

The logo for AST SpaceMobile. 'AST' is in a large, white, bold, sans-serif font. 'SpaceMobile' is in a smaller, orange, bold, sans-serif font. The background is a dark space with a bright, glowing orange arc of light curving across the top right.

AST SpaceMobile

Transforming how
the world connects



NASDAQ: ASTS

Investor Presentation

April 2023

Forward Looking Statements

The information in this presentation and the oral statements made in connection therewith includes “forward-looking statements” for the purposes of federal securities laws that are not historical facts and involve risks and uncertainties that could cause actual results to differ materially from those expected and projected. All statements, other than statements of historical fact in this presentation and the oral statements made in connection therewith regarding AST SpaceMobile, Inc.’s, collectively with its subsidiaries (“SpaceMobile” or the “Company”), financial position, business strategy and the plans and objectives of management for future operations, are forward-looking statements. Words such as “expect,” “believe,” “anticipate,” “intend,” “estimate,” “seek” and variations and similar words and expressions are intended to identify such forward-looking statements. Such forward-looking statements relate to future events or future performance, but reflect management’s current beliefs, based on information currently available. A number of factors could cause actual events, performance or results to differ materially from the events, performance and results discussed in the forward-looking statements. For information identifying important factors that could cause actual results to differ materially from those anticipated in the forward-looking statements, please refer to the Risk Factors contained in AST SpaceMobile’s Annual Report on Form 10-K, filed with the SEC on March 31, 2023. The Company’s securities filings can be accessed on the EDGAR section of the SEC’s website at www.sec.gov. Except as expressly required by applicable securities law, the Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

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This presentation contains certain non-GAAP measures, including cash operating expense. Cash operating expense is equal to total operating expense less non-cash operating expense such as depreciation and amortization and stock-based compensation expense. The Company believes that these non-GAAP measures, when presented in conjunction with comparable GAAP measures, provide useful information about the Company’s operating results and liquidity and enhance the overall ability to assess the Company’s financial performance. The Company uses these measures, together with other measures of performance under GAAP, to compare the relative performance of operations in planning, budgeting and reviewing the performance of its business.

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This presentation includes market data and other statistical information from sources believed to be reliable, including independent industry publications, governmental publications or other published independent sources. Although AST SpaceMobile believes these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy and completeness.

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AST SpaceMobile is building the first & only space-based cellular broadband network



Raised ~\$725 million to date to fund network build and technology with 2,600+ patent and patent-pending claims



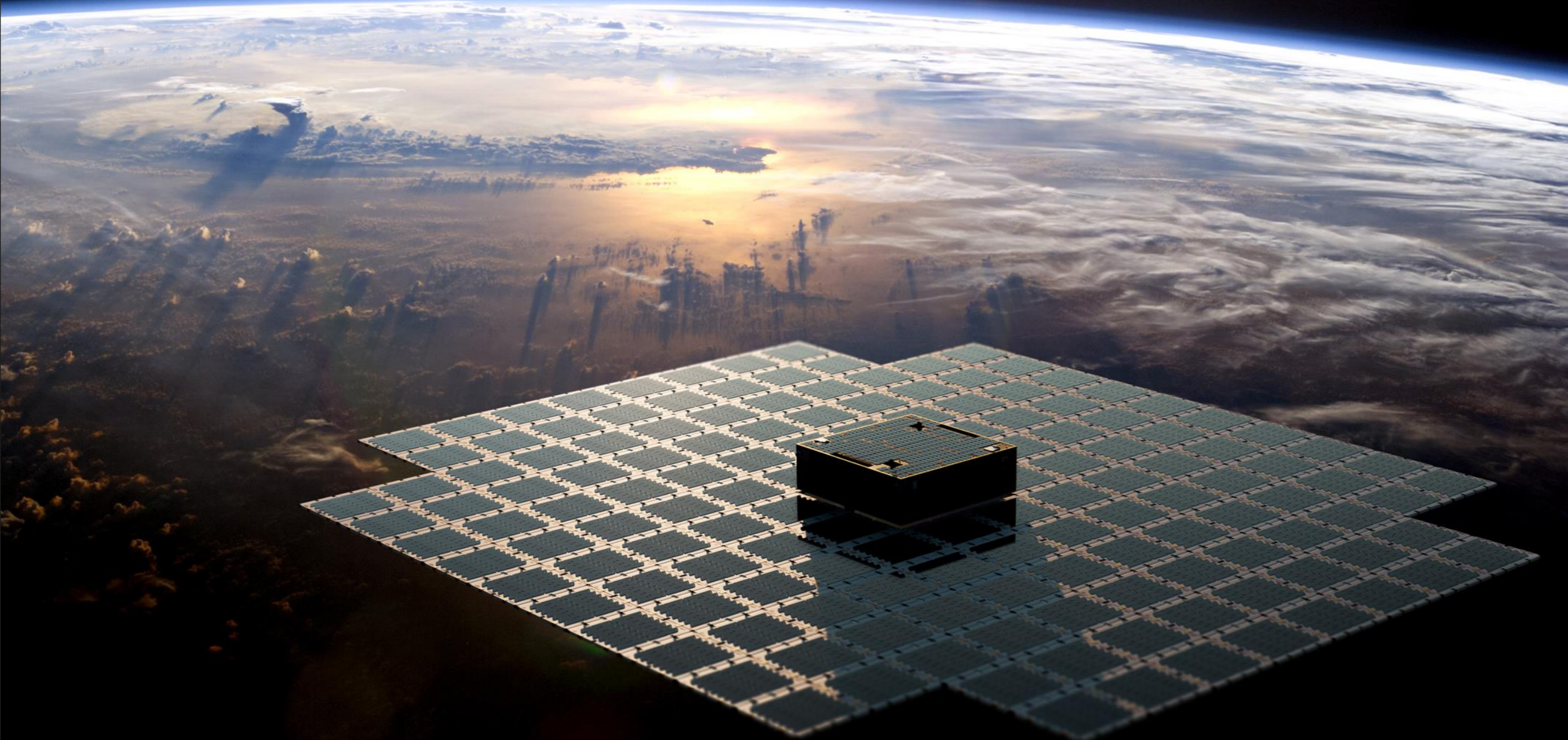
Signed agreements and understandings with 35+ mobile network operators with 2+ billion existing subscribers



Currently testing BlueWalker 3 in-orbit, the largest-ever commercial communications array in LEO



Funded for production and launch of first phase of commercial satellites to offer initial cellular broadband service



