 4785, para. 16; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9586, para. 11.

⁷⁹ 47 U.S.C. § 309(e); *T-Mobile-UScellular Order*, 40 FCC Rcd at 4785, para. 16; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9586-87, para. 11; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10444, para. 27.

⁸⁰ 47 U.S.C. § 310(d).

⁸¹ 47 U.S.C. §§ 308, 310(d); *T-Mobile-UScellular Order*, 40 FCC Rcd at 4785, para. 17; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10596-97, para. 43; *Century Link-Level 3 Order*, 32 FCC Rcd at 9587, para. 12.

⁸² *See, e.g., T-Mobile-Sprint Order*, 34 FCC Rcd 10596-97, para. 43; *CenturyLink-Level-3 Order*, 32 FCC Rcd at 9587, para. 12.

⁸³ *See, e.g., Applications of Liberty Latin America Ltd. and DISH Network Corp. for Consent To Assignment of Spectrum Licenses, Assets, and Customers of DISH Network Corp. to Liberty Latin America Ltd. in Puerto Rico and* (continued....)

suggests that the Trust would not be legally, technically, or financially qualified to be a Commission licensee. Accordingly, we find that the Trust is qualified to hold the licenses and authorizations that are being transferred in the proposed transaction.

27. We also find that SpaceX is qualified to be a licensee. In its petition to deny, Frequency Forward “seeks an evidentiary hearing on the applications and the qualifications of SpaceX to remain an FCC licensee,” based on Frequency Forward’s arguments that Elon Musk, as majority shareholder of SpaceX, is “controlled by, or subject to the direction of” the Chinese Communist Party (CCP).⁸⁴ SpaceX responds that it has disclosed all parties that hold a 10% or greater interest,⁸⁵ none of whom are citizens of the People’s Republic of China,⁸⁶ and that Frequency Forward’s arguments are inaccurate.⁸⁷ We find that the articles Frequency Forward cites fail to sufficiently support its contention that SpaceX has disclosable investors from the People’s Republic of China.⁸⁸ The Commission has previously found that SpaceX is qualified to hold Commission licenses and authorizations,⁸⁹ and we find no evidence that would warrant an evidentiary hearing under section 309(e) of the Communications Act⁹⁰ to determine SpaceX’s

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the U.S. Virgin Islands, GN Docket No. 24-55, Memorandum Opinion and Order and Declaratory Ruling, 39 FCC Rcd 8772, 8776, para. 11 (WTB/OIA 2024) (*LLA-DISH Order*) (finding no basis to reevaluate the qualifications of DISH Network Corporation (a wholly owned subsidiary of EchoStar) to hold Commission licenses).

⁸⁴ Frequency Forward Petition to Deny at 1, 8. Frequency Forward points to “business arrangements with China” by Elon Musk and his separate company, Tesla, as well as “testimony before a court in Delaware” regarding potential “Chinese investors” in SpaceX. Frequency Forward Petition to Deny at 2-3, 5-7; Frequency Forward Reply at 3.

⁸⁵ SpaceX Consolidated Response at 17.

⁸⁶ See Amended Public Interest Statement at 1-2; SpaceX Consolidated Response at 17; ULS. File No. 0011758623 (Space Exploration Technologies Corp. Ownership Disclosure Filing) (Sept 19, 2025).

⁸⁷ SpaceX argues that Frequency Forward’s advocacy “falls back on pedestrian business details” to reach the conclusion that Tesla, a separate company, “is under the control of the Chinese government and could indirectly control SpaceX.” SpaceX Consolidated Response at 16-17. SpaceX also responds that Frequency Forward’s sole basis to support its allegation that SpaceX allows “Chinese investors” to “purchase shares in privately held SpaceX” is a lawsuit “involving an investment firm being sued because SpaceX forced it to *reject* approximately \$50 million it had raised from Chinese sources.” SpaceX Consolidated Response at 16 (emphasis in original).

⁸⁸ 47 CFR § 1.2112(a)(2), (3), (5), (6) (requiring full disclosure of parties with a 10 percent or greater ownership interest for each application to participate in competitive bidding, or for a license, authorization, assignment or transfer of control); SpaceX Consolidated Response at 17; *see also* Frequency Forward Petition to Deny at 3, 6; Frequency Forward Reply at 3-6. Further, Frequency Forward’s suggestion that certain loans made to companies controlled by Elon Musk, as SpaceX is, would “influence and control” Mr. Musk and by extension, SpaceX specifically is not supported by any evidence in the record. *See* Frequency Forward Reply at 3, 5-7; Frequency Forward Petition to Deny at 2-3, 5-6, 8.

⁸⁹ *See, e.g., Space Exploration Holdings, LLC, Application for Approval for Orbital Deployment and Operating Authority for the SpaceX NGSO Satellite System; Application For Approval For Orbital Deployment And Operating Authority for the SpaceX NGSO Satellite System Supplement*, IBFS File Nos. SAT-LOA-20161115-00118, SAT-LOA-20170726-00110, Memorandum Opinion, Order and Authorization, 33 FCC Rcd 3391 (2018) (*SpaceX 2018 NGSO Authorization Order*); *Space Exploration Holdings, LLC, Request for Deployment and Operating Authority for the SpaceX Gen2 NGSO Satellite System; Application for Authority for Modification of the SpaceX NGSO Satellite System to Add a Direct to Cellular System; Application for Modification of the SpaceX V-band Satellite System; Space Bureau and Wireless Telecommunications Bureau Seek Comment on Filings of SpaceX and T-Mobile Requesting to Establish Supplemental Coverage from Space*, ICFS File Nos.: SAT-LOA-20200526-00055, SAT-AMD-20210818-00105, SAT-AMD-20221216-00175, SAT-AMD-20241017-00228, SAT-MOD-20230207-00021, SAT-AMD-20240322-00061, SAT-MOD-20240423-00089; GN Docket No. 23-135, Order and Authorization, 39 FCC Rcd 12550 (SB 2024) (*SpaceX SCS Lower Altitude Authorization Order*); *see also* SpaceX Consolidated Response at 17 (noting that the Commission has “determined on numerous occasions that SpaceX is qualified to hold spectrum licenses”).

⁹⁰ 47 U.S.C. § 309(e).

qualifications to hold the licenses at issue. We therefore find SpaceX to be qualified to hold the Commission licenses at issue.

28. Finally, we find that the transaction will not violate any statutory provision or Commission rule with the exception of the waiver requests for sections 1.948(d), 1.953(a), 25.119(f), and 27.14(q), (r), and (s) of the Commission's rules, which we grant below.⁹¹

V. POTENTIAL PUBLIC INTEREST HARMS

29. In reviewing applications seeking approval for assignment of licenses or authorizations, the Commission, among other things, evaluates the potential public interest harms, including potential competitive harms, that may result from the proposed transaction.⁹² In this transaction, EchoStar proposes to assign certain spectrum and earth station licenses to SpaceX following EchoStar's decision to transition offering its Boost Mobile service through a "hybrid-MNO" model.⁹³ Because this transaction centers on the acquisition of spectrum and would not result in the acquisition of wireless business units, network facilities, or customers, we begin our competitive analysis by noting that there is no loss of direct competition between SpaceX and EchoStar that would result from approving this transaction. Indeed, as discussed in section VI, we anticipate that SpaceX's acquisition and use of the licenses at issue in this transaction will facilitate greater competition in the provision of advanced spectrum-based services to consumers.

A. Competitive Analysis

30. *Market Definitions.* In previous transactions, the Commission has defined the relevant product market as a combined "mobile telephony/broadband services" product market that comprises mobile voice and data services, including mobile voice and data services provided over advanced broadband wireless networks (mobile broadband services).⁹⁴ In addition, the Commission has previously found that the geographic market for wireless transactions is local, generally the CMA, but has also found that competitive effects should be evaluated at the national level where a proposed transaction exhibits certain national characteristics.⁹⁵

31. Our analysis recognizes these definitions for the purposes of applying our initial spectrum screen, but we also recognize the fundamental importance of a forward-looking analysis given that ongoing innovation and reinvention are defining characteristics of the provision of mobile

⁹¹ See *infra* section VII.B (Waiver of Consummation Period).

⁹² See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4793, para. 28; *Application of T-Mobile US, Inc., Nextel West Corp., and LB License Co, LLC for License Assignment*, ULS File No. 0010923038, Memorandum Opinion and Order, 39 FCC Rcd 11482, 11487, para. 11 (WTB/OEA 2024) (*T-Mobile-LB License Order*); *Application of T-Mobile License LLC and Horry Telephone Cooperative, Inc. to Assign Spectrum Licenses*, ULS File Nos. 0010864059, 0010877919, and 0010902770, Memorandum Opinion and Order, 39 FCC Rcd 10712, 10716-17, para. 11 (WTB/OEA 2024) (*T-Mobile-HTC Order*).

⁹³ See Amended Public Interest Statement at 2, 10, 17.

⁹⁴ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4793-94, para. 30; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10601, 10603, paras. 55, 60; *Applications of Cricket License Company, LLC, et al., Leap Wireless International, Inc., and AT&T Inc. for Consent to Transfer Control of Authorizations et al.*, WT Docket No. 13-137, Memorandum Opinion and Order, 29 FCC Rcd 2735, 2746, para. 23 (WTB/IB 2014) (*AT&T-Leap Order*).

⁹⁵ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4795-96, paras. 33-34; *T-Mobile-LB License Order*, 39 FCC Rcd at 11491-92, para. 23; *T-Mobile-HTC Order*, 39 FCC Rcd at 10721, para. 24; *Application of T-Mobile License LLC, Nextel West Corp. and Channel 51 License Company LLC for License Assignment*, ULS File Nos. 0010168412, 0010168420, and 0010168439, Memorandum Opinion and Order, 38 FCC Rcd 12150, 12164, para. 33 (WTB/OEA 2023) (*T-Mobile-Channel 51-LB License Order*); *T-Mobile-Sprint Order*, 34 FCC Rcd at 10605-06, para. 66; *AT&T-Leap Order*, 29 FCC Rcd at 2748, para. 27.

telephony/broadband services.⁹⁶ Accordingly, as the Commission has previously stated, the definition of the mobile telephony/broadband services product market not only includes traditional wireless services, but also necessarily encompasses the recent significant and rapidly evolving advances in mobile broadband services technologies.⁹⁷

32. We also recognize there are good arguments for adopting a broader market definition that accounts for a range of technologies and offerings, given the modern trends in the communications sector. Advances in technology have begun to blur traditional service characteristics, enabling service providers across various market segments to offer their services to the same consumers, thereby intensifying competition. We note that, while Space X is currently not providing terrestrial mobile telephony/broadband services, we recognize that its planned deployment may fundamentally transform the marketplace. However, even relying on these narrow definitions for our spectrum screen analysis that the Commission has been using for recent transactions, we find, as specified below, that the transaction is in the public interest.

33. *Spectrum Aggregation.* The Commission has consistently recognized that spectrum is an essential input in the provision of mobile wireless services, and that it is critical to ensure that sufficient spectrum is available for incumbent licensees as well as potential new entrants to promote effective competition and innovation in the mobile wireless marketplace.⁹⁸ When considering the potential competitive effects of spectrum aggregation, the Commission has considered whether spectrum transfers would increase the likelihood that rival service providers or potential entrants would be foreclosed from entering or expanding capacity or deploying advanced mobile broadband technologies, and also whether rivals' costs would be increased to the extent that they would be less likely to be able to compete robustly.⁹⁹ In undertaking our spectrum aggregation analysis, we note that the Commission's spectrum screen helps identify those markets that provide particular reason for further competitive review.¹⁰⁰ Spectrum bands that are currently found suitable and available for the provision of mobile wireless services are included in the spectrum screen.¹⁰¹ While this transaction does involve the assignment of spectrum that is included in our spectrum screen,¹⁰² the transaction does not trigger the current spectrum

⁹⁶ *T-Mobile-UScellular Order*, 40 FCC Rcd at 4793-94, paras. 30-31; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10603-04, paras. 60-61.

⁹⁷ *T-Mobile-UScellular Order*, 40 FCC Rcd at 4794, para. 31; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10603-04, para. 61. As we have explained, we also consider the advances by mobile virtual network operators (MVNOs) and cable providers within the range of differentiated services offered to consumers within the broader mobile telephony/broadband services product market. *T-Mobile-UScellular Order*, 40 FCC Rcd at 4794, para. 31.

⁹⁸ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4801-02, para. 46; *T-Mobile-HTC Order*, 39 FCC Rcd at 10716-17, para. 11; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10617-18, para. 94.

⁹⁹ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4801-02, para. 46; *T-Mobile-HTC Order*, 39 FCC Rcd at 10716-17, para. 11; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10617-18, para. 94.

¹⁰⁰ *T-Mobile-Sprint Order*, 34 FCC Rcd at 10614, para. 87.

¹⁰¹ See *T-Mobile-Sprint Order*, 34 FCC Rcd at 10608, para. 72. The Commission has previously determined that the following bands, or portions thereof, should be included in the input market for spectrum: 600 MHz, 700 MHz, cellular, specialized mobile radio service (SMR), broadband Personal Communications Service (PCS), Advanced Wireless Services (AWS) in the 1710-1755 and 2110-2155 MHz band (AWS-1), AWS-3, AWS in the 2000-2020 MHz and 2180-2200 MHz spectrum bands (AWS-4), Broadband Radio Service (BRS), Wireless Communications Service (WCS) spectrum, H Block, Educational Broadband Service (EBS), 3.7 GHz, and 3.45 GHz. See, e.g., *Communications Marketplace Report*, GN Docket No. 24-119, 2024 Communications Marketplace Report, 39 FCC Rcd 14116, 14173-74, paras. 69-70, Fig. II.B.11 (2024) (*2024 Communications Marketplace Report*); *T-Mobile-LB License Order*, 39 FCC Rcd at 11491-92, para. 23; *T-Mobile-HTC Order*, 39 FCC Rcd at 10721, para. 24.

¹⁰² Prior to the transaction, SpaceX leased 10 megahertz of spectrum nationwide from T-Mobile. As a result of the proposed transaction, SpaceX would hold a maximum of 75 megahertz of spectrum in any local market post-transaction, none of which is below 1 GHz.

screen in any local market.¹⁰³ The trigger is currently 385 megahertz and the maximum attributable post-transaction to SpaceX in any local market would be 75 megahertz, suggesting that the spectrum transfer does not raise any competitive concerns. Further we do not find any evidence that competition would be harmed at the national level; rather, we believe there is potential for increased competition due to SpaceX's planned deployment of currently underutilized spectrum. We also find no other factors that would suggest any spectrum aggregation concerns that would arise as a result of the transaction. After applying our standard spectrum screen analysis, we conclude that the acquisition of this spectrum by SpaceX is not likely to lessen the ability of other service providers from competing robustly or otherwise lead to significant anticompetitive harms in any of the services at issue.

