SpaceMobile

Transforming how the world connects



NASDAQ: ASTS

Investor Presentation May 2025



Forward Looking Statements

This communication contains "forward-looking statements" that are not historical facts, and involve risks and uncertainties that could cause actual results of AST SpaceMobile to differ materially from those expected and projected. These forward-looking statements can be identified by the use of forward-looking terminology, including the words "believes," "estimates," "anticipates," "expects," "intends," "plans," "may," "will," "would," "potential," "projects," "predicts," "continue," or "should," or, in each case, their negative or other variations or comparable terminology. These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results. Most of these factors are outside AST SpaceMobile's control and are difficult to predict.

Factors that could cause such differences include, but are not limited to: (i) expectations regarding AST SpaceMobile's strategies and future financial performance, including AST's future business plans or objectives, expected functionality of the SpaceMobile Service, anticipated timing of the launch of the Block 2 BlueBird satellites, anticipated demand and acceptance of mobile satellite services, prospective performance and commercial opportunities and competitors, the timing of obtaining regulatory approvals, ability to finance its research and development activities, commercial partnership acquisition and retention, products and services, pricing, marketing plans, operating expenses, market trends, revenues, liquidity, cash flows and uses of cash, capital expenditures, and AST SpaceMobile's ability to invest in growth initiatives; (ii) the negotiation of definitive agreements with mobile network operators relating to the SpaceMobile Service that would supersede preliminary agreements and memoranda of understanding and the ability to enter into commercial agreements with other parties or government entities; (iii) the ability of AST SpaceMobile to grow and manage growth profitably and retain its key employees and AST SpaceMobile's responses to actions of its competitors and its ability to effectively compete; (iv) changes in applicable laws or regulations; (v) the possibility that AST SpaceMobile may be adversely affected by other economic, business, and/or competitive factors; (vi) the outcome of any legal proceedings that may be instituted against AST SpaceMobile; and (vii) other risks and uncertainties indicated in the Company's filings with the Securities and Exchange Commission (SEC), including those in the Risk Factors section of AST SpaceMobile's Form 10-K filed with the SEC on March 3, 2025 and Form 10-Q filed with the SEC on May 12, 2025.

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Use of Non-GAAP Financial Measures

Adjusted operating expense is an alternative financial measure used by management to evaluate our operating performance as a supplement to our most directly comparable U.S. GAAP financial measure. We define Adjusted operating expense as total operating expenses adjusted to exclude amounts of stock-based compensation expense and depreciation and amortization expense. We believe Adjusted operating expenses is a useful measure across time in evaluating the Company's operating performance as we use Adjusted operating expenses to manage the business, including in preparing our annual operating budget and financial projections. Adjusted operating expense is a non-GAAP financial measure that has no standardized meaning prescribed by U.S. GAAP, and therefore has limits in its usefulness to investors. Because of the non-standardized definition, it may not be comparable to the calculation of similar measures of other companies and are presented solely to provide investors with useful information to more fully understand how management assesses performance. This measure is not, and should not be viewed as, a substitute for its most directly comparable GAAP measure of total operating expenses.

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Building the First and Only Space-Based Cellular Broadband Network



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Coverage everywhere Eliminates cellular coverage gaps and dropped connections globally

1 **Compatible with existing devices** Seamless service with no modifications required to consumer devices

Cellular broadband from space native cellular capabilities

~50 operators globally with nearly 3 billion existing subscribers: AT&T, Verizon, Vodafone, Bell Canada, American Tower, Google, and Rakuten



Investment in network

Raised over \$2 billion to fund network build and technology Proprietary technology with 3,650+ patent and patent-pending claims









5G / LTE data rates with low latency and cellular-quality service levels with

Deep wireless ecosystem partnerships

Space-Based Connectivity Direct-to-Device Technology (5G + 4G LTE)

"We are excited to bring this revolutionary technology to the world. We believe space-based broadband cellular connectivity will revolutionize how people connect, empowering communities and driving economic growth on a global scale."



- Abel Avellan Chairman and CEO

Everyday smartphones from all major brands compatible with AST SpaceMobile









EXISTING SPECTRUM

†††

Market Opportunity is Deep, Untapped, and Expanding

\$1.1 Trillion

global mobile wireless services market

5.6 Billion

mobile phones and devices moving in and out of coverage

42%

global population without cellular broadband

~90%

of Earth's surface without cellular coverage

\$100+ Billion

10-year expected demand for satellite direct-to-device communications



ceMobile Source: GSMA market data as of 12/31/2023.