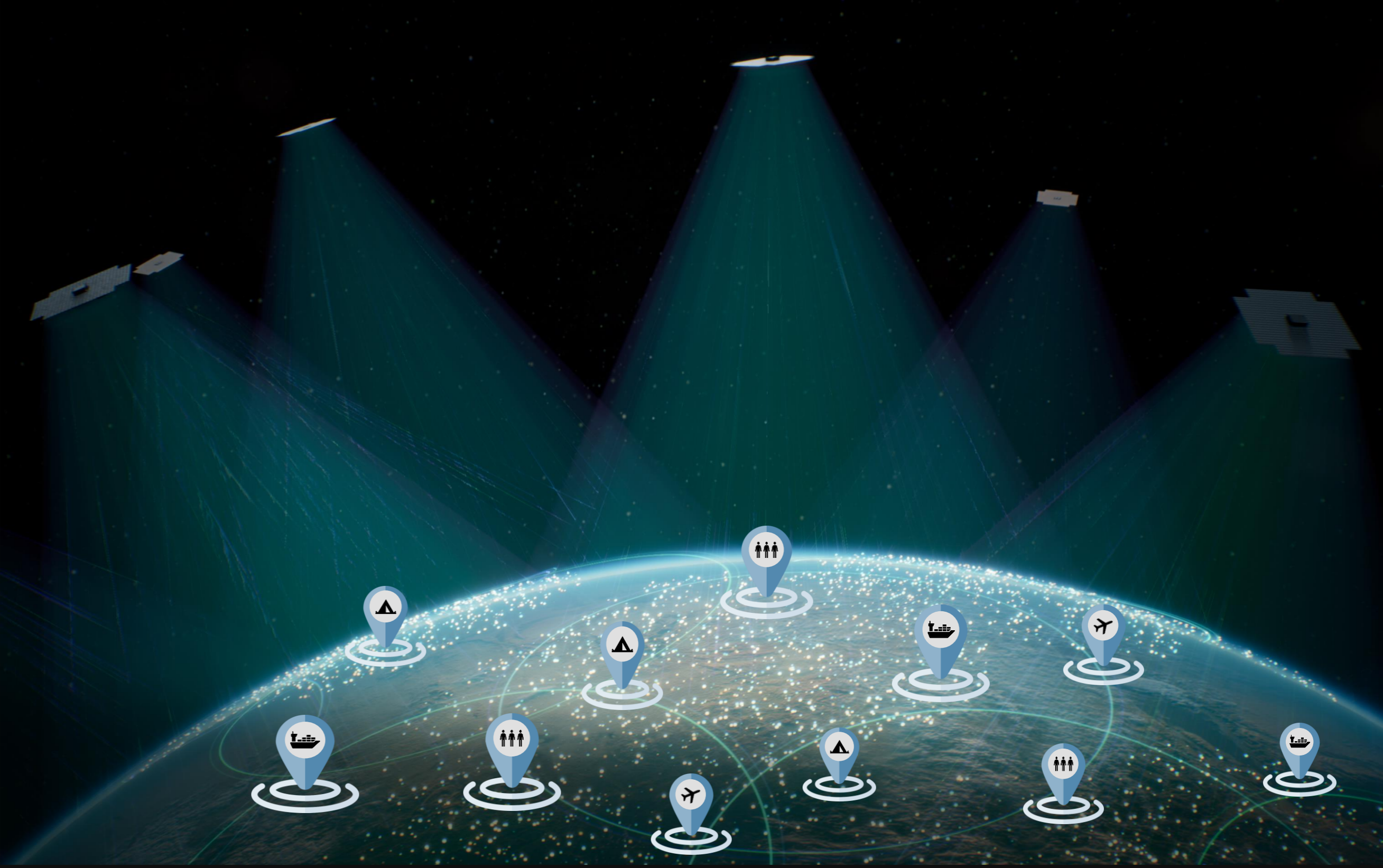
Transforming connectivity with direct-to-cell technology (5G + LTE)

“Eliminating the friction of specialized equipment and spectrum bands from direct-to-cellular satellite coverage, at broadband speeds, is a transformational event for the communications industry”

“Not only do we expect to provide essential, affordable broadband connectivity to everyone everywhere, we are working to expand the market to billions of individuals and devices”



- Abel Avellan
Chairman and CEO



Market
opportunity is
deep, untapped
and expanding

Source: GSMA market data as of December 31, 2022.