B. Other Potential Competitive Harms

34. We find unpersuasive Syndicat CFE-CGC Télécom's claims that approving the transaction and enabling SpaceX's plans for D2D service would "lead to a global monopoly" and that the transaction would result in "endangering the viability of the U.S. mobile industry" due to SpaceX's having the ability to offer services on a global scale.¹⁰⁴ The licenses and authorizations at issue in this transaction are geographically limited to the United States and its territories, and as SpaceX points out, it would need to seek authorization from foreign regulatory authorities in order to provide satellite services in other countries using these bands.¹⁰⁵ In addition, we note that there are several other bands that are available to provide MSS and similar D2D services from space, including the L-Band (1.5/1.6 GHz), the "Big LEO" band (1.6/2.4 GHz) and the five SCS bands.¹⁰⁶ Finally, we agree with SpaceX that the 55 megahertz to 65 megahertz of incremental spectrum capacity that EchoStar is seeking to assign to SpaceX is more likely to increase competition than to "destabilize" it.¹⁰⁷

35. We also find unpersuasive Liberty Latin America's (LLA's) claims of harm in Puerto Rico and the U.S. Virgin Islands. LLA argues that approval of the transaction would strand the investments LLA has made to build out a 5G network in these markets using the Lower AWS-3, AWS-4, and AWS H-Block licenses that LLA acquired from EchoStar.¹⁰⁸ In particular, LLA asserts that SpaceX's plans to use these licenses to provide D2D service throughout the country rather than traditional terrestrial wireless service would eliminate the market for handsets and other equipment needed to deploy terrestrial wireless service in these bands, which ultimately would lead to "dead zones" in the provision of

¹⁰³ The Commission's spectrum screen, which is applied on a county-by-county basis, identifies those local markets where an entity would hold approximately one-third or more of the total spectrum suitable and available for the provision of mobile telephony/broadband services post-transaction. Further, if the acquiring entity would increase its below-1-GHz spectrum holdings so as to hold approximately one-third or more of such spectrum post-transaction, we apply enhanced factor review. *See, e.g., T-Mobile-UScellular Order*, 40 FCC Rcd at 4799-800, para. 41; *see also Policies Regarding Mobile Spectrum Holdings; Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, WT Docket No. 12-269, GN Docket No. 12-268, Report and Order, 29 FCC Rcd 6133, 6240, paras. 286-88 (2014) (*Mobile Spectrum Holdings Report and Order*).

¹⁰⁴ Syndicat CFE-CGC Télécom Comments at 2. Syndicat CFE-CGC Télécom describes itself as a "trade union organisation representing workers in the telecommunications sector in France." Syndicat CFE-CGC Télécom Comments at 1.

¹⁰⁵ SpaceX Consolidated Response at 15.

¹⁰⁶ *See* 47 CFR § 2.106(d)(33)(i); *SCS Report and Order* 39 Rcd at 2625, 2634-35, paras. 10 & n.11, 28.

¹⁰⁷ *See* SpaceX Consolidated Response at 15.

¹⁰⁸ LLA Comments at 2, 8-10. We address LLA's arguments regarding SpaceX's acquisition of EchoStar's 2 GHz MSS rights and the potential impacts on LLA's use of its AWS-4 licenses below. *See infra* section VIII (Other Issues).

communications service in Puerto Rico and the U.S. Virgin Islands.¹⁰⁹ Contrary to LLA's claims, there are already a wide range of handsets that currently support the spectrum bands that LLA acquired from EchoStar, and we find that it is unlikely that manufacturers would no longer support this band post-transaction.¹¹⁰ Moreover, there are many other bands available for the provision of mobile wireless services and available handsets that are compatible with those bands. As such, we find it unlikely that the transaction would result in dead zones due to the lack of availability of or support for suitable handsets to meet LLA customer needs.

36. We likewise are unpersuaded by the Rural Wireless Association's (RWA's) argument that approving the transaction would enable "spectrum aggregation by the nationwide wireless carriers."¹¹¹ Contrary to RWA's suggestion, the spectrum is being transferred to SpaceX and not a nationwide mobile wireless provider, so there would be no increase in spectrum aggregation among the national, terrestrial wireless providers. Moreover, we anticipate that SpaceX's use of the spectrum will bring substantial benefits to customers in geographically hard-to-reach areas.¹¹²

37. Finally, with regard to the effect of EchoStar no longer offering service as a traditional facilities-based provider,¹¹³ we note that EchoStar has decided to continue to offer mobile wireless service through an infrastructure-based MVNO model that it terms "Hybrid-MNO," whereby EchoStar plans to leverage its own core network with access to AT&T's nationwide network and SpaceX's proposed D2D service to better serve Boost Mobile customers.¹¹⁴ We find no harm as a result of EchoStar's sale of the spectrum to SpaceX and ultimate shift of its business model to offer wireless service as a Hybrid-MNO. Today, we note that EchoStar primarily operates as an MVNO, through agreements with AT&T and T-Mobile.¹¹⁵

¹⁰⁹ LLA Comments at 2, 9. LLA also notes that "since SpaceX would not be acquiring the Puerto Rico and U.S. Virgin Island licenses as part of the Transaction," these geographies would not benefit from SpaceX's proposed service. LLA Comments at 9.

¹¹⁰ There are currently 272 devices, including devices from all major device manufacturers, that support the n70 band, which incorporates lower AWS-4 and upper H Block spectrum, listed on the Frequency Check website. Frequency Check, *5G NR Interface Frequency Bands*, <https://www.frequencycheck.com/interfaces/5g-new-radio> (last visited May 4, 2026). See also SpaceX Consolidated Response at 12, n.31 (providing device data from frequency check.com as of Dec. 18, 2025). There are currently 1,681 devices that support the n66 band, which incorporates the AWS-3 spectrum, listed on the Frequency Check website. Frequency Check, <https://www.frequencycheck.com/interfaces/5g-new-radio> (last visited May 4, 2026). We note that these standards are available in devices used by service providers other than EchoStar. See, e.g., Frequency Check, *Wireless Carriers and Mobile Network Operators*, https://www.frequencycheck.com/carriers?q%5Bfrequency_bands_id_eq%5D=130 (last visited May 4, 2026).

¹¹¹ RWA Comments at 4-6. While OTI and Public Knowledge assert that the proposed transaction will not improve competition in the foreseeable future, they do not suggest that the transaction would result in competitive harm. OTI and Public Knowledge Comments at 3. Rather, OTI and Public Knowledge assert that the proposed transaction would not entrench an "'oligopoly' of the 'Big 3' wireless carriers." OTI and Public Knowledge Comments at 3.

¹¹² We address RWA's arguments that the Commission should re-auction the spectrum because EchoStar failed to meet its buildout requirements below. See *infra* section VIII (Other Issues).

¹¹³ See LLA Comments at 1; RWA Comments at 5-6. But see OTI and Public Knowledge Comments at 7 (noting that "to the extent that Boost's hybrid MVNO service will incorporate SpaceX's D2[D] service, this transaction promises to differentiate Boost and make it a more viable alternative in the marketplace").

¹¹⁴ Amended Public Interest Statement at 17.

¹¹⁵ EchoStar 10-K at 6, 68 ("Prior to November 15, 2025, we were operating primarily as an MVNO utilizing network services under the [amended Master Network Services Agreement] and the [Network Services Agreement, as amended] and secondarily as an [mobile network operator]"; "As a mobile virtual network operator ('MVNO'), we depended on either T-Mobile or AT&T to provide us with network services . . .").

VI. POTENTIAL PUBLIC INTEREST BENEFITS

38. Having determined that the likelihood of public interest harms associated with the transaction is low, we next discuss the public interest benefits of the transaction.¹¹⁶ We find the transaction is likely to result in significant public interest benefits in light of SpaceX's plans to rapidly deploy a first of its kind, next-generation D2D network using this approximately 65 megahertz of dedicated spectrum. This transaction—with the forward-looking waivers and rigorous buildout conditions we adopt below—has the potential to unlock transformational, ubiquitous connectivity to mobile users, particularly in hard-to-reach areas of the United States. It also has the potential ultimately to impact service offerings in the broader wireless marketplace. In addition, we accept the Applicants' claims that the transaction has the potential to facilitate EchoStar's plans to become a Hybrid-MNO and ultimately provide the benefits of SpaceX's planned D2D service to Boost Mobile customers.

39. The Commission finds a claimed benefit to be cognizable when it arises as a result of the transaction and likely could not be accomplished in the absence of the transaction¹¹⁷ and is verifiable.¹¹⁸ Because much of the information relating to the potential benefits of a transaction is in the sole possession of the applicants, they are required to provide sufficient evidence supporting each claimed benefit so that the Commission can verify its likelihood and magnitude.¹¹⁹ Further, the Commission is "more likely to find marginal cost reductions to be cognizable than reductions in fixed cost" as, in general, reductions in marginal cost are more likely to result in lower prices for consumers.¹²⁰ And benefits expected to occur only in the distant future may be discounted or dismissed because, among other things, predictions about the distant future are inherently more speculative than predictions that are expected to occur closer to the present.¹²¹

40. We credit SpaceX's plans to use this spectrum to deploy a next generation D2D network that will "help[] to close coverage gaps"¹²² and provide "increased capacity, reduced latency, and broader

¹¹⁶ *T-Mobile-UScellular Order*, 40 FCC Rcd at 4822, para. 89; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214.

¹¹⁷ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4822, para. 89; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9604, para. 50 (citing *AT&T-BellSouth Order*, 22 FCC Rcd at 5761, para. 202); *AT&T-DIRECTV Order*, 30 FCC Rcd at 9237, para. 273.

¹¹⁸ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4822, para. 89; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *CenturyLink-Level 3 Order*, 32 FCC Rcd at 9604, para. 50; *AT&T-DIRECTV Order*, 30 FCC Rcd at 9237, para. 274; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10468, para. 87; *Applications of Deutsche Telekom AG, T-Mobile USA, Inc., and MetroPCS Communications, Inc. For Consent To Transfer of Control of Licenses and Authorizations*, WT Docket No. 12-301, Memorandum Opinion and Order and Declaratory Ruling, 28 FCC Rcd 2322, 2342, para. 58 (WTB/IB 2013) (*T-Mobile-MetroPCS Order*).

¹¹⁹ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4822, para. 89; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10468, para. 87; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58. In addition, "the magnitude of benefits must be calculated net of the cost of achieving them." See, e.g., *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10468, para. 87; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

¹²⁰ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4822, para. 89; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671, para. 214; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10468, para. 87; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

¹²¹ See, e.g., *T-Mobile-UScellular Order*, 40 FCC Rcd at 4822, para. 89; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *Alaska Wireless-GCI Order*, 28 FCC Rcd at 10468, para. 87; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

¹²² Amended Public Interest Statement at i.

service coverage for mobile users” across the United States.¹²³ We agree with the Applicants that this advanced and new iteration of D2D service has the potential to improve connectivity for mobile users across America and to “facilitate a leap in technology,”¹²⁴ leading to efficient and effective use of these valuable spectrum resources.¹²⁵

41. Even with the small amount of D2D spectrum authorized to date, D2D service has already proven effective in supplementing existing terrestrial service, particularly for hard-to-reach areas or in scenarios when terrestrial networks are unavailable—such as emergencies and natural disasters.¹²⁶ The Applicants explain that combining this 65 megahertz of “exclusive spectrum with new state-of-the-art satellite technologies,” SpaceX will be able to deliver “next generation Direct to Cell (‘D2C’) service . . . to standard, unmodified cell phones and Internet of Things devices—helping to close coverage gaps and ultimately eliminate mobile dead zones around the world.”¹²⁷ OTI and Public Knowledge likewise assert that the proposed license assignments will serve the public interest by enabling a robust D2D service “that extends basic mobile phone and even broadband connectivity to virtually all locations in the country,” marking “an important step toward achieving ubiquitous and seamless connectivity for consumers, anytime and anywhere.”¹²⁸

42. We also credit that this transaction has the potential to lead to more intensive use of this AWS-4, AWS-H Block, and AWS-3 spectrum. Although the spectrum at issue has been authorized for either MSS operations, terrestrial wireless service, or both for over a decade,¹²⁹ the spectrum has been

¹²³ Amended Public Interest Statement at 13.

¹²⁴ Amended Public Interest Statement at ii, 13-16.

¹²⁵ Amended Public Interest Statement at 13-14 (“With the world’s most advanced phased arrays, the wider bandwidth operations enabled by this spectrum purchase, and optimized 5G protocols, the system will support an overall capacity increase of more than 100x the first-generation SpaceX D2[D] system.”).

¹²⁶ See, e.g., *SpaceX SCS Lower Altitude Authorization Order*, 39 FCC Rcd at 12560-61, para. 17 (“We find that SpaceX and T-Mobile’s SCS operations will yield many benefits, including an increase in access to emergency services in areas where consumers would otherwise not have the capability to access a terrestrial network to call or text 911, as evidenced, for example, through SpaceX’s provision of emergency SCS in areas affected by Hurricanes Helene and Milton.”); see also, e.g., Chris Velazco, *When Storms Knock Out Cell Service, Satellites Can Help Keep You Connected*, (Oct. 10, 2024), <https://www.washingtonpost.com/technology/2024/10/10/how-text-message-satellite-without-cell-service/>; David Shepardson, *US Lets Starlink Provide Direct-to-Cell Coverage for Hurricane-Hit Areas*, (Oct. 6, 2024), <https://www.reuters.com/world/us/us-lets-starlink-provide-direct-to-cell-coverage-hurricane-hit-areas-2024-10-06/>.

¹²⁷ Amended Public Interest Statement at i.

¹²⁸ OTI and Public Knowledge Comments at 4-5.