.. Represents 2023-2033 cumulative estimates demand, per Analysys Mason (formerly Northern Sky Research).



Robust Network of Leading MNOs as Investors, Partners, and Customers

- MNO agreements span nearly every large country (excl. China & Russia)
- Leverages existing 5.6 billion mobile phones and devices
- Easy signup for cellular subscribers
- Super-wholesale revenue share model with MNOs
- Intended to drive new MNO partner revenue and reduced churn



~50 MNO partners with nearly 3 billion subscribers globally







95% Vertically-Integrated Manufacturing

~200,000 sq. ft. of manufacturing in Midland, TX, with capacity to produce up to 6 satellites per month during the fourth quarter of 2025



- 95% vertically-integrated manufacturing, with content manufactured in-house or through 3rd parties using owned IP, driving speed, certainty, lower costs, flexibility, and reliability
- With its custom ASICs and 2,400 sq. ft. arrays, next-generation BlueBirds are expected to support up to 10,000 MHz of processing bandwidth per satellite in the future, enabling peak data rates of up to 120 Mbps
- Automated processes and scale economics change nature of investment requirements and unit costs for next-generation BlueBirds



BlueWalker 3

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History Made & Proven Technology

Connecting everyday smartphones directly from space with BlueWalker 3







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September 2023

5G Voice Calls 14 Mbps Data Rate (Per 5MHz Channels) In a 5G first-ever, we demonstrated space-based 5G connectivity by placing a call from Maui, Hawaii, USA, to a Vodafone engineer in Madrid, Spain using AT&T spectrum

June 2023

4G LTE Voice Calls 10 Mbps Data Rate In a 4G LTE first-ever, using AT&T spectrum, everyday smartphones communicated directly via BlueWalker 3

<u>April 2023</u>

2G Voice Calls

The first voice call was made from the Midland, Texas area to Rakuten in Japan over AT&T spectrum using a Samsung Galaxy S22 smartphone













Block 1



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First Five Commercial Satellites Reach Low Earth Orbit Successfully in September 2024





First Five BlueBird Commercial Satellites Fully Operational

Successfully conducted capability demonstrations of two-way video call transmission with AT&T, Verizon, and Vodafone using unmodified smartphones in premium low-band wireless spectrum

Received FCC grant of Special Temporary Authority (STA) with AT&T and Verizon in the U.S. to facilitate initial services, targeting approximately 100% nationwide coverage from space with over 5,600 coverage cells

Company plans to activate initial cellular broadband capabilities across the United States, Europe and Japan with AT&T, Rakuten, Verizon, and Vodafone using premium low-band wireless spectrum



850 MHz Premium Spectrum

5,600+ Cells

Target ~100% Geographical Coverage







~70% **US Mobile** Users





Latest Status





Accelerated Satellite Production and Manufacturing

Planning and production of 40 Block 2 BlueBird satellites underway at manufacturing facilities in Midland, Texas

Accelerated procurement of components and materials needed to complete fully assembled microns and phased array for over 50 satellites in total

Exercised option for additional orbital launches, with contracted launch capacity now for over 60 satellites during 2025 and 2026

Completed bring-up and initial validation of novel ASIC, supporting up to 10,000 MHz in processing bandwidth per satellite with peak data transmission speeds of up to 120 Mbps

Global manufacturing expansion to ~200,000 sq. ft. in Midland, TX, ~59,000 sq. ft. in Barcelona, Spain, and soon, ~85,000 sq. ft. in Homestead, FL





Planned Orbital Launch Schedule for the Largest-Ever Commercial Satellites in LEO

Announced multi-provider satellite orbital launch plan with five contracted launches over the next six to nine months

Anticipate orbital launches every one to two months on average during 2025 and 2026

On track with satellite manufacturing of 40 Block 2 BlueBird satellites and the procurement of components and materials needed to complete fully assembled microns and phased arrays for over 50 satellites in total

Satellite manufacturing expected to reach a cadence of six satellites per month during 2025, with phased array equivalent cadence reaching target during Q3 2025

Manufacturing cadence and orbital launch schedules support continuous cellular broadband coverage goals in key markets such as the U.S., Europe, Japan, the U.S. Government, and other strategic markets during 2026