1. Represents 2023-2030 cumulative estimated demand,
per Northern Sky Research.

\$1.1 Trillion

global mobile wireless services market

5.5 Billion

mobile phones and devices moving in and out
of coverage

~50%

global population without cellular broadband

~90%

of Earth's surface without cellular coverage

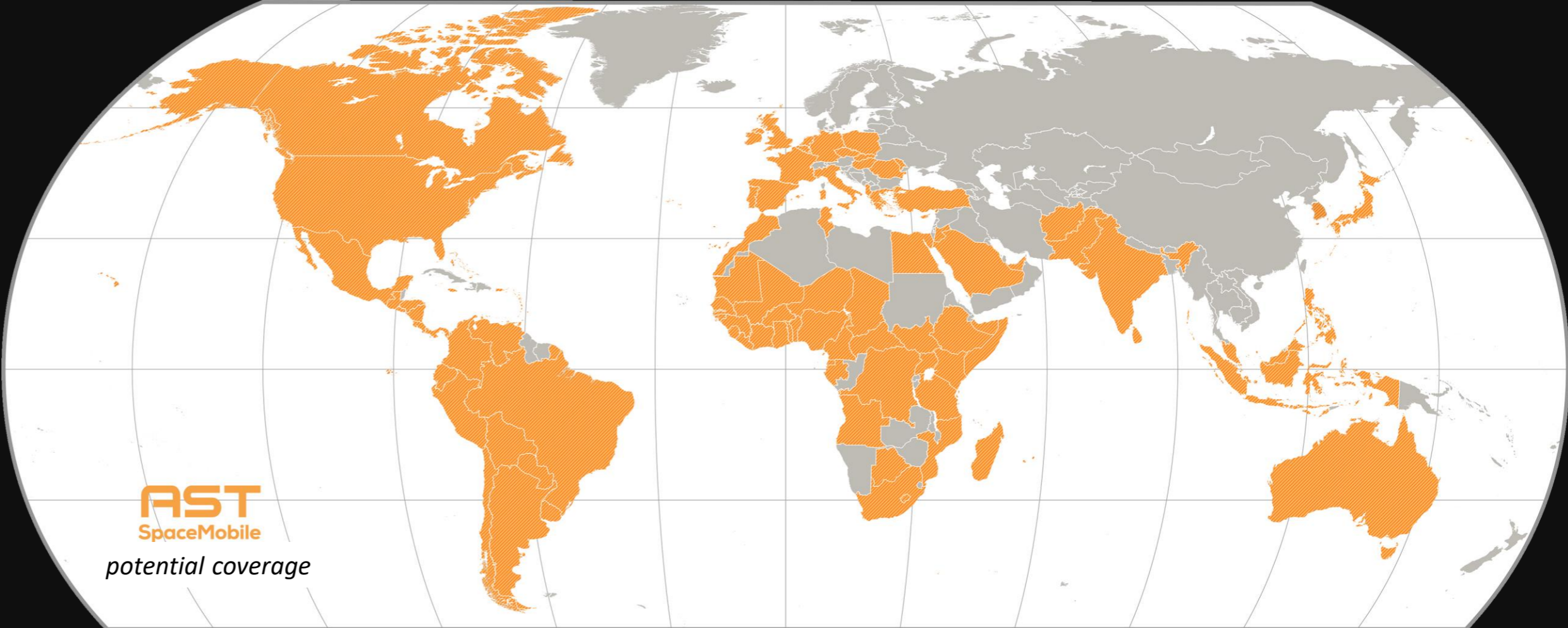
\$67 Billion

8-yr expected demand for satellite direct-to-
device communications ¹



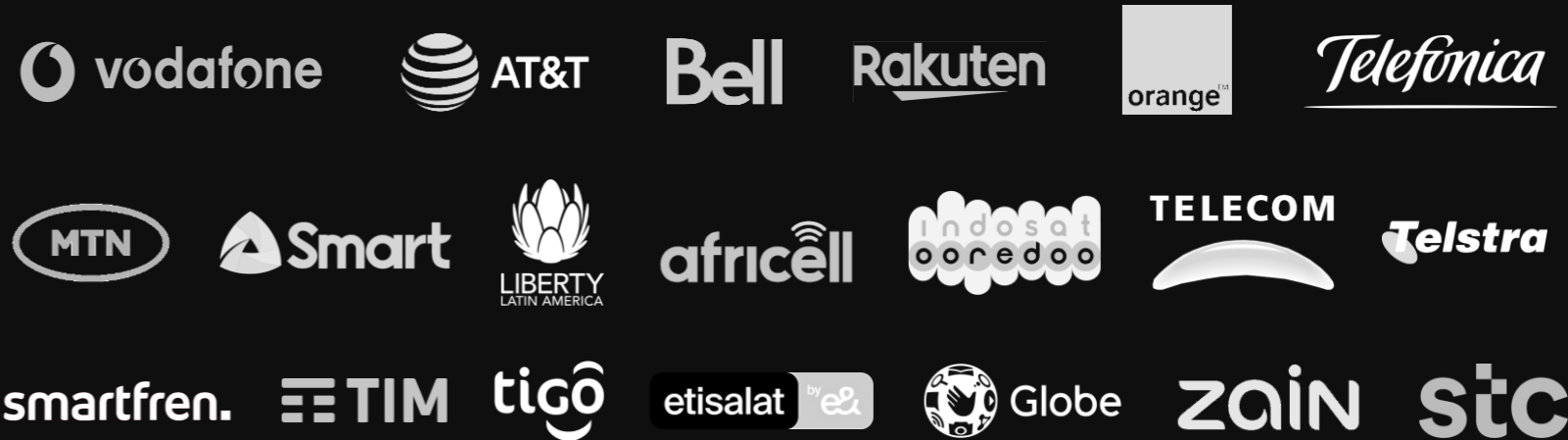
Mobile Network Operators (MNOs) are investors, partners and customers

When operational, SpaceMobile service will be available to MNOs on a wholesale basis, with existing relationships spanning nearly all large countries (ex. China/Russia)



Strategic Investors

Select MNO Partners



BlueWalker 3 Test Satellite

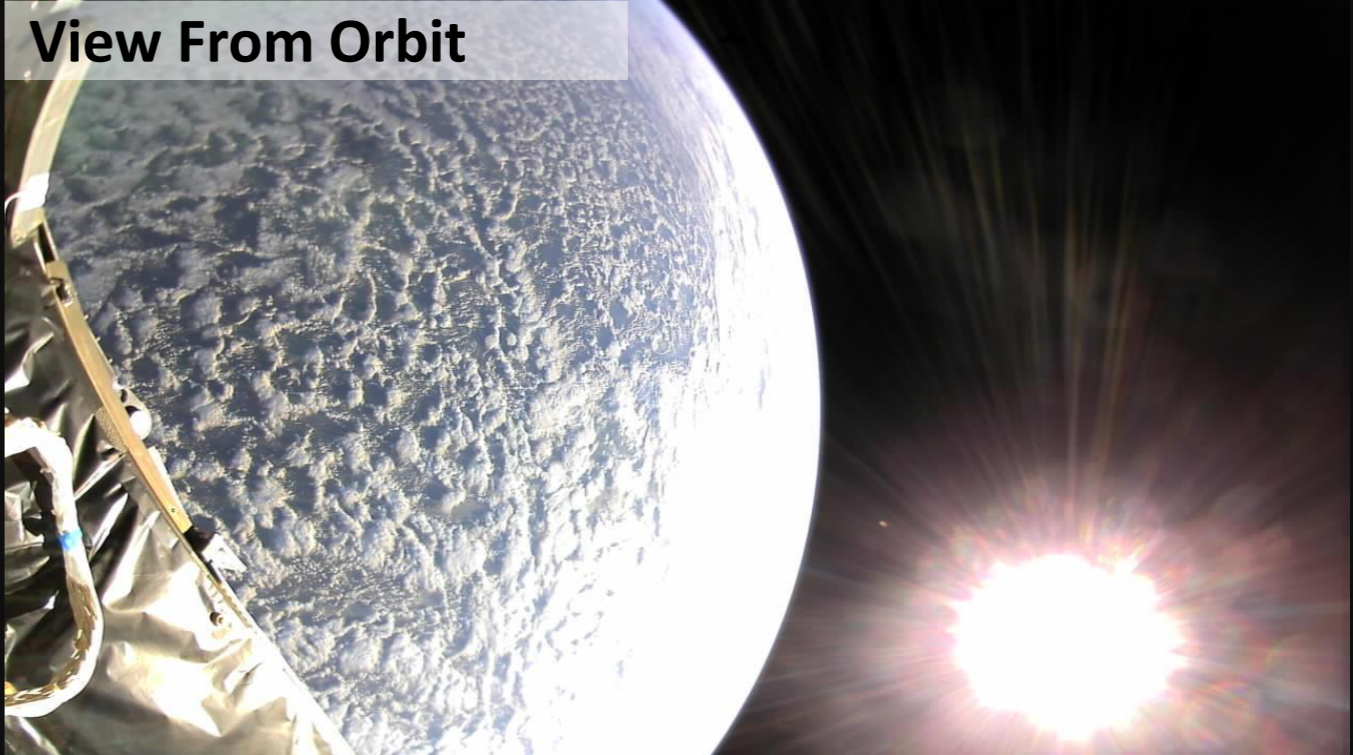


Critical, unique cellular broadband technology currently deployed in orbit

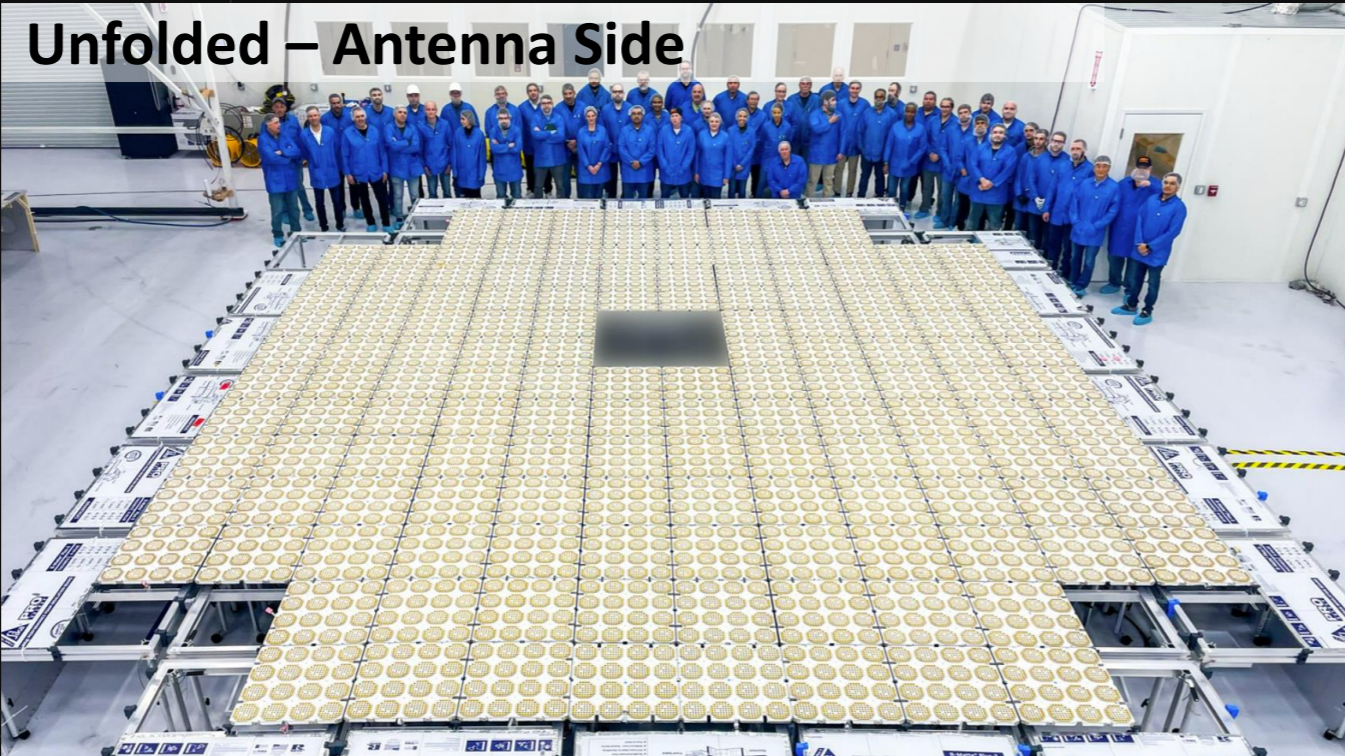
The first and only in-orbit deployment of innovative satellite technology designed for cellular broadband direct to unmodified cell phones