¹²⁹ The Commission first allowed MSS operations in the 2000-2020 MHz and 2180-2200 MHz frequency bands more than 25 years ago, and allowed terrestrial wireless services in the same spectrum, the AWS-4 band, as well as the AWS-H Block of 1915-1920 MHz and 1995-2000 MHz, and the unpaired AWS-3 blocks of 1695-1700 MHz and 1700-1710 MHz, more than 10 years ago. See, e.g., *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*, GN Docket No. 13-185, Report and Order, 29 FCC Rcd 4610 (2014); *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Band et al.*, WT Docket Nos. 12-70 and 04-356, ET Docket No. 10-142, Report and Order and Order of Proposed Modification, 27 FCC Rcd 16102 (2012); *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands et al.*, IB Docket Nos. 01-185, 02-364, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd 1962 (2003); *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, First Report and Order Further Notice of Proposed Rulemaking, 12 FCC Rcd 7388 (1997). The 2 GHz MSS band and the AWS-4 band are 2000-2020 MHz and 2180-2200 MHz. The AWS-H Block is 1915-1920 MHz and 1995-2000 MHz. The unpaired AWS-3 band is 1695-1700 MHz and 1700-1710 MHz.

underutilized. SpaceX's demonstrated track record of launching its Gen1 NGSO system¹³⁰ and commercial SCS service with T-Mobile¹³¹ indicate that SpaceX has the tools to deploy the system as proposed,¹³² leading to efficient and effective use of these valuable spectrum resources.¹³³ The AWS-4 (with associated 2 GHz MSS rights) and AWS-H Block spectrum bands are well suited for SpaceX's planned system given that these bands have both terrestrial and satellite allocations.¹³⁴ SpaceX also seeks to use the unpaired AWS-3 spectrum bands for this system,¹³⁵ and justifies the request that it would "build on" the existing SCS framework "to enable deployment of SCS in additional bands and scenarios," as envisioned by the Commission in support of "innovative solutions for supplemental satellite coverage."¹³⁶ As the Applicants explain, SpaceX will have the potential to "harness these bands to dramatically enhance connectivity for mobile users across the United States, including first responders, commercial enterprises, and other users who are underserved or unserved by existing networks."¹³⁷ They explain that with the "wider bandwidth operations enabled by this spectrum purchase, and optimized 5G protocols, the system will support an overall capacity increase of more than 100x the first-generation SpaceX D2[D] system."¹³⁸ They further explain that "[i]n most environments," SpaceX's planned system "will enable full 5G cellular connectivity with a comparable consumer experience to current terrestrial LTE service, which will be used in partnership with MNOs to augment high-capacity terrestrial 5G networks."¹³⁹ SpaceX's

¹³⁰ Amended Public Interest Statement at 16 (citing *SpaceX 2018 NGSO Authorization Order*, 33 FCC Rcd at 3407, para. 42(b) (2018) (establishing March 29, 2024, as first milestone date); *Satellite Policy Branch Information*, Report No. SAT-01663, Public Notice, 37 FCC Rcd 10214, 10214 (2022) (finding SpaceX had satisfied its first milestone)).

¹³¹ Amended Public Interest Statement at 16 (citing *SpaceX SCS Lower Altitude Authorization Order*, 39 FCC Rcd (granting SCS authority); Mike Robuck, *T-Mobile US launches Starlink D2D public beta*, (Feb. 10, 2025), <https://www.mobileworldlive.com/t-mobile-us/embargoed-t-mobile-us-launches-starlink-d2d-beta/>; Press Release, T-Mobile, It's Official: T-Mobile Has the Best Network in America (June 23, 2025), <https://www.t-mobile.com/news/network/best-network-in-america> (announcing commercial availability of SCS on July 23, 2025)).

¹³² Amended Public Interest Statement at 16-17 ("Building the constellation to its present form with its unique regenerative architecture involved designing, manufacturing, launching and operating cell towers in space, including development of the system's eNodeB payload, phased array antennas, and core network, which enables network integration similar to a standard roaming partner. SpaceX also worked with leading device manufacturers and application developers to enhance the services provided over the satellite network. SpaceX's track record clearly demonstrates that it is uniquely qualified to deliver advanced services across the United States in a compressed timeframe using the AWS-4/2 GHz MSS, AWS-H Block, and AWS-3 spectrum—and thoroughly intends to do so.").

¹³³ Amended Public Interest Statement at 13-14 ("With the world's most advanced phased arrays, the wider bandwidth operations enabled by this spectrum purchase, and optimized 5G protocols, the system will support an overall capacity increase of more than 100x the first-generation SpaceX D2[D] system. In most environments, this will enable full 5G cellular connectivity with a comparable consumer experience to current terrestrial LTE service, which will be used in partnership with MNOs to augment high-capacity terrestrial 5G networks."). ITIF likewise argues that "permitting these transactions would enhance the productivity of the spectrum governed by these licenses." ITIF Comments at 2.

¹³⁴ Amended Public Interest Statement at 14-15.

¹³⁵ Amended Public Interest Statement at 14-15.

¹³⁶ *SCS Report and Order*, 39 FCC Rcd at 2623, 2632, paras. 3, 23.

¹³⁷ Amended Public Interest Statement at 15-16.

¹³⁸ Amended Public Interest Statement at 13-14.

¹³⁹ Amended Public Interest Statement at 14.

plans to use this spectrum to deploy a hybrid satellite and terrestrial network demonstrate the rapidly evolving convergence of satellite and terrestrial service to provide mobile users with ubiquitous service.¹⁴⁰

43. Not only will SpaceX's planned deployment bring ubiquitous connectivity, it also has the potential to increase competition in the mobile wireless marketplace. SpaceX's plans to offer this next generation D2D service will supplement current mobile networks and potentially lead to more mobile wireless service options for consumers, particularly for those consumers who live or work in geographically hard-to-reach areas of the United States. Further, as technology advances, SpaceX's transformational service offerings may lead to increased competition in the provision of retail wireless services to the benefit of all consumers in the United States. As we have similarly noted in the context of SCS applications, SpaceX's planned service here is "reflective of an increase in innovation, investment, and competition in the marketplace that the Commission sought to encourage in the *SCS R&O*."¹⁴¹

44. Finally, we credit the Applicants' arguments that by providing EchoStar access to SpaceX's planned D2D service, Boost Mobile's customers will benefit from a greater availability of service.¹⁴² Through its Hybrid-MNO infrastructure, EchoStar claims that it will continue to provide service to Boost Mobile subscribers through its core network, which will be augmented by "Starlink's forthcoming innovative D2D MSS services."¹⁴³ OTI and Public Knowledge agree that the services that would result from the transaction would strengthen Boost Mobile as a hybrid-MNO.¹⁴⁴ This has the potential to improve service to Boost Mobile customers, directly connecting them with the benefits of SpaceX's D2D advancements, offering them "near-ubiquitous connectivity nationwide—even in the hardest to reach remote areas of the country."¹⁴⁵

45. For these reasons, we find that the transaction has the potential to provide several public interest benefits including facilitating the use of valuable spectrum resources to increase mobile connectivity across the United States—particularly in areas that are unserved or underserved.

VII. WAIVERS

46. As detailed below, to promote technological flexibility and innovation—and ensure that the benefits of the transaction are real and enforceable—we grant Applicants a series of waivers and impose rigorous buildout conditions that will require SpaceX to meet deployment milestones on par with

¹⁴⁰ See, e.g., Amended Public Interest Statement at 15; Amended Waiver Requests at 4 ("The ideal network design will aim to maximize utilization of the MSS system (as the satellites, once deployed, will be capable of delivering service across the entire United States), employing terrestrial base stations to enhance capacity where needed.").

¹⁴¹ See *SpaceX SCS Lower Altitude Authorization Order*, 39 FCC Rcd at 12561, para. 17 (citing *SCS Report and Order*, 39 FCC Rcd at 2623, 2640, 2725, paras. 2, 44, 238).

¹⁴² Amended Public Interest Statement at ii, 17.

¹⁴³ Amended Public Interest Statement at 17.

¹⁴⁴ OTI and Public Knowledge Comments at 4-8. Although generally supportive of the public interest benefits of the transaction, however, OTI and Public Knowledge do note that "this transaction will not improve the competitive landscape in mobile services in the foreseeable future," but rather will "provide consumers with new, innovative services that *supplement* terrestrial wireless service" and will not "further entrench" the "oligopoly" of the 'Big 3' wireless carriers." OTI and Public Knowledge Comments at 3.

¹⁴⁵ Amended Public Interest Statement at 17. SpaceX and EchoStar assert that "no commenter disputes" these "fundamental and transformative public interest benefits," namely, that SpaceX will "gain the ability to provide high-quality mobile connectivity from space" and that EchoStar will "gain the ability to enhance [Boost Mobile's] service through new direct-to-device [] capabilities." SpaceX Consolidated Response at 2; see also EchoStar Consolidated Response at 1. In its Consolidated Response, EchoStar also states that "[n]o commenter disputes" that the proposed transaction will enhance "EchoStar's ability to compete in the mobile wireless marketplace." EchoStar Consolidated Response at 1. This issue, which was also raised by RWA in its Comments and Reply Comments, is discussed in section V, *supra*, addressing potential public interest harms.

a similarly situated terrestrial wireless network. The Commission may grant a waiver of rules governing the Wireless Radio Services when either (i) “[t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest,” or (ii) “[i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”¹⁴⁶ The Commission may also waive any provision of its rules “for good cause shown.”¹⁴⁷ As explained below, based on the record, we find that given the unique circumstances present here, it is in the public interest to grant the requested waivers of the terrestrial construction requirements for the AWS-4, AWS-H Block, and unpaired AWS-3 licenses, as conditioned to facilitate rigorous buildout; the discontinuance rule to the extent necessary to effectuate the transaction; and the 180-day consummation rules.¹⁴⁸

A. Waiver of Terrestrial Construction Requirements

47. We find that it serves the public interest to grant a waiver to SpaceX of the terrestrial construction requirements currently applicable to EchoStar’s AWS-4, AWS-H Block, and unpaired AWS-3 licenses, and to the extent necessary, the requirements contained in section 27.14(q), (r), and (s) of the Commission’s rules, with conditions.¹⁴⁹ As discussed above, SpaceX is acquiring AWS-4, AWS-H Block, and unpaired AWS-3 licenses for purposes of deploying a next-generation D2D network, a reflection of the rapidly evolving convergence of satellite and terrestrial wireless technologies that can provide users of mobile devices with ubiquitous connectivity. In recognition of this evolution of technologies that will provide significant public interest benefits, we find that the public interest would not be served by retaining buildout requirements designed for traditional terrestrial wireless services. Nonetheless, waiving the buildout requirements without substituting an alternate set of requirements would not ensure that the benefits of expanded connectivity and robust spectrum use are achieved. In that regard, we will apply as a condition of approving this transaction a new set of buildout requirements tailored to the provision of D2D, with elements developed to facilitate a quality user experience, robust use of spectrum, and timely deployment. For purposes of facilitating SpaceX’s planned deployment of this spectrum, we also grant waiver and extension of the discontinuance rule in section 1.953 to the extent necessary to effectuate the transaction.

48. *Buildout Requirements.* An AWS-3 or AWS-H Block licensee must provide signal coverage and offer service to at least 75% of the population in each of its license areas.¹⁵⁰ An AWS-4 licensee must provide terrestrial signal coverage and offer terrestrial service to at least 70% of the

¹⁴⁶ 47 CFR § 1.925(b)(3).

¹⁴⁷ 47 CFR § 1.3. Under this standard, waivers are appropriate only if “both (i) special circumstances warrant a deviation from the general rule, and (ii) such deviation will serve the public interest.” See, e.g., *Lazo Technologies, Inc. et al.*, CC Docket No. 02-6, Order on Reconsideration, 26 FCC Rcd 16661, 16668 & n.56 (2011); see also *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990). The rule applicable to wireless services, 47 CFR § 1.925(b)(3), requires “substantially the same” showing as 47 CFR § 1.3. *Barry P. Lunderville, College Creek Broadcasting, Inc., & Cumulus Licensing LLC et al.*, Memorandum Opinion and Order, 28 FCC Rcd 665, 671, para. 14 & n.51 (2013).

¹⁴⁸ The Applicants also seek waiver of section 2.106 to use the 2000-2020 MHz band for MSS downlink; and waiver of section 25.115 to allow AWS-4 handsets to operate as earth stations. Amended Waiver Requests at 7–8. We find that the instant waiver requests are more appropriate to address in the context of the SpaceX D2D Application proceeding, where SpaceX requests the same or similar relief, rather than in the instant transaction. Accordingly, we will consider these waiver requests in the SpaceX licensing proceeding, as we note that there are other earth station issues that will also need to be addressed in SpaceX’s D2D Application. See, e.g., 47 CFR § 25.216; see also 47 CFR § 25.265.

¹⁴⁹ Amended Waiver Requests at 2–5.

¹⁵⁰ 47 CFR § 27.14(r)(2), (s)(2).

population in each of its license areas in the 2000-2020 MHz and 2180-2200 MHz bands (AWS-4 Final Buildout Requirement).¹⁵¹ If an AWS-3, AWS-H Block, or AWS-4 licensee fails to establish that it meets the Final Buildout Requirement for a particular license area, its authorization for each license area in which it fails to meet the Final Buildout Requirement shall terminate automatically without Commission action and the licensee will be ineligible to regain it if the Commission makes the license available at a later date.¹⁵²

49. EchoStar's AWS-4 and AWS-H Block licenses have unique buildout obligations as a result of EchoStar's commitments as part of the *T-Mobile-Sprint* transaction.¹⁵³ EchoStar waived its right to claim buildout based on the Commission's flexible-use policies—these AWS-4 and AWS-H Block licenses are expressly conditioned on EchoStar building, deploying, and offering 5G Broadband Service.¹⁵⁴ Subsequently, EchoStar committed to “accelerated and expanded” buildout commitments by December 31, 2024, for some of its AWS-4, AWS-H Block, and AWS-3 licenses as part of its own extension request for certain of its licenses.¹⁵⁵

50. With respect to the application of buildout requirements in the context of the SCS framework, in 2024 the Commission found that the provision of SCS cannot satisfy a terrestrial wireless licensee's construction and performance requirements.¹⁵⁶ Specifically, section 1.9407(g) of the rule governing SCS leasing arrangements provides “a licensee may not attribute to itself the build-out or performance activities of its SCS spectrum lessee(s) for purposes of complying with any applicable performance or build-out requirement.”¹⁵⁷

51. *Requests for Waiver of Terrestrial Buildout Requirements.* SpaceX seeks a waiver of the AWS-4, AWS-H Block, and AWS-3 buildout requirements applicable to these licenses, including the requirements in section 27.14(q), (r), and (s), asserting that its planned D2D system will require full use of the spectrum, such that a D2D system and terrestrial base stations cannot serve the same location at the same time.¹⁵⁸ SpaceX argues the part 27 rules dictate a far more extensive deployment of terrestrial base stations, which would be inefficient and wasteful, undermining the viability of SpaceX's planned D2D network.¹⁵⁹

52. SpaceX contends that grant of the buildout waiver would facilitate the Commission's goals to enable mobile broadband connectivity in the AWS-4, AWS-H Block, and AWS-3 bands.¹⁶⁰ SpaceX asserts that the buildout waiver is justified because it enables efficient and rapid deployment of its planned commercial satellite service in these bands and would serve the public interest by promoting

¹⁵¹ 47 CFR § 27.14(q)(2).

¹⁵² 47 CFR § 27.14(q)(4), (r)(4), (s)(4).

¹⁵³ *T-Mobile-Sprint Order*, 34 FCC Rcd at 10589, paras. 26-28; *Applications of T-Mobile US, Inc., and Sprint Corporation et al.*, Order of Modification and Extension of Time to Construct, WT Docket No. 18-197, 35 FCC Rcd 9580 (WTB 2020) (*DISH Modification Order*).

¹⁵⁴ *DISH Modification Order*, 35 FCC Rcd at 9586-87, para. 12.

¹⁵⁵ See, e.g., Letter from Jeffrey H. Blum, Executive Vice President, External & Legislative Affairs, EchoStar Corp., to Joel Taubenblatt, Chief, Wireless Telecommunications Bureau, FCC, ULS File No. 0011245488, at 3-5 (Sept. 17, 2024) (Construction Milestone Extension Request).

¹⁵⁶ *SCS Report and Order*, 39 FCC Rcd at 2673-77, paras. 123-26.