SOLAR PANEL ASSEMBLY

PHASED ARRAY ASSEMBLY

Completed Bring-Up and Initial Validation of Custom ASIC with TSMC

ASIC chips are currently undergoing assembly and testing stages while the validation and qualification stages are nearing completion

Represents a competitive advantage developed over five years, equivalent to an estimated 150 man-years, with approximately \$45 million of development costs

Novel, custom, and low-power architecture developed to enable up to a 10x improvement in processing bandwidth, totaling 10,000 MHz, and support up to 120 Mbps peak data rates, on each satellite

Expected to incorporate our ASIC into Block 2 BlueBird satellites during 2025





Continued Strong Progress on Regulatory Approvals and Spectrum-Related Topics

Received Special Temporary Approval (STA) from the FCC for FirstNet evaluation on public safety's Band 14 spectrum, supporting mission-critical capabilities with direct-to-device cellular broadband connectivity

Established coordination agreement with the U.S. National Science Foundation covering satellite and ground-based astronomy operations

Well positioned to complete full regulatory authorizations for commercial service in the U.S. and Europe

Signed definitive agreements for long-term access to up to 45 MHz of premium lower mid-band spectrum in the U.S. for direct-to-device applications





SENATOR CRUZ AND FCC CHAIRMAN CARR VISIT AST SPACEMOBILE FACILITIES IN MIDLAND, TX

SpaceMobile Two-Way Broadband Video Call Initial Activations in U.S., Europe, and Japan

Two-way broadband video calls using unmodified smartphones enabled by a Block 1 BlueBird satellite over U.S., Europe, and Japan

Currently conducting in-country activations across voice, text, data, video calling, and other native cellular capabilities







ACTIVATION OF TWO-WAY BROADBAND VIDEO CALL CAPABILITIES WITH AT&T, VERIZON, VODAFONE, AND RAKUTEN

Expected Second Half 2025 Revenue Opportunity of \$50 – \$75 Million

Company plans to activate initial cellular broadband capabilities across the United States, Europe and Japan with AT&T, Rakuten, Verizon, and Vodafone using premium low-band wireless spectrum

Ramping up activities under the previously announced \$43 million U.S. Space Development Agency contract and signed a new contract with the Defense Innovation Unit (DIU) for up to \$20 million in revenue, via a prime contractor, for SpaceMobile capabilities with multiple U.S. Government agencies in support of government communications over land, sea, and air

Gateway equipment bookings of \$13.6 million in Q1 2025, with expected gateway equipment bookings of approximately \$10 million on average, per quarter during 2025, as precursor to the rollout of SpaceMobile service



U.S. Department of Defense



DEPLOYMENT OF GLOBAL NETWORK INFRASTRUCTURE







Announced Plans for Vodafone European Distribution Entity

Long-term partnership dating to 2018



European distribution entity, jointly owned with Vodafone, to provide SpaceMobile service to all of Europe

Partnership to offer shared ground infrastructure and turn-key service throughout Europe

Fully sovereign backhaul capabilities under Vodafone coownership, with European headquarters and management







MAR 2025 Announced plans to form joint AST SpaceMobile and Vodafone European Direct-to-Device service provider

FEB 2025 Announced plans for University of Málaga launch space and land mobile broadband research and validation hub

JAN 2025 First-ever space-based video call in Europe from Wales on Block 1 BlueBird

DEC 2024 Signed definitive commercial agreement to deliver AST SpaceMobile service through 2034

SEP 2023 First-ever 5G voice call from space to everyday smartphone on BlueWalker-3

JUN 2023 First-ever 4G voice call from space to everyday smartphone on BlueWalker-3

FEB 2022 AST SpaceMobile and Vodafone announce collaboration to build space-based cellular broadband network

APR 2021 Vodafone's Luke Ibbetson elected to AST SpaceMobile's Board of Directors



JAN 2024 Third \$ investment by Vodafone in AST SpaceMobile

APR 2021 Second \$ investment by Vodafone in AST SpaceMobile

NOV 2019 First \$ investment by Vodafone in AST SpaceMobile

AUG 2018 AST SpaceMobile and Vodafone sign Memorandum of Understanding to evaluate technology

Spectrum Agreement for Access to up to 45 MHz in U.S.