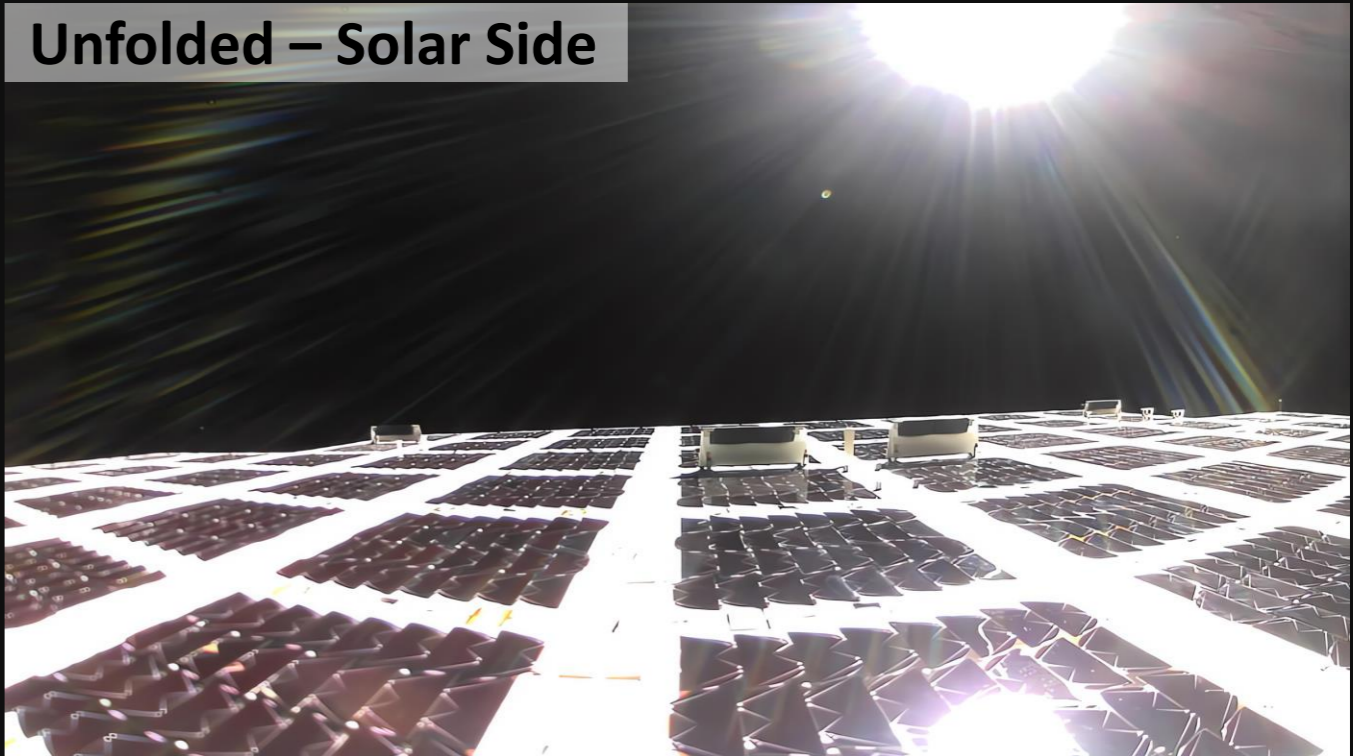
Stowed



View From Orbit



Unfolded – Antenna Side



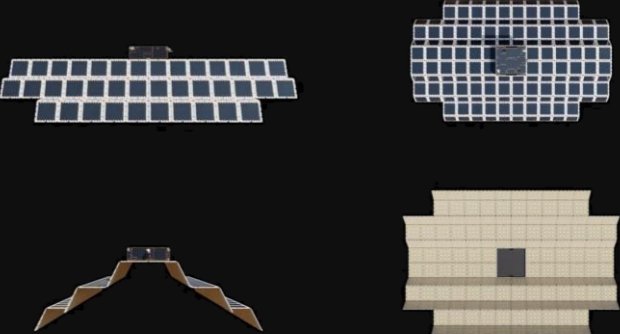
Unfolded – Solar Side

BlueWalker 3 test satellite update

Initial test results indicate downlink signal strength necessary to reach 5G cellular broadband speeds

Satellite Deployment

- ✓ Deployed the largest-ever commercial communications array in low Earth orbit



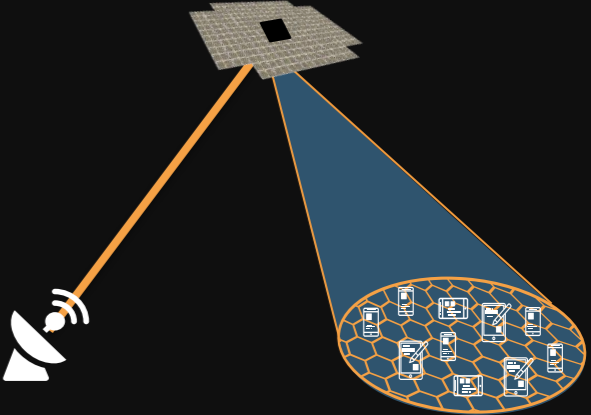
Satellite Flight Control

- ✓ Proven ability to fly and control BW3 with fully deployed array (693 sq ft)



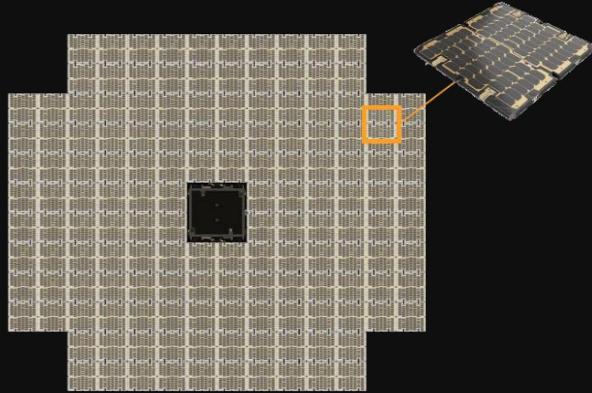
Patented Technology

- ✓ Validated our patented doppler and delay compensation



End-to-End Testing

- ☐ Targeting to complete cellular broadband speeds direct to standard, unmodified phones