¹⁵⁷ 47 CFR § 1.9047(g).

¹⁵⁸ Amended Waiver Requests at 3-4.

¹⁵⁹ Amended Waiver Requests at 4.

¹⁶⁰ SpaceX Consolidated Response at 6-10.

innovation and competition in the wireless connectivity market.¹⁶¹ SpaceX further claims that the Commission’s objective in adopting buildout requirements is to enable ubiquitous mobile service and not to prioritize terrestrial deployment.¹⁶² After discussions with staff,¹⁶³ on May 12, 2026, SpaceX submitted commitments to meet certain performance metrics for its D2D system in support of its waiver request.¹⁶⁴

53. *Record.* OTI and Public Knowledge support SpaceX’s buildout waiver request, but explain that “waiver [of the terrestrial construction requirements] should be contingent on the deployment and operation of a ubiquitous D2D service over the entire continental United States.”¹⁶⁵ With respect to the AWS-4 requirements specifically, OTI and Public Knowledge explain that “neither the Commission’s initial authorization of an ancillary terrestrial component, nor its subsequent *AWS-4 Order* and terrestrial buildout requirements, were intended ‘to transform the band into exclusively terrestrial spectrum.’”¹⁶⁶

54. RWA and LLA oppose SpaceX’s request for waiver of the terrestrial construction requirements applicable to EchoStar’s AWS-3, AWS-4, and AWS-H Block licenses.¹⁶⁷ RWA asserts that waiver in this instance would undermine the Commission’s goals that the spectrum support a terrestrial network built in a timely manner.¹⁶⁸ RWA argues that the requested relief from the construction requirements to replace terrestrial service in these spectrum bands with D2D would be more appropriately achieved by rule changes, following a petition for rulemaking and public notice and comment.¹⁶⁹ RWA further contends that waiver of the construction requirements is not aligned with the “fundamental purpose” of the AWS-4 rules, asserting that buildout of a terrestrial network is central to the *AWS-4 Order*.¹⁷⁰ LLA argues that waiver of the construction requirements to allow D2D instead of traditional terrestrial wireless service would run counter to the Commission’s finding in the *SCS Report and Order* that SCS operations cannot fulfill the terrestrial-based buildout responsibilities.¹⁷¹ LLA also suggests that a waiver of the construction requirements would change the terms of the unique 5G buildout

¹⁶¹ See SpaceX Consolidated Response at 6–10.

¹⁶² See SpaceX Consolidated Response at 7–8.

¹⁶³ See, e.g., SpaceX Mar. 3, 2026 *Ex Parte*.

¹⁶⁴ Appx. C: SpaceX Buildout Commitments.

¹⁶⁵ OTI and Public Knowledge Comments at 12.

¹⁶⁶ OTI and Public Knowledge Comments at 11 (citing Amended Waiver Requests at 3).

¹⁶⁷ RWA Comments at 2, 10–12; LLA Comments at 4–7, 10–12; RWA Reply Comments at 4–6.

¹⁶⁸ RWA Comments at 10–11; RWA Reply at 4–6. LLA similarly asserts the premise that terrestrial service should be provided in these bands in accordance with a reliable timeline and argues that waiver of the construction requirements to enable D2D instead of traditional terrestrial wireless service conflicts with this premise. LLA Comments at iii, 10–11; LLA Reply at 2–5.

¹⁶⁹ RWA Comments at 2–3, 12; RWA Reply at 4–6.

¹⁷⁰ RWA Comments at ii, 2, 11–12. In response to arguments from RWA, SpaceX asserts that the terrestrial construction requirement is not fundamental to the AWS-4 rules. SpaceX Consolidated Response at 8–9.

¹⁷¹ LLA Comments at 11–12. In response, SpaceX argues that the “hybrid (rules-based and waiver-based) approach” in the Commission’s *SCS Report and Order* is relevant here, and that waiver of the buildout requirements is appropriate because SpaceX would be able to provide “true mobile broadband service” with its planned D2D satellite system, which was not foreseeable in 2024 when the Commission adopted the *SCS Report and Order* due to the rapidly changing D2D market. SpaceX Consolidated Response at 8–10. RWA and LLA disagree with SpaceX’s interpretation of the *SCS Report and Order* claiming that Commission dicta invites waiver-based approaches to enable D2D to replace terrestrial buildout rules. RWA Reply at 4; LLA Reply at 3. RWA and LLA disagree with SpaceX for different reasons. RWA argues the Commission intended to leave the door open to waivers of SCS technical rules and not waivers of the terrestrial buildout rules. RWA Reply at 4. LLA argues that “it is absurd” to suggest that SpaceX’s planned D2D network was not foreseeable to the Commission in 2024. See LLA Reply at 3.

responsibilities imposed upon EchoStar's licenses and asserts that measures must be in place to protect the public interest if there is a waiver.¹⁷²

55. *Discussion.* We find that waiver of the terrestrial construction requirements, with the stringent buildout conditions that we adopt, serves the public interest, as waiver will provide SpaceX with technological flexibility to use the spectrum for its next generation D2D network. The purposes of the buildout rules—and the unique EchoStar 5G deployment commitments—are to ensure the productive use of spectrum, encourage service is provided in a timely manner, and promote innovative services and technologies in rural areas. Strict application of the buildout requirements would require the deployment of a traditional terrestrial wireless network with ground-based infrastructure, such as cellular towers equipped with antennas. In the instant case, however, we consider SpaceX's planned D2D network, which would connect directly to mobile handsets using satellites instead of traditional ground-based cellular towers. D2D satellite beams and terrestrial base stations cannot effectively serve the same location at the same time on the same spectrum due to severe interference challenges and operational limitations. In light of the coexistence challenges, we find that the underlying purposes of the buildout requirements would not be served by requiring SpaceX to deploy a traditional terrestrial wireless network. Instead, we find that a waiver, as conditioned, would facilitate SpaceX's planned D2D network and serve the purposes of the buildout requirements.

56. For the same reasons, we also find that unique circumstances justify a waiver in this context. In particular, SpaceX plans to use the terrestrial licenses it acquires from EchoStar to be at the forefront of D2D development. SpaceX's planned D2D network, as conditioned under the waiver relief provided herein, promises to offer enhanced performance compared with previous hybrid satellite/terrestrial solutions. Waiver relief in the instant case would enable SpaceX's plans to deploy its cutting-edge D2D technology, whereas application of the buildout rules to these unique circumstances would be an inequitable regulatory burden that essentially perpetuates technological stagnation.

57. We recognize, however, the importance of ensuring the benefits of expanded connectivity and robust spectrum use are realized. It would not be in the public interest to waive the terrestrial buildout requirements without placing conditions on SpaceX to use the spectrum to deploy a next-generation D2D network that delivers on the substantial public interest benefits discussed above. For purposes of SpaceX's acquisition of these licenses, therefore, we adopt SpaceX's buildout commitments as conditions. Accordingly, we waive the buildout requirements applicable to the AWS-3, AWS-4, and AWS-H Block licenses, subject to the following conditions:¹⁷³

- For each license, SpaceX shall meet the following minimum performance metrics per block¹⁷⁴ for downlink quality of service (Signal-to-Interference-Plus-Noise Ratio (SINR)); uplink user throughput; and spectral efficiency:
 - Downlink Quality of Service (SINR):

¹⁷² LLA Comments at 10-11. LLA further argues that SpaceX should not be permitted to retain rights to deploy a terrestrial network using EchoStar's spectrum without meeting buildout requirements. LLA Reply at 5.

¹⁷³ See Appx C: SpaceX Buildout Commitments.

¹⁷⁴ The AWS-4 band is two blocks (Channel A: 2000-2010 MHz and 2180-2190 MHz; and Channel B: 2010-2020 MHz and 2190-2200 MHz); AWS-3 unpaired spectrum is two blocks (1695-1700 and 1700-1710 MHz); and the AWS-H block is two blocks (1915-1920 and 1995-2000 MHz). 3GPP Non-Terrestrial Network (NTN) standards—which enable D2D connectivity to end user devices—do not currently support satellite communication for the 1915-1920 MHz band. See Appx. C: SpaceX Buildout Commitments at 1 n.2. We anticipate that SpaceX will work with diligence towards 3GPP standards and equipment deployment for this block. As the milestone nears, if SpaceX believes that it needs additional time to meet applicable performance metrics for this block, SpaceX would need to file a request for waiver with appropriate justifications.

- First Interim Performance Requirement (two years from November 30, 2027): SINR of 5 dB; Service Availability¹⁷⁵ of 70% of the time in 90% of the total geographic area of each Basic Economic Area (BEA) license¹⁷⁶;
- Second Interim Performance Requirement (four years from November 30, 2027): SINR of 5 dB; Service Availability of 80% of the time in 90% of the total geographic area of each BEA license; and
- Final Performance Requirement (nine years from November 30, 2027): SINR of 10 dB; Service Availability of 90% of the time in 90% of the total geographic area of each BEA license.
- Uplink User Throughput:
 - First Interim Performance Requirement (two years from November 30, 2027): 5th percentile user throughput of at least 100 kbps/MHz in the uplink over 90% of the geographic area at Service Availability of 70% of the time;
 - Second Interim Performance Requirement (four years from November 30, 2027): 5th percentile user throughput of at least 200 kbps/MHz in the uplink over 90% of the geographic area at Service Availability of 80% of the time; and
 - Final Performance Requirement (nine years from November 30, 2027): 5th percentile user throughput of at least 300 kbps/MHz in the uplink over 90% of the geographic area at Service Availability of 90% of the time.
- Spectral Efficiency:
 - First Interim Performance Requirement (two years from November 30, 2027): 300 kbps/MHz/beam in the downlink and 100 kbps/MHz/beam in the uplink; and
 - Final Performance Requirement (nine years from November 30, 2027): 600 kbps/MHz/beam in the downlink and 200 kbps/MHz/beam in the uplink.
- SpaceX shall demonstrate compliance with the performance metrics with respect to each license (e.g., per spectrum block and per BEA) for downlink quality of service (SINR), uplink user throughput, and spectral efficiency by filing a construction notification with the Commission in accordance with the provisions set forth in §1.946(d) of the Commission's rules within 30 days of each milestone. In its construction notification, SpaceX shall certify whether it has met the performance requirements and file documentation to support its claim. For each license, the supporting documentation shall include:
 - Technical narrative with a link budget that describes and demonstrates the satellite link performance, including but not limited to, SINR and 5th percentile user throughput of the service being provided, system parameters (transmit powers, antenna gains, receive sensitivity, noise figures, orbit altitude, minimum elevation angle, etc.) and link degradations (attenuation, atmosphere noise, etc.), carrier-to-noise ratio, energy-per-bit density, percentage of time performance, and any other performance parameters necessary to support the construction showing.

¹⁷⁵ “Service Availability” is a user receiving the signal (SINR) or a user transmitting the signal (uplink user throughput) at a point in the covered geographic area at the applicable percentage of the time (as detailed herein), when the user is outdoors. See Appx. C: SpaceX Buildout Commitments at 1 n.4.

¹⁷⁶ For purposes of meeting any metric by geographic area, the relevant geographic area is the one associated with the AWS-3, AWS-4, and AWS-H Block terrestrial licenses, i.e., the Basic Economic Area. See Appx. C: SpaceX Buildout Commitments at 1 n.5.

- The technical narrative shall include the service availability in terms of the number of antennas and beams serving the geographic area at any given time;
- Demonstration of spectral efficiency per beam should include analysis and/or modeling to support the system performance. This analysis should include assumptions on UE distribution, UE parameters, beam coverage, and other deployment assumptions. The methodology should be clearly described.
- Electronic maps (in both shapefile and PDF format) accurately depicting the boundaries of the BEA license area and where in the BEA license area the licensee provides service that meets the performance requirements. SpaceX shall submit separate map representations demonstrating SINR and separate map representations demonstrating uplink user throughput.
- SpaceX shall submit measurements and/or data representing service to customers to verify its compliance with each milestone. At least 9 months before the First Interim Performance Requirement, SpaceX shall submit for WTB approval a plan describing the type of measurements and/or data that SpaceX shall be required to submit to verify compliance, which shall be based on industry-standard practices (e.g., on-the-ground test results via a sampling methodology; network logs; or crowd-sourced data). SpaceX shall submit the required verification measurements and/or data within 6 months of each milestone.
- If the Bureaus determine that SpaceX has failed to meet its performance requirements as set forth above, the following conditions shall apply:
 - If the Bureaus determine that SpaceX has failed to meet all of the First Interim Performance Requirements listed above (Downlink Quality of Service (SINR); Uplink User Throughput; and Spectral Efficiency) for a particular license, the deadline for all of the Final Performance Requirements for that license shall be accelerated by one (1) year (i.e., the Final Performance Requirements must be met 8 years after the Effective Date, rather than 9 years after the Effective Date);
 - If the Bureaus determine that SpaceX has failed to meet all of the Second Interim Performance Requirements (Downlink Quality of Service (SINR) and Uplink User Throughput) for a particular license, the deadline for the Final Performance Requirements for that license shall be accelerated by two (2) years. This acceleration shall be cumulative to any acceleration if the First Interim Performance Requirements were not met. For example, the Final Performance Requirements must be met 7 years from the Effective Date for that license, rather than 9 years after the Effective Date; or if the First Interim Performance Requirements were not met, the Final Performance Requirements must be met by 6 years, rather than 9 years after the Effective Date.
 - If the Bureaus determine that SpaceX has failed to meet all of the Final Buildout Requirements for a particular license, upon such determination, SpaceX's license for such license area shall terminate automatically without Commission action, and SpaceX will be ineligible to regain it if the Commission makes the license available at a later date.

58. SpaceX's planned D2D network—as conditioned under this buildout waiver relief—will advance the leadership of the United States in hybrid satellite/terrestrial D2D technology while providing real benefits to consumers nationwide. The buildout waiver conditions promote the efficient use of spectrum resources and ensure reliable two-way communications. Specifically, the waiver conditions are designed to ensure meaningful widespread outdoor coverage by measuring performance in each spectrum block and in each geographic area where SpaceX's planned D2D network is intended to operate. The metrics for uplink and downlink communications in the conditions establish that consumers will stay

seamlessly connected. The conditions also impose a rigorous schedule with deadlines that are designed to ensure the high-quality D2D service expectations are met in a timely manner.

59. The waiver, with conditions, on the terrestrial licenses intended for SpaceX's planned D2D network, is in the public interest because the relief will facilitate uninterrupted coverage outdoors in the geographic areas of the AWS-4, AWS-H Block, and AWS-3 licenses that SpaceX seeks to acquire from EchoStar. Moreover, the waiver will facilitate SpaceX to leverage innovative technology to provide advanced communications services to mobile devices in rural and remote areas. We find the buildout waiver, as conditioned, will enable nearly ubiquitous mobile connectivity across the nation.