80+ year usage rights for a large block of a scarce resource of mid-band spectrum

Enhances potential of growing in-orbit cellular broadband network, expanding subscriber capacity while enabling peak data rates up to 120 Mbps

Matches attractive spectrum position with the largest satellite arrays in LEO for direct-to-device cellular broadband from space

More spectrum means more subscribers and better services in the U.S. – the most valuable wireless market in the world

Strengthens AST SpaceMobile's position within broader wireless ecosystem with additional core strategic asset





Existing low-band 3GPP strategy is enhanced with new potential mid-band spectrum access



Carrier Aggregation

Leveraging both low-band coverage and mid-band capacity through carrier aggregation

AST SpaceMobile Differentiation



Only pure-play, low Earth orbit (LEO) broadband communications company that is publicly traded today



Novel technology solution applicable to global cellular market of 5.6 billion mobile phones and devices, and the related \$1.1+ trillion TAM $^{\rm 1}$



Jointly going to market, not competing, with mobile network operators with hundreds of millions of subscribers, in the U.S. and internationally



Revenue share business model designed to allow easy user signup, expected to start initial operations in 2025 with government and non-continuous services



Robust balance sheet with \$874.5 million in cash, cash equivalents, and restricted cash to fund business operations and commercial satellites ²



Appendix



Company Snapshot

Founder-led leadership and deep team with decades of successful execution

Global Infrastructure



Scott Wisniews

President





Chief Financial Officer and Chie Legal Officer

Andrew Johns

Chris Ivory

Chief Commercia Officer

Dr. Huiwen Yao



Chief Technology Officer

Israel RF / Hardware Design

Spain

Mechanical Design

India

Manufacturing / Support

United Kingdom

Research & Development

Midland HQ / Manufacturing Facilities

Maryland Satellite Operations and Network Operations Center / Space Assembly Lab

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USA





0	 Co-inventor of 21 U.S. Patents Former Founder and CEO of EMC (Emerging Markets Comms.) until \$550mm sale in 2016 Provided initial seed capital for AST SpaceMobile
ki	 15+ years of M&A / financing experience Previously Managing Director, TMT Investment Banking at Barclays Advised or managed all AST SpaceMobile funding since \$110mm Series B in 2019
	 25+ years developing and implementing growth strategies, business operations, and building high performing teams Joined AST SpaceMobile in 2021 as Chief Accounting Officer Over two decades experience working in Big 4 audit and consulting firms
on	 25+ years of legal / capital markets experience Nearly two decades at 3D Systems Corporation as EVP, Chief Legal Officer and Secretary and Chief Corporate Development Officer Previously held positions of Interim President and CEO and Interim CFO while at 3D Systems Corporation
	 25+ years in satcom, business development and government / regulatory affairs Led Commercial Business Unit as EVP Globecomm Former SVP of Satellite Land Services at EMC
	 30+ years RF engineering + satcom Prior: Northrop Grumman Innovation Systems (Orbital ATK) 40+ GEO satellites built

SpaceMobile WillConnect Directlyto EverydayMobile Phones

Building the first and only space-based cellular broadband network

Giant total addressable market

Global wireless services market generates over \$1.1 trillion in annual revenue via 5.6 billion mobile phones and devices

Revolutionary tech, over 3,650 patent & patentpending claims and first-mover advantage Technology designed to deliver broadband from space to unmodified mobile devices, providing a service to fill cellular



Industry-leading strategic partners

coverage gaps

Investment, development, and commercial relationships with AT&T, Verizon, Vodafone, Google, American Tower, Rakuten, and others



Built-in customer base ready to be turned on

When operational, SpaceMobile service will be available to our MNO customers, a growing list of leading companies with nearly 3 billion existing subscribers

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Flexible, scalable, super-wholesale business model The SpaceMobile network is designed to provide easy signup for existing MNO subscribers under revenue-share agreements





5.6 Billion Mobile Phones and Devices Globally

Global wireless services market generates over \$1.1 trillion in annual revenue, with a backdrop of evolving and imperfect networks

Global Population – 8.15 billion





eMobile Source: GSMA Intelligence (data as of 12/31/2024)

5.6 billion unique cellular subscribers

move in and out of coverage as they live, work, and travel



0.4 billion have no coverage

3.0 billion usage gap

Satellite-to-Cellular Architecture is Transparent to End User Differentiated approach compared to existing space-based communications





Satellites in low Earth orbit to offer low-latency and

Large satellites designed to create over 1 million fixed terrestrial cells globally with broadband capacity



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