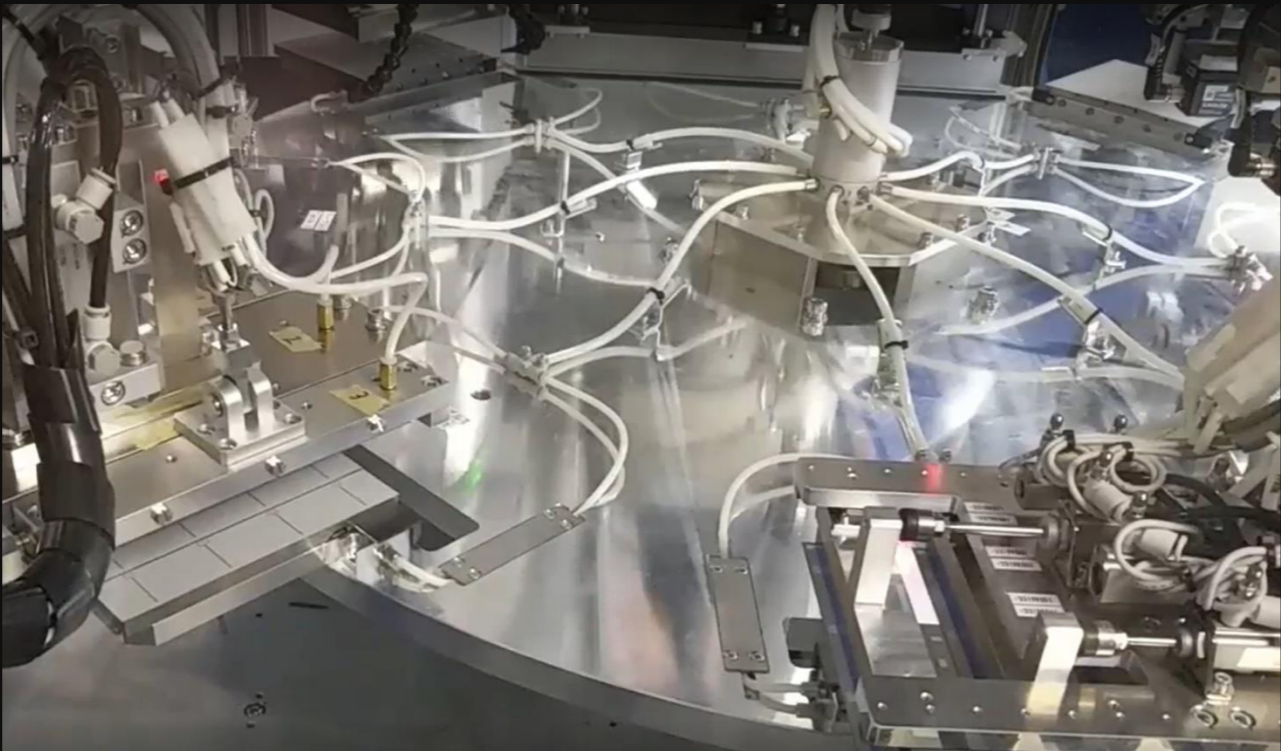
Vertically integrated manufacturing to support rapid constellation build

We continue to invest in our facilities in Texas and around the world, as we ramp up initial manufacturing and assembly lines for the Block 1 BlueBird satellites

Headquarters

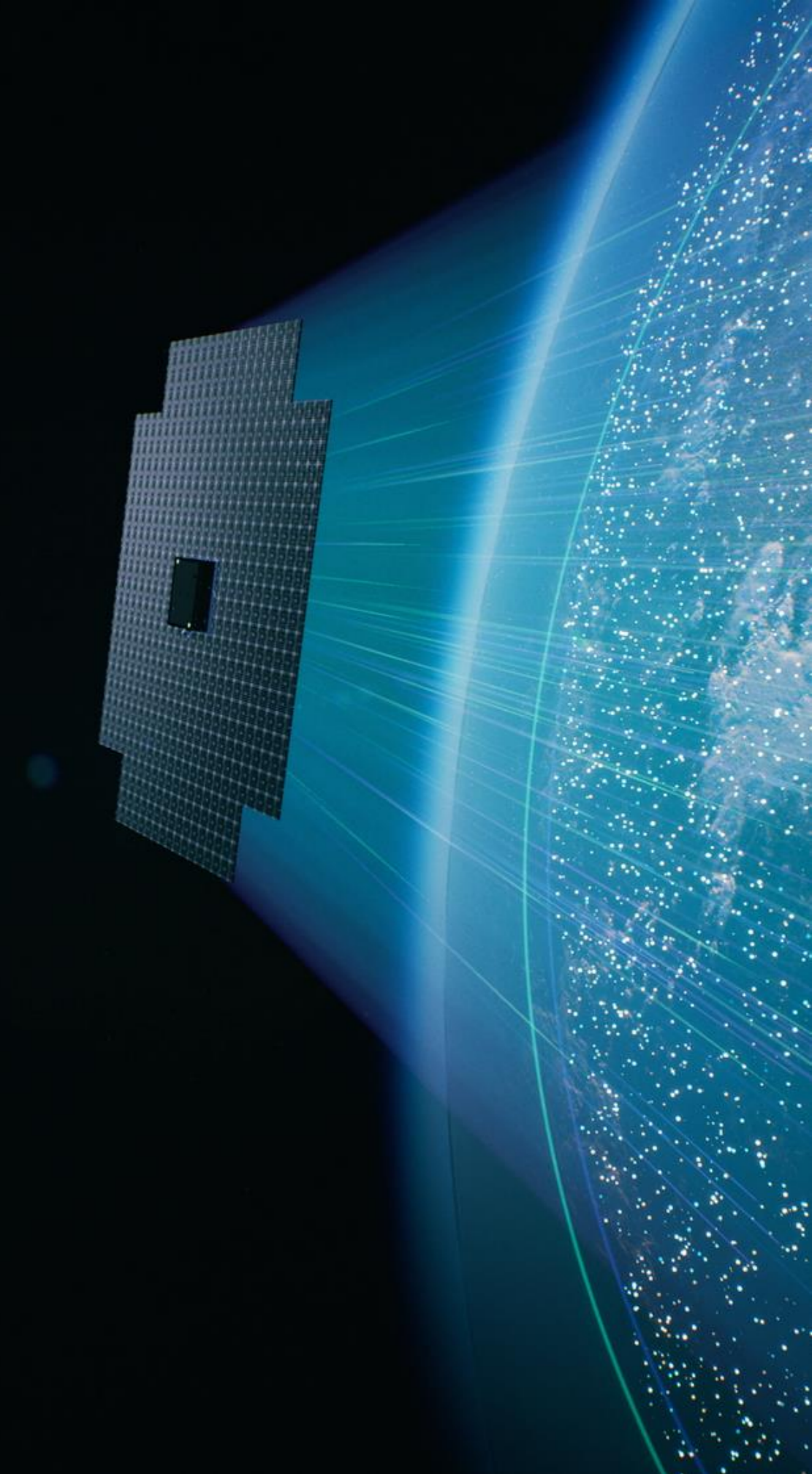


Site 2



Key future milestones to reach initial space-based cellular broadband commercial service

- Joint test results of BlueWalker 3 capabilities with MNO customers and technology partners
- Manufacturing and assembly of Block 1 BlueBird satellites at our Texas facilities
- Completion of definitive commercial agreements with initial customers
- Regulatory approvals in key markets
- Finalization of Block 2 BlueBird design, including ASIC tape out
- Launch of 5 Block 1 BlueBird satellites
- Initial commercial service using Block 1 satellites



AST SpaceMobile differentiation



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



Novel technology solution applicable to a market of 5.5 billion mobile phones and devices and the related \$1.1+ trillion TAM ¹



Jointly going to market, not competing, with mobile network operators with hundreds of millions of subscribers



Revenue share business model designed to allow users to sign up with a simple text message



Approximately \$239 million cash and cash equivalents to fund business operations and initial production satellites ²

1. AST SpaceMobile market size based on GSMA Intelligence estimate of total cellular wireless market spend. As of December 31, 2022.
2. Cash and cash equivalents as of December 31, 2022.