60. LLA argues that a waiver to enable SpaceX's planned D2D operations instead of traditional terrestrial wireless service would contradict the Commission's finding in the *SCS Report and Order*.¹⁷⁷ We disagree. We do not believe the Commission's findings in the *SCS Report and Order* preclude a waiver of the applicable buildout requirements. Moreover, we are not waiving any SCS rules in this Order. We find the buildout waiver relief, as conditioned, recognizes the fast-developing nature of D2D, the need for adapting a set of buildout requirements that reflect technologically neutral elements for D2D service, and the characteristics of SpaceX's planned D2D network. We will continue to assess the appropriate buildout requirements for D2D in a broader context as D2D technologies and services develop and expand.

61. For these reasons, we believe the purpose of the terrestrial buildout rules in the instant case and public interest considerations warrant grant of the requested waiver relief, as conditioned. For the foregoing reasons, we waive the applicable buildout requirements pursuant to section 1.925(b)(3). This waiver relief is subject to the conditions herein. The waiver will apply to both the Trust and SpaceX, and will be effective upon consummation of step one of the transaction.

62. *Waiver of Discontinuance Rule.* In light of the fact that we waive the terrestrial buildout requirements so that SpaceX can use the spectrum for its D2D service—and thus SpaceX will not be using EchoStar's facilities—we also extend the discontinuance period and grant the Applicants a temporary and partial waiver of the discontinuance rule to the extent necessary to effectuate the transaction. Under section 1.953(a) of the Commission's rules, a licensee's authorization will terminate automatically if the licensee permanently discontinues service or operations under the license during the license term after the date it is required to be providing service or operating, although the period may be extended for good cause.¹⁷⁸ The Applicants request a waiver and/or extension of the discontinuance rule, to the extent necessary for assignment of the licenses, for all of the AWS-4, AWS H-Block, and AWS-3 licenses included in the proposed transaction.¹⁷⁹ Given that SpaceX will not be using EchoStar's facilities and the licenses will be held in the Trust during the transition period before consummation of step two of the transaction to assign the licenses to SpaceX, we find good cause to extend the discontinuance period and waive section 1.953 until step 1 of the transaction is consummated (or abandoned) for any permanent

¹⁷⁷ LLA Comments at 11-12; LLA Reply at 3; *see also* RWA Reply at 4.

¹⁷⁸ 47 CFR § 1.953(a), (g).

¹⁷⁹ *Applicants' Discontinuance Waiver/Extension Request Letter* at 2. Prior to this letter, certain EchoStar subsidiaries separately requested an extension and/or waiver of the 180-day period in section 1.953 of the Commission's rules for certain of the licenses included in the assignment applications "to the extent necessary for the time needed to complete the first step of a two-step transaction for which approval has already been requested from the Commission." *See, e.g.,* DBSD Corporation Waiver Request, Call Sign T070272136 (filed Mar. 6, 2026) (*DBSD Waiver Request*); American H Block Wireless L.L.C. Waiver Request, Call Sign WQTX335 (filed Mar. 6, 2026) (*American H Block Waiver Request*); Gamma Acquisition L.L.C. Waiver Request, Call Sign T060430136 (filed Mar. 6, 2026) (*Gamma Waiver Request*). The parties explained that if the requested waiver and/or extension is not granted, it would frustrate "EchoStar's ability to arrange for the orderly assignment of licenses to assignees that can put the spectrum to its best and highest use." *DBSD Waiver Request* at 3; *American H Block Waiver Request* at 3; *Gamma Waiver Request* at 3.

discontinuance of service of the AWS-4, AWS-H Block, and AWS-3 licenses.¹⁸⁰ We note that once step one of the transaction is consummated, new buildout deadlines will govern all of the licenses and section 1.953(a) will become applicable on “the date [SpaceX] is required to be providing service or operating.”¹⁸¹

B. Waiver of Consummation Period

63. We grant SpaceX’s waiver of the consummation period under sections 1.948(d) and 25.119(f), because strict application of this rule would not serve the public interest, as the structure of this transaction is not conducive to consummation within 180 days.¹⁸² Section 1.948(d) requires applicants to notify the Commission of consummation of an approved assignment within 180 days of public notice of approval of the transaction.¹⁸³ Similarly, section 25.119(f) requires that assignments of station authorizations be completed within 180 days from the date of authorization, and that a letter be filed with the Commission with the date of consummation and application file numbers within 30 days of consummation.¹⁸⁴ The Applicants explain that final consummation of the second step of the transaction may not occur within the 180-day period and ask for a preemptive extension of the consummation deadline through November 30, 2027.¹⁸⁵ They assert that waiver of the rule serves the public interest because it will “allow for the orderly completion of the transaction without requiring either a new application or a request for extension,” and will thus avoid needless burden on Commission staff and give Applicants assurance that they can consummate their transaction within their planned timetable.¹⁸⁶

64. We have determined that it is reasonable and more efficient to consider whether the transaction as a whole will serve the public interest, convenience, and necessity, rather than to consider only step one now and delay consideration of step two until closer to the intended time of consummation. Because the Trust is for the benefit of SpaceX, and because the Applicants have provided a timeline for consummation of step two of the transaction to SpaceX, we have sufficient certainty as to the ownership of the underlying assets for the limited duration of the waiver.¹⁸⁷ In addition, the buildout requirements we have adopted for the spectrum are sufficient to address any concerns that the requested waiver of the consummation period could impact the use of the spectrum.¹⁸⁸ We find that in view of the unique factual

¹⁸⁰ Section 1.953(b) provides “[p]ermanent discontinuance of service or operations for Covered Geographic Licenses is defined as 180 consecutive days during which a licensee does not operate or, in the case of commercial mobile radio service providers, does not provide service to at least one subscriber that is not affiliated with, controlled by, or related to the licensee.” 47 CFR § 1.953(b).

¹⁸¹ 47 CFR § 1.953(a). If step one of the transaction is not timely consummated or if the parties abandon the transaction, the waiver and extension of section 1.953 will cease.

¹⁸² The Applicants explain that the proposed two-step transaction and the timeframe contemplated by the Applicants “will provide the time necessary for an orderly transition in these bands” and will enable SpaceX to “ramp up in preparation to begin commercial service by designing, constructing, and beginning to deploy satellite facilities.” Amended Public Interest Statement at 10.

¹⁸³ 47 CFR § 1.948(d).

¹⁸⁴ 47 CFR § 25.119(f).

¹⁸⁵ Amended Waiver Requests at 9; SpaceX Oct. 21, 2025 *Ex Parte* at 1.

¹⁸⁶ Amended Waiver Requests at 9.

¹⁸⁷ See, e.g., *Federal Communications Commission Announces Waiver Relief for Untimely Notifications of Consummation of Wireless License Assignment and Transfer of Control Applications*, Public Notice, 19 FCC Rcd 24549, 24550 (2004) (noting with respect to the need for timely filed consummation notices that “[i]t is critical that the Commission be able to identify, and to contact as needed, the entity authorized in fact to control a Commission-licensed facility”).

¹⁸⁸ See Syndicat CFE-CGC Télécom Comments at 2 (expressing concern that under the proposed assignment “the market opportunity is sterilised for the next 2 years.”).

circumstances of the instant case, strict application of the 180-day consummation rule to the Applicants would be contrary to the public interest. Accordingly, we waive sections 1.948(d) and 25.119(f) and grant the Applicants an extension to consummate the second step of the transaction until November 30, 2027.¹⁸⁹

VIII. OTHER PUBLIC INTEREST ISSUES

65. *AWS-4 and 2 GHz MSS in Puerto Rico and the U.S. Virgin Islands.* We decline to adopt LLA's requested condition that SpaceX will not deploy 2 GHz in Puerto Rico and the U.S. Virgin Islands and that it may not operate in a manner that would interfere with LLA's use of its AWS-4 spectrum in those geographic areas. As we explain below, such a condition would be inconsistent with our rules.

66. As noted above, in a prior transaction, EchoStar assigned its AWS-4 terrestrial wireless licenses in Puerto Rico and the U.S. Virgin Islands to LLA.¹⁹⁰ It did not assign its 2 GHz MSS rights to LLA.¹⁹¹ LLA raises concerns with SpaceX's assertion that LLA's AWS-4 operations in Puerto Rico and the U.S. Virgin Islands would need to protect SpaceX's proposed 2 GHz MSS operations in those geographic areas.¹⁹² LLA states that such a requirement would override LLA's right to use the AWS-4 licenses that it purchased from EchoStar and would cause great harm to consumers in Puerto Rico and the U.S. Virgin Islands.¹⁹³ LLA further asserts that, by Commission rules, EchoStar gave up protection for its satellite services when it sold its AWS-4 spectrum to LLA and that SpaceX should have to protect LLA's AWS-4 deployment in Puerto Rico and the Virgin Islands.¹⁹⁴ Accordingly, LLA requests the Commission condition the proposed transaction on a commitment from SpaceX that it will not deploy 2 GHz MSS in these geographic areas or otherwise operate "in a manner that would interfere with LLA's use of its terrestrial wireless spectrum."¹⁹⁵

67. In response, SpaceX asserts that this issue has no bearing on, and does not warrant delayed approval of, the instant proposed transaction.¹⁹⁶ SpaceX contends that it will have full rights to provide MSS in Puerto Rico and the U.S. Virgin Islands as a result of the assignment of EchoStar's MSS licenses, and that the AWS-4 operations of LLA must be conducted in a way that does not impinge upon SpaceX's space-based service in the band.¹⁹⁷ SpaceX also disputes LLA's claims that the obligation to protect 2 GHz MSS would result in depriving residents of Puerto Rico and the U.S. Virgin Islands of terrestrial broadband service, explaining instead that LLA holds significant spectrum in these territories without the AWS-4 licenses and provided "significant" mobile broadband coverage in these areas even

¹⁸⁹ SpaceX will have 30 days from November 30, 2027, to file its consummation notices for step two of the transaction.

¹⁹⁰ See generally *LLA-DISH Order*, 39 FCC Rcd 8772. When the *LLA-DISH* transaction was filed, DISH Network Corporation (DISH) was the assignor. On December 31, 2023, EchoStar completed its acquisition of DISH, with DISH becoming a wholly owned subsidiary of EchoStar. See EchoStar Corporation, SEC Form 10-K at 1 (filed Feb. 29, 2024). For consistency in our discussion, we refer to EchoStar as the relevant party, even though DISH was the entity named in the *LLA-DISH Order*.

¹⁹¹ See generally *LLA-DISH Order*, 39 FCC Rcd 8772.

¹⁹² LLA Comments, ICFS File Nos. SAT-LOA-20250916-00282, SAT-AMD-20251125-00339, GN Docket No. 25-340, at 2-3 (Jan. 5, 2026) (LLA D2D Comments) (commenting on SpaceX D2D Application); LLA Reply at 2 (incorporating by reference LLA's comments on SpaceX D2D Application into the instant docket).

¹⁹³ LLA D2D Comments at 5; see LLA Reply at 3-4.

¹⁹⁴ See LLA Feb. 20, 2026, *Ex Parte* at 3; LLA Reply at 4, 6.

¹⁹⁵ LLA Reply at 3, 6; see also LLA D2D Comments at 7.

¹⁹⁶ SpaceX Consolidated Response at 13.

¹⁹⁷ See SpaceX Consolidated Response at 13; SpaceX Mar. 2, 2026 *Ex Parte* at 1; SpaceX Feb. 6, 2026 *Ex Parte* at 1.

before acquiring the AWS-4 spectrum from EchoStar.¹⁹⁸ EchoStar argues that LLA has no right to the licenses being assigned, and that LLA does not argue that the agreement imposes any surviving obligation on EchoStar or restrict EchoStar's freedom to assign its remaining licenses for these bands.¹⁹⁹

68. We decline LLA's request for a condition on SpaceX. When LLA sought approval to purchase EchoStar's AWS-4 licenses, it did not include in that application EchoStar's complementary 2 GHz MSS authorizations.²⁰⁰ Further, nothing in the order approving the LLA-EchoStar assignment of AWS-4 licenses precluded EchoStar from selling or transferring the 2 GHz MSS authorizations to another party in the future.²⁰¹ Thus, LLA cannot complain about a transfer of those authorizations to SpaceX here.

69. Nor can LLA complain about SpaceX's future exercise of its interference protection rights under its MSS authorizations. The Commission's rules require AWS-4 licensees, such as LLA, to protect MSS operations in the 2000-2020 MHz and 2180-2200 MHz bands from harmful interference and to accept interference from duly authorized MSS operations in these bands.²⁰² LLA contends that the requirement to protect MSS operations does not apply here because EchoStar voluntarily limited the use of this spectrum for MSS when it sold the two AWS-4 licenses to LLA.²⁰³ We disagree. The *2012 AWS-4 Order* and our rules do not support LLA's contention that a private agreement could modify the MSS license. Although the Commission permitted an MSS licensee "to limit voluntarily its ability to offer satellite service as part of a secondary market arrangement enabling another party to better provide flexible use terrestrial service, including mobile broadband using AWS-4 spectrum,"²⁰⁴ the Commission's part 25 rules do not provide for the partitioning or disaggregation of space station licenses, in other words, the assignment of a portion of the MSS interference protection rights.²⁰⁵ The Commission also did not

¹⁹⁸ SpaceX Mar. 2, 2026 *Ex Parte* at 2.

¹⁹⁹ EchoStar Consolidated Response at 6.

²⁰⁰ See ULS File No. 0010802260; *Federal Communications Commission Establishes Docket for Petition for Declaratory Ruling and Proposed Assignment of Spectrum Licenses, Assets, and Customers of DISH Network Corporation to Liberty Latin America Ltd in Puerto Rico and U.S. Virgin Islands*, GN Docket No. 24-55, Public Notice, 39 FCC Rcd 1381 (WTB 2024); *LLA-DISH Order*, 39 FCC Rcd 8772.

²⁰¹ See generally *LLA-DISH Order*, 39 FCC Rcd 8772; see also 47 CFR § 27.2(d) ("Operators in the 2000-2020 MHz and 2180-2200 MHz bands may not provide the mobile-satellite service under the provisions of this part; rather, mobile-satellite service shall be provided in a manner consistent with part 25 of this chapter.").

²⁰² 47 CFR § 27.1136.

²⁰³ LLA D2D Comments at 3-4; LLA Reply at 6; LLA Feb. 20, 2026 *Ex Parte* at 3. In fact, LLA says that EchoStar "partitioned" its AWS-4 spectrum in Puerto Rico and USVI, but this is not correct. LLA D2D Comments at 3-4; LLA Reply at 3-4. EchoStar assigned the full AWS-4 licenses in these markets and did not partition them. See generally *Liberty-DISH Order*, 39 FCC Rcd 8772. We also note that there is nothing in the *LLA-DISH Order* or the record before us that gives any indication that EchoStar did voluntarily limit its MSS rights. Indeed, LLA's argument seems to rest on an interpretation of the *AWS-4 Order* that an MSS licensee could somehow "voluntarily limit" interference protections in a secondary market transaction without explicitly agreeing to such limitation. We disagree that such a voluntary limitation could occur automatically. We do not have this private agreement before us, but even if it imposed any restriction on EchoStar's own MSS operations or on its freedom to assign its remaining licenses, this would not warrant a condition restricting SpaceX's ability to use 2 GHz spectrum for MSS in Puerto Rico and the U.S. Virgin Islands in accordance with the assigned MSS licenses and our rules, as discussed here.

²⁰⁴ *AWS-4 Report and Order*, 27 FCC Rcd at 16196, para. 251.

²⁰⁵ The Commission sought comment in 2012 on whether the part 25 rules should be amended to address partitioning or disaggregation of 2 GHz MSS spectrum by its licensees. *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, WT Docket No. 12-70 et al., Notice of Proposed Rulemaking and Notice of Inquiry, 27 FCC Rcd 3561, 3598-99, para. 114 (2012). Ultimately, however, the Commission did not adopt any such changes to part 25. Absent such rules, modification of the parameters of a

(continued....)

state that any arrangements by an MSS licensee to forego protection or to encumber its operations under an MSS license would run with the MSS license, in contrast to its statements about secondary market arrangements for AWS-4 licenses.²⁰⁶ Thus, any action taken by an MSS licensee voluntarily to encumber its MSS operations or forego protection for its MSS operations are limited to that licensee and, contrary to LLA's argument, do not "run with the license" so that they modify the underlying MSS license to restrict the scope of the license or the protection of such a license under the Commission's rules.²⁰⁷ We will therefore not impose a condition to impose a constraint on SpaceX that our rules do not warrant.²⁰⁸

70. *Cancellation or Surrender of EchoStar's Unconstructed Licenses.* We reject RWA's suggestion that the Commission should reclaim the spectrum and auction it off because EchoStar allegedly failed to meet its buildout requirements.²⁰⁹ As an initial matter, the Commission's rules do not prohibit assignment of unconstructed AWS-4, AWS-H Block, and AWS-3 licenses.²¹⁰ The licenses that

(Continued from previous page)

space station license can only be done through an application for modification approved by the Commission. *See* 47 CFR § 25.117(a) (providing that with the exception of modifications not requiring prior authorization, no modification of a space station license that affects the parameters or terms and conditions of the station authorization shall be made except upon application to and grant of such application by the Commission).

²⁰⁶ *AWS-4 Report and Order*, 27 FCC Rcd at 16195, para. 249 (stating that "the MSS interference protection rule we adopt above will 'run with the license', obligating any partitionee or disaggregatee to avoid interference with MSS operations").

²⁰⁷ Indeed, Special Condition 1 on every AWS-4 license, including the licenses assigned to LLA, reads substantially as follows:

This license document as first issued on March 7, 2013, reflects the Order of Modification and Authorization (DA 13-231) to existing Mobile Satellite Service ("MSS") call sign E060430 to add Part 27 rights and obligations for Advanced Wireless Service-4 ("AWS-4") terrestrial operating authority with all of the attendant rights, limitations, and obligations associated with the AWS-4 service rules adopted in WT Docket No. 12-70 (FCC 12-151), and any subsequent orders. The license document issued on March 7, 2013, is not a separate authorization in and of itself. The parameters reflected in the [ICFS] for the MSS authorization of the license (call sign E060430) together with the parameters reflected in the [ULS] for the standalone terrestrial authorization of the license (call sign T060430001 - T060430176 derivatives) as of March 7, 2013 constitute the whole of the modified license. Except as otherwise ordered, a licensee of AWS-4 operating authority is permitted to partition, disaggregate, and lease AWS-4 spectrum as provided under the FCC's rules. *See, e.g.*, FCC 19-103; 47 CFR Parts 1, 27. The partition, disaggregation, or lease of AWS-4 spectrum does not encompass the MSS authorization. *See, e.g.*, ULS, Call Sign T060430174, Special Condition 1.

²⁰⁸ Satelio IoT Services USA (Satelio) urges the Commission to ensure that access to the 2 GHz MSS band remains available for additional entrants deploying Internet-of-Things (IoT) MSS systems. Satelio Comments at 1–2. These concerns are primarily focused on interoperability and innovation in the band. Satelio Comments at 4–5. In response, SpaceX urges the Commission to reject Satelio's request. SpaceX Consolidated Response at 11. While, the concerns raised by Satelio are broader general industry-wide matters that are beyond the scope of the current transaction, SB has confirmed that EchoStar holds the exclusive terrestrial and MSS licenses over the AWS-4/2 GHz MSS spectrum. *See MSS Spectrum Clarification Order* at 10, para. 22. By extension, once the assignment to SpaceX is consummated, SpaceX will hold the exclusive terrestrial and MSS licenses over the AWS-4/2 GHz MSS spectrum, with the exception of the AWS-4 licenses in Puerto Rico and U.S. Virgin Islands.

²⁰⁹ RWA Comments at i, 2, 8-10, 12; RWA Reply at 2-3 & nn.4, 7. LLA asserts that the proposed transaction would result in a windfall to EchoStar, but does not expressly request the cancellation or surrender of EchoStar's spectrum licenses. *See* LLA Comments at 7, 12-13. SpaceX responds to RWA and LLA's assertions to suggest that EchoStar's unique buildout obligations are not at issue. SpaceX Consolidated Response at 7-8.

²¹⁰ *Compare* 47 CFR § 1.948(i) (FCC may review assignment applications to determine if the transaction is for purposes of trafficking in service authorizations but there is no general prohibition on assignment of unconstructed licenses) *with* 47 CFR § 101.55(a) (fixed microwave licenses not authorized pursuant to competitive bidding procedures may not be assigned prior to the completion of construction, except as provided for in section 101.55(d)).

EchoStar seeks to assign remain in active status.²¹¹ Accordingly, contrary to RWA’s suggestion, nothing prevents EchoStar from assigning these licenses, whether they are constructed or not. Further, by this order, we waive the existing terrestrial construction requirements and grant SpaceX new buildout deadlines for all of the AWS-4, AWS-H Block, and AWS-3 licenses, so any of EchoStar’s active notifications or requests are now moot.²¹²

71. *Roaming and Rural Provider Access to SCS.* RWA requests a change to section 25.125(a) of the Commission’s rules requiring an applicant for SCS space station authorization to enter into a lease arrangement with one or more terrestrial licensees.²¹³ RWA contends that rural carriers do not qualify for required leasing under this rules section.²¹⁴ RWA also argues that rural and small providers need roaming agreements to service their customers and approval of this transaction would result in reduced roaming revenues for rural carriers.²¹⁵ RWA further expresses concern that SpaceX will not work with rural providers to help rural Americans connect to satellite-enabled wireless services, or help coordinate a way for rural carriers to provide SCS.²¹⁶ However, RWA does not request a condition on roaming or rural carrier SCS access. SpaceX asserts that it hopes to be able to partner with RWA’s members to ensure their customers can access MSS service, and also explains that RWA members will “benefit from the ability to partner with satellite operators in the evolving mobile market.”²¹⁷

72. We decline to impose RWA’s requested condition. RWA does not indicate that its members have roaming arrangements with EchoStar, thus, there is no indication that the proposed transaction would directly impact RWA’s existing roaming arrangements. In addition, RWA’s requested rule change is a general industry-wide issue that is outside the scope of the review of an individual transaction.²¹⁸ We further note that under our existing regulatory framework, multiple co-channel

²¹¹ EchoStar’s construction deadlines for the AWS-4 and AWS-H Block licenses were June 14, 2025, and the construction deadlines for the AWS-3 spectrum licenses were October 27, 2025. EchoStar filed a September 17, 2024, extension request for certain of its AWS-4, AWS-H Block, and AWS-3 licenses and later filed notices of construction for some of its AWS-4, AWS-H Block, and AWS-3 licenses and additional extension requests for the remainder of its licenses with 2025 construction deadlines in ULS. *See, e.g.*, ULS call signs T060430130 (AWS-4 license); ULS call signs T070272001 (AWS-4 license); WQTX329 (AWS-H Block license); WQTX217 (AWS-H Block license); WQWQ560 (unpaired AWS-3 license); WQWQ824 (unpaired AWS-3 license). Accordingly, all licenses that EchoStar seeks to assign remain in active standing.

²¹² *See infra* section VII.A (Waiver of Terrestrial Construction Requirements). Specifically, we find that any active construction notifications or extension and waiver requests for EchoStar’s licenses that it seeks to assign are moot, as this Order provides new construction deadlines for all of these licenses.

²¹³ RWA Reply at 6-7. While RWA advocates for a rule change “that would allow RWA members to work with SpaceX,” RWA does not propose specific changes to section 25.125, thus, it is not clear what changes RWA seeks. RWA Reply at 6-7.

²¹⁴ RWA Reply at 6. RWA asserts that rural wireless carriers are precluded from benefitting from SCS under section 25.125(a) because rural carriers by nature “do not have a nationwide reach or hold all co-channel licenses throughout a GIA in a given band.” RWA Reply at 6.

²¹⁵ RWA Comments at 4-5.

²¹⁶ RWA Reply at 2, 6.

²¹⁷ SpaceX Consolidated Response at 5, 8.

²¹⁸ *See, e.g., 2011 AT&T-Qualcomm Order*, 26 FCC Rcd at 17622, para. 79 (declining requests for relief pertaining to industry-wide issues, “as these issues are better addressed in the context of these industry-wide proceedings”); *AT&T-Centennial Order*, 24 FCC Rcd at 13969, 13972, paras. 133, 141 (2009) (finding issues that “apply broadly across the industry are more appropriate for a Commission proceeding where all interested industry parties have an opportunity to file comments”); *Applications of AT&T Inc., Cellco Partnership d/b/a Verizon Wireless, Grain Spectrum, LLC, and Grain Spectrum II, LLC for Consent to Assign and Lease AWS-1 and Lower 700 MHz Licenses*, WT Docket No. 13-56, Memorandum Opinion and Order, 28 FCC Rcd 12878, 12899, para. 52 (WTB 2013) (same). We note that in the *SCS Report and Order*, the Commission contemplated applying the roaming rules in part 20 to

(continued....)

licensees can partner with a single satellite operator to provide SCS in a GIA and therefore, RWA's concern that section 25.125(a) precludes rural carriers from participation in SCS is unfounded.²¹⁹ Further, RWA's concerns about SpaceX's willingness to cooperate with rural providers are speculative and, thus, do not warrant action.

73. *EchoStar's Contractual Obligations to its Partners.* In 2019, in connection with purchasing Boost Mobile from Sprint Corp. as part of the T-Mobile/Sprint merger, DISH Network Corp. (DISH) committed to becoming a "nationwide facilities-based competitor" using a "first-of-its-kind 5G network built from the ground up."²²⁰ To help accomplish this goal, DISH sought extensions of the construction deadlines for various licenses it owned through subsidiaries, including the AWS-4 and AWS-H Block licenses at issue here and the 600 MHz licenses it proposes to sell to AT&T. It further committed to not selling its AWS-4 licenses for six years without FCC approval. Those commitments were imposed as conditions on those licenses in September 2020 when WTB modified DISH's licenses.²²¹

74. Since 2020, to fulfill those conditions, DISH has built various parts of that network, leasing tower space, installing new radios on towers, and entering into contracts for backhaul, among other actions. It has also gone through a number of internal restructurings, including merging with and becoming a subsidiary of EchoStar.²²² When that transaction was first announced, EchoStar was to become a subsidiary of DISH, a corporate structure that would have inverted the current relationship between the two entities.²²³

75. EchoStar seeks not only to sell the AWS-4, AWS-H Block, and unpaired AWS-3 spectrum licenses it now controls, as well as several earth station licenses, to SpaceX, but in a separate set of applications before us, seeks to sell its 3.45 GHz and 600 MHz licenses to AT&T, effectively dismantling its radio network.²²⁴ As described in those other applications, EchoStar has also entered into an agreement with AT&T to use AT&T's radio network, in what the parties describe as a hybrid-Mobile

(Continued from previous page) _____

satellite operators providing SCS and concluded that the roaming rules would not apply to satellite operators. *SCS Report and Order*, 39 FCC Rcd at 2693-94, paras. 169, 172. In that order, the Commission explained that it was premature to apply roaming requirements in early stages of SCS deployment and determined that doing so "could affect the development of SCS collaborations." *SCS Report and Order*, 39 FCC Rcd at 2694, para. 172. Accordingly, the Commission found that intervening in contractual arrangements between private parties would not serve the public interest and declined to impose roaming requirements for SCS.

²¹⁹ 47 CFR § 25.125(a); *see also SCS Report and Order*, 39 FCC Rcd at 2660, 2664-65, paras. 90, 99-104.

²²⁰ Letter from Jeffrey H. Blum, Senior Vice President, Public Policy & Government Affairs, DISH, to Donald Stockdale, Chief, Wireless Telecommunications Bureau, FCC, DBSD Corporation, AWS-4, Lead Call Sign T070272001, et al., at 2-3 (July 26, 2019)

²²¹ *See DISH Modification Order*, 35 FCC Rcd 9580.

²²² *See* EchoStar Corporation, SEC Form 10-K for fiscal year ending December 31, 2024 at 1 (filed Feb. 27, 2025), <https://www.sec.gov/Archives/edgar/data/1415404/000155837025001663/tmb-20241231x10k.htm>; *see also* EchoStar, *EchoStar Corporation Completes Merger With DISH Network Corporation*, (Jan. 2, 2024), <https://ir.echostar.com/news-releases/news-release-details/echostar-corporation-completes-merger-dish-network-corporation>.

²²³ Press Release, EchoStar, DISH Network Corporation and EchoStar Corporation Combine, (Aug. 8, 2023), <https://ir.echostar.com/news-releases/news-release-details/dish-network-corporation-and-echostar-corporation-combine>.

²²⁴ *See* Applications of AT&T Mobility II LLC and EchoStar Corporation for Consent to Assign Licenses, WT Docket No. 25-303, ULS File Nos. 0011749148 (lead application), 0011749151, 0011749122 and paper applications filed in ECFS File Nos. 50001WTAA25 and 50002WTAA25 (filed Sept. 18, 2025). ULS File No. 0011944971 was filed in ULS to replace ECFS File Nos. 50001WTAA25 and 50002WTAA25 (filed March 13, 2026).

Network Operator (MNO) arrangement. Thus, while Boost Mobile will continue to provide wireless service to its customers, it will no longer operate its own radio network.

76. A number of commenters allege that EchoStar has told various tower companies, fiber backhaul providers, and construction firms that it will not fulfill its contracts nor pay the monies it owes them for constructing that radio network.²²⁵ They also allege that EchoStar claims that the subsidiary that contracted with them will not be receiving any of the monies from the sale of these licenses.²²⁶ We note that EchoStar will receive approximately \$8 billion in cash, plus \$2 billion of interest payments that SpaceX will assume, plus over \$10 billion in SpaceX stock from the transaction at issue here, as well as another \$23 billion from the sale of the licenses to AT&T.²²⁷ The commenters therefore ask that we condition our approval of the transaction on requiring DISH Wireless, LLC to honor or meet its existing contractual obligations to its infrastructure partners, including requiring the deposit of monies in an escrow account.²²⁸ EchoStar responds that it has reached settlements with hundreds of vendors and made hundreds of millions of dollars of payments. It argues that any escrow condition is illegal and unmanageable.²²⁹

²²⁵ See, e.g., WIA Comments at 2-5; WIA Jan. 8, 2026 *Ex Parte* at 3-4; WIA Jan. 22, 2026 *Ex Parte* at 2; Wireless Infrastructure Providers *Ex Parte* at 2; FirstLight *Ex Parte* at 2, NATE *Ex Parte* at 1-2.