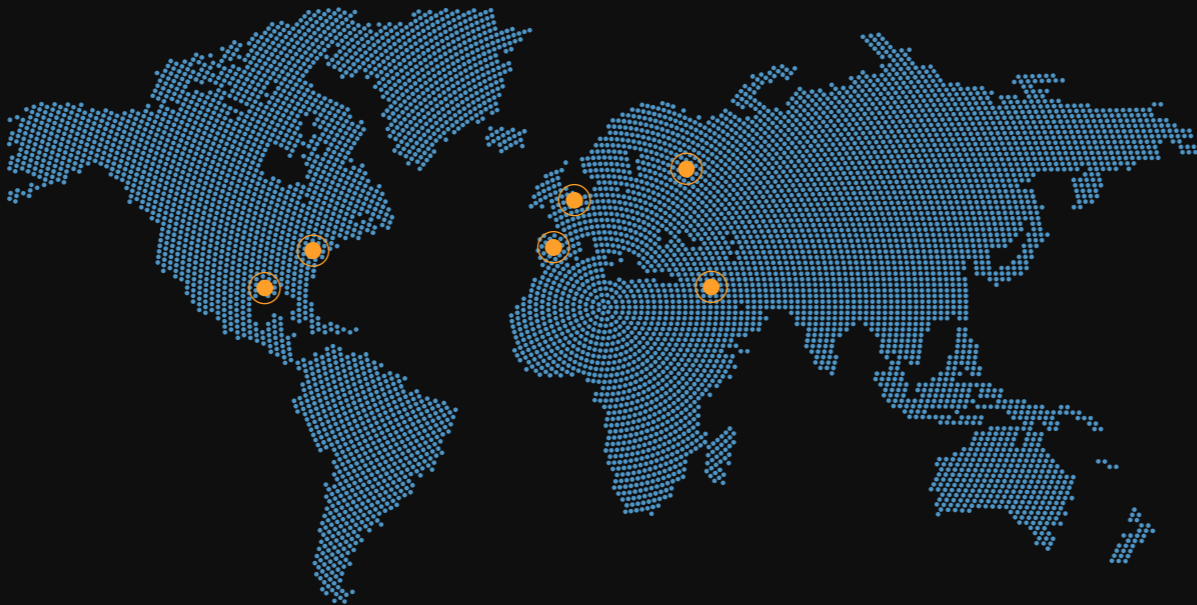
Appendix



Company snapshot

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

Global Infrastructure



Midland HQ /
Manufacturing Facilities

Maryland Satellite Operations and
Network Operations Center /
Space Assembly Lab

Israel
RF/Hardware
Design

Spain
Mechanical
Design

Lithuania
Prototyping/
Support

United Kingdom
Manufacturing/
Support



Abel Avellan
Chairman and CEO

- 25+ years space industry experience
- 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



Sean Wallace
Chief Financial Officer

- 25+ years senior management and banking experience
- Prior CFO and Treasurer of Cogent Communications
- Former banking leadership positions at Standard Chartered Bank and J.P. Morgan



Scott Wisniewski
Chief Strategy Officer

- 15+ years of M&A / financing experience
- Previously Managing Director, TMT Investment Banking at Barclays
- Advised AST on its \$110mm Series B in 2019 and the SPAC merger / PIPE financing in 2021



Brian Heller
General Counsel and Secretary

- 20+ years of public company legal experience
- Prior General Counsel of Castle Brands Inc.
- Former Partner practicing Corporate and IP law



Chris Ivory
Chief Commercial Officer

- 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



Dr. Huiwen Yao
Chief Technology Officer

- 30+ years RF engineering + satcom
- Prior: Northrop Grumman Innovation Systems (Orbital ATK)
- 40+ GEO satellites built



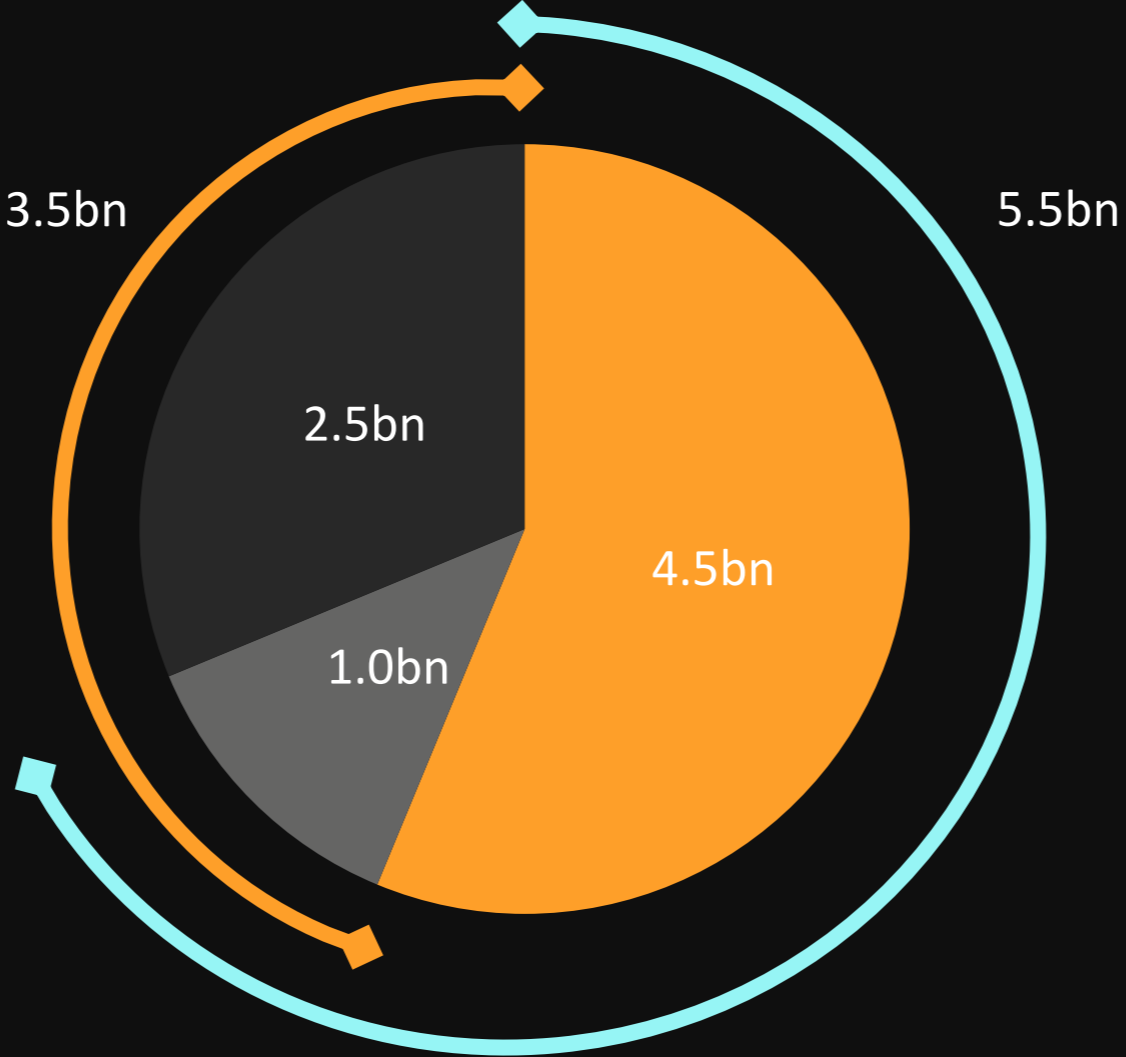
Dr. Ray Sedwick
Chief Space Scientist

- Director, Space Power and Propulsion Lab at University of Maryland
- NASA Innovative Advanced Concepts Fellow

5.5 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 – 8.0 billion



5.5 billion unique cellular subscribers

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

3.5 billion not subscribed to cellular broadband

0.4 billion have no coverage

3.1 billion usage gap




- Cellular subscribers - broadband
- Cellular subscribers - no broadband
- Not a cellular subscriber

Source: GSMA Intelligence (data as of December 31, 2022).