²²⁶ See, e.g., WIA Comments at 4; Letter from Nanette S. Edwards, Counsel for Horry Telephone Cooperative, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, Attach. Letter from Arnold Agcoaili, Vice President-National Development, DISH Wireless L.L.C., to Horry Telephone Cooperative Inc., at 1 (“DISH Wireless L.L.C. (‘DISH Wireless’) is not a party to the AT&T or SpaceX agreements, does not own the spectrum licenses being sold to AT&T or SpaceX, and is not entitled to receive any of the spectrum sale proceeds at closing.”) (filed Feb. 20, 2026).

²²⁷ Press Release, EchoStar, EchoStar Announces Spectrum Sale and Commercial Agreement with SpaceX (Sept. 8, 2025) <https://ir.echostar.com/news-releases/news-release-details/echostar-announces-spectrum-sale-and-commercial-agreement-spacex>; Press Release, EchoStar, EchoStar Agrees to Sell Full Unpaired AWS-3 Spectrum License Portfolio to SpaceX, (Nov. 6, 2025), <https://ir.echostar.com/news-releases/news-release-details/echostar-agrees-sell-full-unpaired-aws-3-spectrum-license>; Press Release, EchoStar, EchoStar Announces Spectrum Sale and Hybrid Mobile Network Operator (MNO) Agreement, Steps Toward Resolving Federal Communications Commission’s Inquiries, (Aug. 26, 2025), <https://ir.echostar.com/news-releases/news-release-details/echostar-announces-spectrum-sale-and-hybrid-mobile-network>.

²²⁸ See, e.g., DQE Communications Petition at 1-3; WIA Comments at 5-6; Letter from Michael D. Saperstein, Jr., Senior Vice President, Government Affairs & Chief Strategy Officer, Wireless Infrastructure Association, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 3-5 (filed Jan. 8, 2026) (WIA Jan. 8, 2026 *Ex Parte*); Letter from Michael D. Saperstein, Jr., Senior Vice President and Chief Strategy Officer, Wireless Infrastructure Association, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 2 (filed Jan. 23, 2026) (WIA Jan. 23, 2026 *Ex Parte*); Letter from Roger Laperma, President and CEO 1 Source Towers, et al., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 2, (filed Dec. 19, 2025) (Wireless Infrastructure Providers *Ex Parte*); Letter from Jill Sandford, Chief Legal Officer, FirstLight Fiber Inc. to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 2 (filed Dec. 23, 2025) (FirstLight *Ex Parte*); Letter from Todd Schlekeway, President and CEO, NATE: The Communications Infrastructure Contractors Association, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 1-2 (filed Jan. 6, 2026) (NATE *Ex Parte*). See also Letter from John Flynn, Counsel for 1Finity Americas, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 3 (filed Jan. 30, 2026) (1Finity Filing) (requesting approval be conditioned on DISH Wireless’s assignment of its contractual requirements to AT&T and make 1Finity whole if DISH Wireless cannot meet its contractual obligations); Letter from Suzette Michel, Landowner, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, at 2 (filed Feb. 3, 2026) (Michel *Ex Parte* at 2) (requesting that the FCC clarify that it has not authorized or endorsed a suspension of site rents owed by DISH Wireless).

²²⁹ Letter from Pantelis Michalopoulos, Andrew Golodny, Andrew Magloughlin, Steptoe LLP, Counsel to EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 25-303, GN Docket No. 25-302, at 1 (filed May 8, 2026) (EchoStar May 8, 2026 *Ex Parte*).

77. *Discussion.* Given the unique factual and legal circumstances presented in this transaction and the accompanying one, as well as the record that has developed, we impose a limited escrow or trust fund obligation on EchoStar as a condition of approving these transactions. As noted above, EchoStar seeks approval to sell the licenses at issue here and in the related AT&T-EchoStar applications for tens of billions of dollars. However, a number of entities have argued that EchoStar has indicated that it will not pay companies for work—the construction of a new facilities-based nationwide 5G network, including the leasing of space on towers and rooftops to house its antennas—that it was required to undertake as a condition on those licenses. At the same time, EchoStar disputes claims that have been raised by those companies. With the attached condition, the FCC continues to allow the relevant parties and, if necessary, courts or other bodies, to adjudicate or settle these issues. The Commission’s unique role in the underlying series of events creates a precedentially novel fact pattern and cognizable public-interest harms specific to this transaction that we find necessary to resolve here.²³⁰ Therefore, as set forth in more detail in Appendix B, we condition our approval on EchoStar, within 30 days of consummating the transaction, creating a trust fund and depositing \$2.4 billion into that fund to help pay obligations potentially incurred in connection with the construction, operation, maintenance, building, decommissioning, and/or provisioning of goods or services related to or arising out of the communications sites and/or communications network associated with certain of the licenses being assigned or transferred in this transaction..²³¹ We find that such a condition is necessary to conclude that the proposed transaction serves the public interest.²³²

78. *Other Issues Related to Space Station Application.* Syndicat CFE-CGC Télécom opposes the transaction and raises several concerns arising from SpaceX’s proposed D2D system. These include issues relating to international coordination of the system through the International Telecommunications Union (ITU) process, pre-judging the outcome of the 2027 World Radiocommunications Conference, space safety, harmful interference, and space sustainability.²³³ These issues are unrelated to the instant transaction involving the assignment of terrestrial and earth station licenses.

IX. CONCLUSION

79. Based on our review of the record and our competitive analysis, we conclude that the risk of public interest harms from granting the Applications is low and the potential public interest benefits are significant. The assignment of approximately 65 megahertz of dedicated spectrum to SpaceX for use in its next generation D2D network represents a major step in expanding spectrum-based connectivity for consumers. Our grant of the waivers and adoption of rigorous buildout conditions will further establish technological flexibility for SpaceX’s deployment and ensure the public interest benefits are realized. In the near term, consumers will benefit from the advances to D2D services that will result from infusion of this spectrum for D2D, resulting in increased mobile connectivity in hard-to-reach areas. In the longer term, the transaction has the potential to invigorate wireless competition, as we expect wireless options for consumers to expand with SpaceX’s D2D deployment, with the potential to lower prices for wireless offerings. Further, we expect that the clarity we bring to disputes over this AWS-4, AWS-H Block, and AWS-3 spectrum will result in intensive use of this previously underutilized spectrum. We also credit the Applicants’ claims that by providing EchoStar access to SpaceX’s planned D2D service, Boost Mobile’s

²³⁰ Although EchoStar contends that Commission precedent forecloses the remedy we adopt today, *see* EchoStar May 8, 2026 *Ex Parte*, we find this precedent inapposite and materially different from the unique circumstances presented in this transaction.

²³¹ *See DISH Modification Order*, 35 FCC Rcd 9580; *T-Mobile-Sprint Order*, 34 FCC Rcd 10578. An identical condition is being placed on WTB’s approval of EchoStar’s assignment of licenses to AT&T in WT Docket No. 25-303. Only one fund is required to be created, and only \$2.4 billion is required to be placed into the fund.

²³² We also note that the Bureaus and the Commission retain full authority to apply all appropriate sanctions and remedies for a violation of the conditions contained in this Order.

²³³ Syndicat CFE-CGC Télécom Comments at 2-3.

customers will benefit from a greater availability of service. We thus conclude that the proposed transaction would serve the public interest, convenience, and necessity. We further find that, given the unique circumstances present here, granting the requested waivers of the terrestrial construction requirements, as conditioned; the discontinuance rule to the extent necessary; and the 180-day consummation rules is in the public interest and would ensure that the spectrum at issue is not unused or underutilized.

X. ORDERING CLAUSES

80. **ACCORDINGLY**, having reviewed the Applications and record in this matter, **IT IS ORDERED** that, pursuant to sections 4(i) and (j), 5(c), 303(r), 309, and 310(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 155(c) 303(r), 309, 310(d), and pursuant to the authority delegated under sections 0.51, 0.131, 0.261, and 0.331 of the Commission's rules, 47 CFR §§ 0.51, 0.131, 0.261, and 0.331, the applications for consent to assignment filed by SpaceX and EchoStar **ARE GRANTED**, to the extent specified in the Memorandum Opinion and Order and **SUBJECT TO** the conditions specified herein.

81. **IT IS FURTHER ORDERED** that, pursuant to sections 4(i) and (j), 303(r), 309, and 310(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), (j), 303(r), 309, 310(d), the Petition to Deny filed by Frequency Forward, **IS DENIED** for the reasons stated herein.

82. **IT IS FURTHER ORDERED** that, pursuant to sections 4(i) and (j) of the Communications Act of 1934 as amended, 47 U.S.C. § 154(i), (j) and sections 1.3 and 1.925 of the Commission's rules, 47 CFR §§ 1.3, 1.925(a), the waiver request concerning the terrestrial construction requirements currently applicable to EchoStar's AWS-4, AWS-H Block and unpaired AWS-3 licenses, and requirements in section 27.14(q), (r), and (s) of the Commission's rules, 47 CFR § 27.14(q), (r), (s), **IS GRANTED** to the extent described herein and **SUBJECT TO** the conditions described herein.

83. **IT IS FURTHER ORDERED** that, pursuant to sections 4(i) and (j) of the Communications Act of 1934 as amended, 47 U.S.C. § 154(i), (j) and sections 1.3 and 1.925 of the Commission's rules, 47 CFR §§ 1.3 and 1.925, the waiver request concerning the MSS allocation under section 2.106 of the Commission's rules, 47 CFR § 2.106, **IS DEFERRED** to GN Docket No. 25-340 to the extent described herein.

84. **IT IS FURTHER ORDERED** that, pursuant to sections 4(i) and (j) of the Communications Act of 1934 as amended, 47 U.S.C. § 154(i), (j) and sections 1.3 and 1.925 of the Commission's rules, 47 CFR §§ 1.3 and 1.925, the waiver request concerning the use of end-user handsets using the AWS-4 Band under section 25.115 of the Commission's rules, 47 CFR § 25.115, **IS DEFERRED** to GN Docket. No. 25-340 to the extent described herein.

85. **IT IS FURTHER ORDERED** that, pursuant to sections 4(i) and (j) of the Communications Act of 1934 as amended, 47 U.S.C. § 154(i), (j) and sections 1.3 and 1.925 of the Commission's rules, 47 CFR §§ 1.3 and 1.925, partial waiver of the consummation periods under sections 1.948(d) and 25.119(f) of Commission's rules, 47 CFR §§ 1.948(d) and 25.119(f), **IS GRANTED** to the extent described herein.

86. **IT IS FURTHER ORDERED** that this Memorandum Opinion and Order **SHALL BE EFFECTIVE** upon adoption. Petitions for Reconsideration under section 1.106 of the Commission's Rules, 47 CFR § 1.106, may be filed within thirty days of the date of adoption of this Memorandum Opinion and Order.

87. This action is taken under delegated authority pursuant to sections 0.51, 0.131, 0.261 and 0.331 of the Commission's rules, 47 CFR §§ 0.51, 0.131, 0.261, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Joel Taubenblatt
Chief, Wireless Telecommunications Bureau

Jay Schwarz
Chief, Space Bureau

APPENDIX A
Petitioners and Commenters
(GN Docket No. 25-302)

Petition to Deny

Frequency Forward, Petition to Deny (rec. Oct. 30, 2025)

Petition to Condition

DQE Communications LLC Petition to Condition Assignment of Certain Spectrum and Earth Station Licenses (rec. Dec. 15, 2025)

Oppositions Co-Filed with Comments

Information Technology and Innovation Foundation, Comment and Opposition to Petitions to Deny (rec. Dec. 3, 2025)

SpaceX, Consolidated Opposition to Petitions and Response to Comments (rec. Dec. 29, 2025)

EchoStar Corporation, Consolidated Opposition to Petition and Reply Comments (rec. Dec. 29, 2025)

Comments

Syndicat CFE- CGC Télécom, Comments (rec. Dec. 15, 2025)

Satelio IOT Services USA, Inc., Comments (rec. Dec. 15, 2025)

Rural Wireless Association, Inc., Comments (rec. Dec. 15, 2025)

Open Technology Institute at New America and Public Knowledge, Comments (rec. Dec. 15, 2025)

Liberty Latin America LTD, Comments (rec. Dec. 15, 2025)

Wireless Infrastructure Association, Comments (rec. Dec. 15, 2025)

Replies

Liberty Latin America LTD., Reply Comments (rec. Jan. 8, 2026)

DQE Communications LLC, Reply Comments (rec. Jan. 8, 2026)

Frequency Forward, Reply Comments (rec. Jan. 8, 2026)

Rural Wireless Association, Inc., Reply Comments (rec. Jan. 8, 2026)

Ex Parte Submissions¹

SpaceX, *Ex Parte* Submission (Nov. 18, 2025)

EchoStar Corporation, *Ex Parte* Submission (Dec. 3, 2025)

Small and Medium-sized Infrastructure Providers, *Ex Parte* Submission (Dec. 19, 2025)

FirstLight Fiber, Inc., *Ex Parte* Submission (Dec. 23, 2025)

NATE: The Communications Infrastructure Contractors Association, *Ex Parte* Submission (Jan. 6, 2026)

FirstLight, Fiber, Inc., *Ex Parte* Submission (Jan. 7, 2026)

Wireless Infrastructure Association, *Ex Parte* Submission (Jan. 8, 2026)

TowerNorth Development, LLC, *Ex Parte* Submission (Jan. 20, 2026)

Wireless Infrastructure Association, *Ex Parte* Submission (Jan. 20, 2026)

Wireless Infrastructure Association, *Ex Parte* Submission (Jan. 22, 2026)

1Finity Americas, Inc., *Ex Parte* Submission (Jan. 30, 2026)

Suzette Michel, *Ex Parte* Submission (Feb. 3, 2026)

SpaceX, *Ex Parte* Submission (Feb. 6, 2026)

KSS Investments LLC, Comment (Feb. 13, 2026)

¹ Filings listed in this section that were submitted after the January 8, 2026, close of the pleading cycle for this transaction by their respective filers are accorded the same consideration as *ex parte* filings under the Commission's rules. 47 CFR §§ 1.1200 *et seq.*; *see generally* 47 CFR § 1.419(b).