AST SpaceMobile technology solution

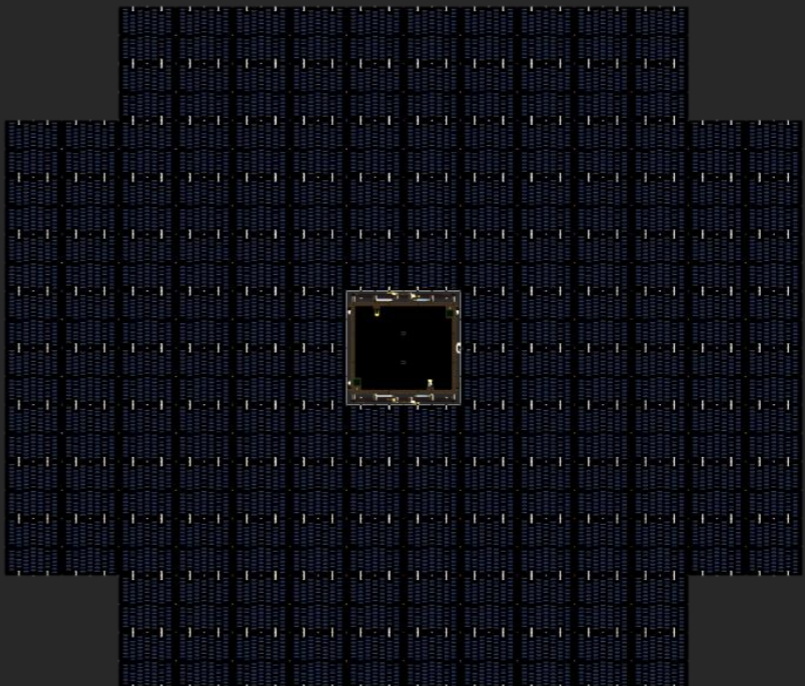
Differentiated approach compared to existing space-based communications

1. Market size based on the sum of 2020A revenues of included providers, AST SpaceMobile market size based on GSMA estimate of total cellular wireless market spend.

	First & Only Broadband Direct To Mobile Phones	Direct via Proprietary Mobile Phones	Indirect via Complex, Expensive Hardware
			
	Any standard mobile phone	Provider-specific satphones (~\$1K)	Provider-specific antennas mounted on planes, ships, vehicles, buildings (~\$1K-\$200K+)
End Users	Mass market mobility and the unconnected	Narrowband service on satphones	Enterprise, Maritime, Aviation, Government, Residential
Market Size ¹	> \$1 trillion	< \$2 billion	< \$20 billion

Satellite-to-cellular architecture is transparent to the end-user

SpaceMobile network designed to closely mirror terrestrial cellular architecture



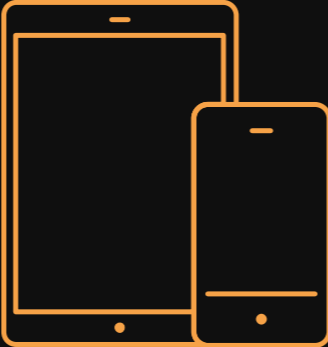
Satellites in low Earth orbit will offer low-latency and attractive look angles

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

Low- and mid-band frequencies shared with wireless customers on non-interference basis

High-throughput Q/V-band feeder links for backhaul

Direct link to unmodified mobile phones and other cellular devices



Gateways / Partner Network



Terrestrial Telecom Network

How subscribers are expected to use SpaceMobile

Significant flexibility in go-to-market strategy, with multiple potential ways for cellular subscribers to access more and better connectivity

Day Pass (Broadband)

- Subscribers receive a text on their phone asking if they would like to turn on SpaceMobile service

Monthly Add-on (Consumer)

- A fixed monthly rate to add SpaceMobile as a supplemental service to existing cellular plan
- Automatically connect with SpaceMobile's network upon entering an area without cell tower coverage

Monthly Add-on (Enterprise)

- Same as consumer, but with more data targeting power users

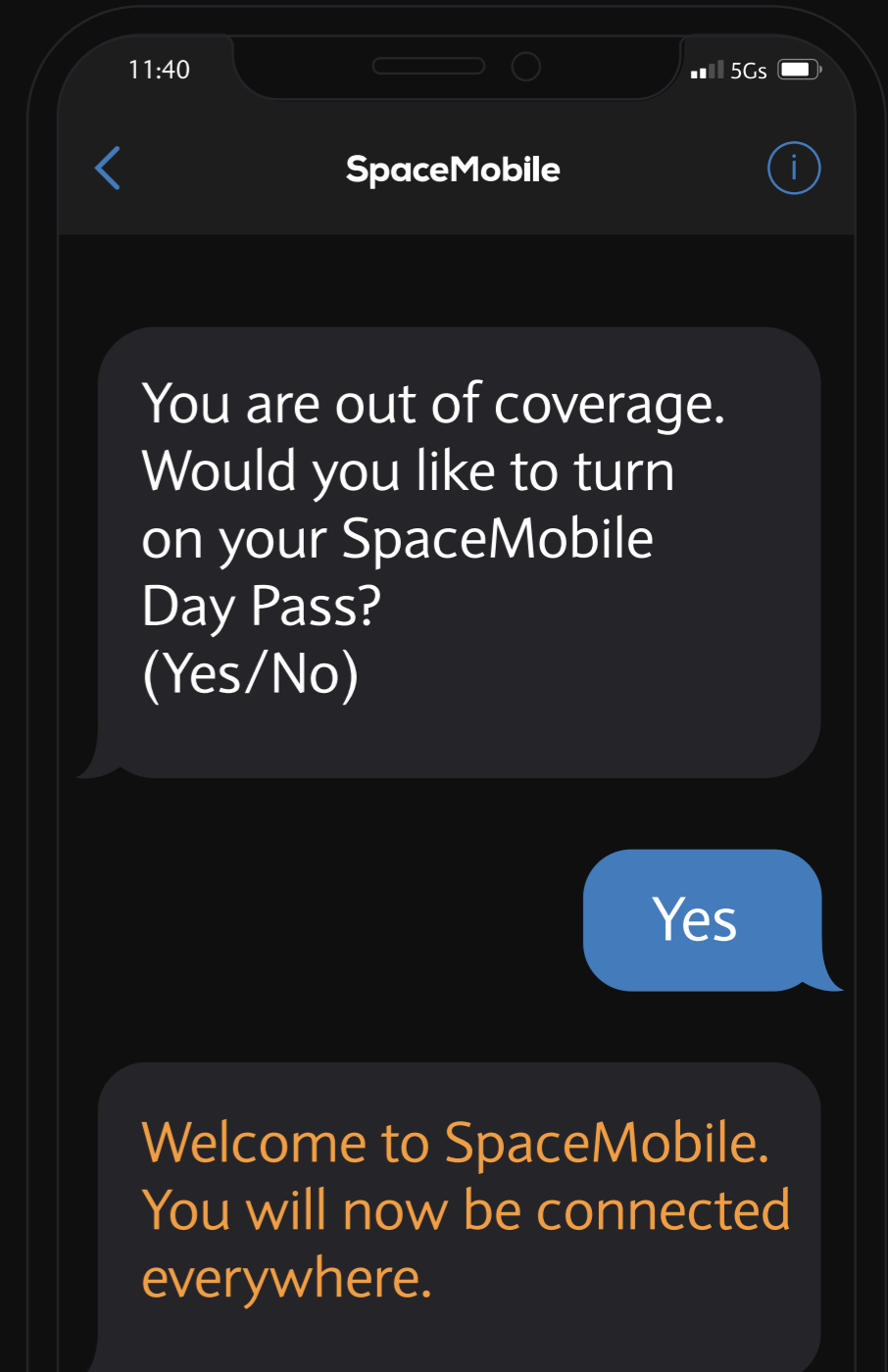
IoT (Internet of Things)