Litan Salman, Reuven Salman, and Clifford Steinberg, *Ex Parte* Submission (Feb. 17, 2026)
The American Wireless Builders Coalition, *Ex Parte* Submission (Feb. 19, 2026)
Horry Telephone Cooperative, Inc., *Ex Parte* Submission (Feb. 20, 2026)
Liberty Latin America Ltd., *Ex Parte* Submission (Feb. 20, 2026)
Wireless Infrastructure Association, *Ex Parte* Submission (Feb. 23, 2026)
American Tower Corporation, *Ex Parte* Submission (Feb. 25, 2026)
SpaceX, *Ex Parte* Submission (Mar. 2, 2026)
Center for American Rights, *Ex Parte* Submission (Mar. 10, 2026)
Wireless Infrastructure Association, *Ex Parte* Submission (Mar. 11, 2026)
Bull Moose Project, *Ex Parte* Submission (Mar. 11, 2026)
Nickolai Bakken, *Ex Parte* Submission (Mar. 16, 2026)
Zada Realty LLC, Comment (Mar. 25, 2026)
Daniel Rahimzada, Zada Realty LLC, Comment (Mar. 26, 2026)
Daniel Rahimzada, Zada Realty LLC, Comment (Mar. 26, 2026)
Center for American Rights, *Ex Parte* Submission (Mar. 31, 2026)
PROTEC, *Ex Parte* Submission (Apr., 14, 2026)
Space Exploration Technologies Corp., EchoStar Corporation, Spectrum Business Trust 2025-1, *Ex Parte* Submission (Apr. 15, 2026)
520 West 20 LLC, Comment (Apr. 29, 2026)
Wireless Infrastructure Association, *Ex Parte* Submission (Apr. 29, 2026)
Wireless Infrastructure Association, *Ex Parte* Submission (May 1, 2026)
EchoStar Corporation, *Ex Parte* Submission (May 8, 2026)
332 Gates LLC and the Board of Managers of the 322 Gates Condominium, Comment (May 11, 2026)
John Freund, Comment (May 11, 2026)

APPENDIX B

1. Within 30 days of consummating the assignment to AT&T of the licenses at issue in the AT&T/EchoStar proceeding¹ (the Consummation Date), EchoStar shall establish and deposit \$2.4 billion into a trust (the Fund) to be used to pay certain obligations potentially incurred in connection with the construction, operation, maintenance, building, decommissioning, and/or provisioning of goods or services related to or arising out of the communications sites and/or communications network associated with certain of the licenses being assigned or transferred in this transaction. The trustee of the Fund (Trustee) shall be authorized to reasonably undertake any actions that are necessary and proper and solely intended to effectuate the purposes identified herein. The terms of the Fund (including the amount of compensation for the Trustee) and any governing documents and the selection of the Trustee must be submitted to and approved by the Wireless Telecommunications Bureau (the Bureau).

2. Within 30 days of the Consummation Date, EchoStar shall select the Trustee, who must (a) be a neutral third-party, free of any conflicts of interest, including but not limited to not having any financial interests in EchoStar, AT&T, or SpaceX or any of its subsidiaries or affiliates; (b) have experience serving as trustee for trusts in excess of \$500 million in assets; and (c) be insured in an amount reasonably commensurate with insured amounts for trustees of funds similar in size to the Fund. The Trustee may not have been employed by EchoStar, AT&T, or SpaceX or any of its subsidiaries or affiliates within the past five years. Any employees or agents of the Trustee also shall have no conflicts of interest and not have been employed by EchoStar, AT&T, or SpaceX or any of its subsidiaries or affiliates within the past five years.

3. The Trustee shall, within 30 days of being selected, establish a process for filing claims with the Fund, including, without limitation, establishing a website providing instructions for filing a claim, and begin accepting claims (the Claims Opening Date).

4. EchoStar shall give notice within 30 days of the Claims Opening Date to all creditors of DISH Wireless LLC of establishment of the Fund and the Internet address of the website established by the Trustee.

5. A person or entity (Claimant), who has a final judgment or arbitration award against or a settlement with EchoStar Corp., DISH Network Corp., DISH Wireless LLC, and/or any other EchoStar subsidiary or affiliate for amounts due it for the construction, operation, maintenance, building, decommissioning, and/or provisioning of goods or services related to or arising out of the communications sites and/or communications network associated with certain of the licenses being assigned in the transaction at issue² (collectively, the Covered Activities), may file a claim with the Fund

¹ See Applications of AT&T Mobility II LLC and EchoStar Corporation for Consent to Assign Licenses, WT Docket No. 25-303, ULS File Nos. 0011749148 (lead application), 0011749151, 0011749122 and paper applications filed in ECFS File Nos. 50001WTAA25 and 50002WTAA25 (filed Sept. 18, 2025). ULS File No. 0011944971 was filed in ULS to replace ECFS File Nos. 50001WTAA25 and 50002WTAA25 (filed March 13, 2026).

² See *Applications of T-Mobile US, Inc., and Sprint Corporation, For Consent To Transfer Control of Licenses and Authorizations*, WT Docket No. 18-197, *Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, ULS File Nos. 0008741236, 0008741420, 0008741603, and 0008741789 et al., WT Docket No. 18-197, Order of Modification and Extension of Time to Construct, 35 FCC Rcd 9580 (WTB 2020); *Applications of T-Mobile US, Inc., and Sprint Corporation, For Consent To Transfer Control of Licenses and Authorizations*, WT Docket No. 18-197, *Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, ULS File Nos. 0008741236, 0008741420, 0008741603, and 0008741789 et al., WT Docket No. 18-197, Memorandum Opinion and Order, Declaratory Ruling, and Order of Proposed Modification, 34 FCC Rcd 10578 (2019). For the avoidance of doubt, Covered Activities are not limited to those activities necessary to meet the minimum requirements of the conditions placed on these licenses.

(a Fund Claim).³ For the avoidance of doubt, Covered Activities include amounts expended or reasonably expected to be expended by the termination of EchoStar's operation of its network (e.g., costs for decommissioning towers and cell sites, costs for electricity used); and for lost future or profits and other amounts (e.g., future taxes, insurance, etc.) due under agreements (including leases) for operating the network that have been terminated, and/or costs incurred that the Claimant reasonably expected to be repaid out of future receipts.

6. A Claimant may file only one Fund Claim, which shall include all claims for which the Claimant and its affiliates seek to pursue recovery from the Fund (for the avoidance of doubt, applicable claims not included in the Fund Claim filed by a Claimant shall be unrecoverable from the Fund).

7. Fund Claims shall be categorized as follows: Type A Claims are those claims that seek \$100,000 or less in total for amounts owed for Covered Activities. Type B Claims are those that seek more than \$100,000 for amounts owed for Covered Activities and are further split into two types. Type B-1 Claims are those portions of a Type B claim that are (i) for outstanding amounts due as of December 31, 2025, or the date the Claimant received notice from EchoStar that EchoStar would no longer fulfill its commitments under the agreement underlying the claim (whichever is earlier) for Covered Activities and/or (ii) for amounts expended or reasonably expected to be expended by the completion of the Covered Activities (e.g., costs for decommissioning towers and cell sites, costs for electricity used). Type B-2 Claims are those portions of a Type B claim that are for lost future rents or profits and other future amounts (e.g., future taxes, insurance, etc.) due under agreements (including leases) for Covered Activities that have been terminated, and/or costs incurred for Covered Activities that the Claimant reasonably expected to be repaid out of future receipts.

8. By filing a Fund Claim, a Claimant, and to the extent applicable any affiliates thereof, agrees that it waives any legal rights it may have against EchoStar Corp., DISH Network Corp., DISH Wireless LLC, and/or another EchoStar subsidiary or affiliate to otherwise recover against or enforce the judgment(s), arbitration award(s), or settlement(s) on which the Fund Claim is based.

9. The Trustee shall verify the validity and eligibility of a Fund Claim. If a portion of a Fund Claim is invalid or ineligible, only the valid and eligible portion shall be considered a Fund Claim. The Bureau retains jurisdiction to require the modification of the process described in this appendix, including, without limitation, regarding the determination of a Fund Claim.

10. The Trustee shall pay out the funds of the Fund as follows: the Trustee shall pay the Fund's reasonable expenses (including his or her own reasonable compensation) as they become due, no more often than once per month. The Trustee shall pay Type A Claims as he or she determines that they are valid and eligible for payment. Every six (6) months, starting six (6) months after the Claims Opening Date, the Trustee shall determine whether the Fund has sufficient money to pay in full all of the pending Type B-1 Claims (after payment of the Fund's reasonable expenses and the Type A Claims). If so, then the Trustee shall pay the pending Type B-1 Claims; if not, then the Trustee shall pay the pending Type B1 Claims pro rata. After five (5) years from the Claims Opening Date, the Trustee shall determine whether the Fund has sufficient money to pay all of the Type B-2 Claims in full (after payment of the Fund's reasonable expenses and the Type A Claims and the Type B-1 Claims). If so, the Trustee shall pay the Type B-2 Claims; if not, the Trustee shall pay the Type B-2 Claims pro rata (retaining sufficient monies to pay the Fund's closing expenses). If any monies remain in the Fund, upon request of the Trustee or a potential Claimant, the Bureau may order that the Fund remain open for additional time. If there is no such request or the Bureau does not so order, the Trustee shall close the Fund, pay its final expenses, and pay any remaining monies to EchoStar.

³ For the avoidance of doubt, a Fund Claim includes final court judgments and arbitration awards and settlements for Covered Activities regardless whether they are based on contract law, principles of *quantum meruit*, or other similar contract or quasi-contract legal principles.

APPENDIX C

SpaceX Buildout Commitments



May 12, 2026

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, N.E.
Washington, DC 20554

Re: *Applications of Spectrum Business Trust 2025-1, Space Exploration Technologies Corp., and EchoStar Corporation for Consent to Assign Spectrum and Earth Station Licenses*, GN Docket No. 25-302

Dear Ms. Dortch,

To support its waiver requests¹ in the above referenced proceeding, SpaceX voluntarily commits to meet the following performance metrics per spectrum block² for downlink quality of service signal-to-interference-plus-noise ratio (“SINR”); uplink user throughput; and spectral efficiency. Each metric will be met with respect to each license.

Downlink Quality of Service (SINR)	
First Interim Performance Requirement (2 years from the Effective Date ³)	SINR of 5 dB; Service Availability ⁴ of 70% of the time in 90% of the total geographic area of each Basic Economic Area (“BEA”) license ⁵
Second Interim Performance Requirement (4 years from the Effective Date)	SINR of 5 dB; Service Availability of 80% of the time in 90% of the total geographic area of each BEA license
Final Interim Performance Requirement (9 years from the Effective Date)	SINR of 10 dB; Service Availability of 90% of the time in 90% of the geographic area of each BEA license

¹ See *Applications of Spectrum Business Trust 2025-1, Space Exploration Technologies Corp., and EchoStar Corporation*, WT Docket No. 25-302, Amended Exhibit B - Waivers (Nov. 20, 2025).

² The AWS-4 band is two blocks (Block A: 2000-2010 and 2180-2190 MHz; Block B: 2010-2020 MHz and 2190-2200 MHz); AWS-3 unpaired spectrum is two blocks (1695-1700 and 1700-1710 MHz); and the AWS-H block is two blocks (1915-1920 and 1995-2000 MHz). Due to the current lack of 3GPP standardization for 1915-1920 MHz, additional time may be needed to meet applicable performance metrics to account for availability of compatible user devices.

³ “Effective Date” means November 30, 2027.

⁴ “Service Availability” is a user receiving the signal (SINR) or a user transmitting the signal (uplink user throughput) at a point in the covered geographic area at the applicable percentage of the time (as detailed in the tables herein), when the user is outdoors.

⁵ For purposes of meeting any metric by geographic area, the relevant geographic area is the one associated with the AWS-3, AWS-4 and AWS-H block terrestrial licenses, i.e., the Basic Economic Area.



Uplink User Throughput	
First Interim Performance Requirement (2 years from the Effective Date)	5th percentile user throughput of at least 100 kbps/MHz in the uplink over 90% of the geographic area at Service Availability of 70% of the time
Second Interim Performance Requirement (4 years from the Effective Date)	5th percentile user throughput of at least 200 kbps/MHz in the uplink over 90% of the geographic area at Service Availability of 80% of the time
Final Interim Performance Requirement (9 years from the Effective Date)	5th percentile user throughput of at least 300 kbps/MHz in the uplink over 90% of the geographic area at Service Availability of 90% of the time
Spectral Efficiency	
First Interim Performance Requirement (2 years from the Effective Date)	300 kbps/MHz/beam in the downlink and 100 kbps/MHz/beam in the uplink
Final Performance Requirement (9 years from the Effective Date)	600 kbps/MHz/beam in the downlink and 200 kbps/MHz/beam in the uplink

Verification

SpaceX will demonstrate compliance with the performance metrics with respect to each license (e.g., per spectrum block and per BEA) for Downlink Quality of Service (SINR); Uplink User Throughput; and Spectral Efficiency by filing a construction notification with the Commission in accordance with the provisions set forth in Section 1.946(d) of the Commission's rules within 30 days of each commitment deadline. In its construction notification, SpaceX will certify whether it has met the performance requirements and file documentation to support its claim.

SpaceX will submit measurements and/or data representing service to customers to verify its compliance with each milestone. At least nine (9) months before SpaceX's two-year milestone (the First Interim Performance Requirement), SpaceX will submit for Wireless Telecommunications Bureau ("WTB") approval a plan describing the type of measurements and/or data that SpaceX will be required to submit to verify compliance, which shall be based on industry-standard practices (e.g., on-the-ground test results via a sampling methodology; network logs; or crowd-sourced data). SpaceX will submit the required verification measurements and/or data within six (6) months of each milestone.



Enforcement

SpaceX proposes the following license conditions in connection with the voluntary commitments above:

- If the WTB and Space Bureau (the Bureaus) determine that SpaceX has failed to meet all of the First Interim Performance Requirements listed above (Downlink Quality of-Service (SINR); Uplink User Throughput; and Spectral Efficiency) for a particular license, the deadline for all of the Final Performance Requirements for that license will be accelerated by one (1) year (i.e., the Final Performance Requirements must be met eight (8) years after the Effective Date, rather than nine (9) years after the Effective Date).
- If the Bureaus determine that SpaceX has failed to meet all of the Second Interim Performance Requirements (Downlink Quality of Service (SINR) and Uplink User Throughput) for a particular license, the deadline for the Final Performance Requirements for that license will be accelerated by two (2) years. This acceleration will be cumulative to any acceleration if the First Interim Performance Requirements were not met. For example, the Final Performance Requirements must be met seven (7) years from the Effective Date for that license, rather than nine (9) years after the Effective Date; or if the First Interim Performance Requirements were not met, the Final Performance Requirements must be met by six (6) years, rather than nine (9) years after the Effective Date.
- If the Bureaus determine that SpaceX has failed to meet all of the Final Buildout Requirements for a particular license, upon such determination, SpaceX's license for such license area shall terminate automatically without Commission action, and SpaceX shall be ineligible to regain it if the Commission makes the license available at a later date.

SpaceX looks forward to continuing to work with the Commission to advance the efficient use of spectrum and ensure delivery of meaningful services to consumers everywhere.

Sincerely,

/s/ David Goldman

David Goldman
Vice President, Satellite Policy

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