- Uplink / downlink for cellular compatible IoT devices, for areas with poor terrestrial connectivity

Emergency Connection

- Subscribers would use SpaceMobile during emergencies and natural disasters when terrestrial networks are not nearby or have failed

Service designed to be compatible with the 5.5 billion existing mobile phones and devices in use globally today

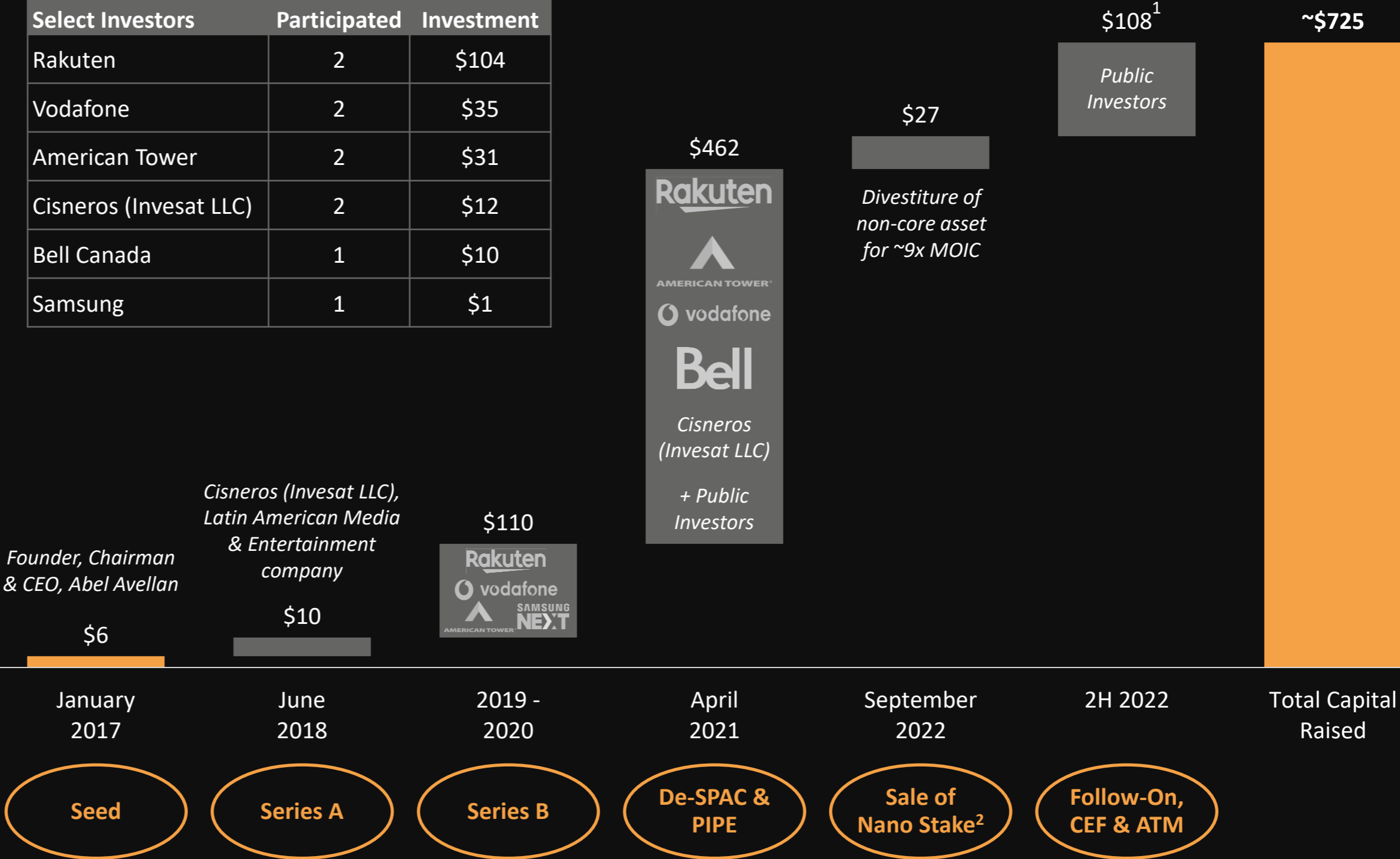


Funding history

Carefully managed funding strategy in line with company milestones

Total Investment (\$M)

Select Investors	Rounds Participated	Total Investment
Rakuten	2	\$104
Vodafone	2	\$35
American Tower	2	\$31
Cisneros (Invesat LLC)	2	\$12
Bell Canada	1	\$10
Samsung	1	\$1



1. Representative of \$75 million of gross proceeds from November 2022 follow-on offering, \$13.4 million of net proceeds from committed equity facility as of December 31, 2022, and \$20.0 million of net proceeds from at-the-market offering program as of December 31, 2022.
2. On September 6, 2022, AST SpaceMobile completed the sale of its 51% interest in its former subsidiary, NanoAvionika UAB ("Nano") for net proceeds of approximately \$26.6 million

ASTS

share count

Shares ¹	millions	Comment
Class A common stock	71.9	Publicly-traded shares
Class B common stock ^{2,3}	50.0	Series A / B shares
Class C common stock ^{2,3}	78.2	Abel Avellan ⁴ shares
Total basic shares	200.1	

Other ¹

Public warrants	11.5	\$11.50 exercise price
Sponsor warrants	6.1	\$11.50 exercise price
Incentive equity ⁵ / stock options and RSUs	16.2	Management grants outstanding as of 12/31/2022

1. Basic share count as of March 28, 2023. Warrants, incentive equity options, and RSUs as of December 31, 2022.
2. Following the Business Combination with NPA on April 6, 2021, the Company was organized as an umbrella partnership-C corporation ("Up-C") structure. As a result of the Up-C structure, the Company is a holding company and, accordingly, all the business of AST is held directly by AST LLC, of which we are the managing member.
3. The Class B and C common stockholders own economic interests in AST LLC which are redeemable into either shares of Class A common stock on a one-for-one basis or cash at the option of the Election Redemption Committee. See AST's Quarterly Report on Form 10-K, filed with the SEC on March 31, 2023, for additional detail.
4. Mr. Avellan has historically asked not to be paid any base salary in excess of applicable minimum wage requirements under federal law and, as such, has received substantially below-market base salary. Effective as of the completion of the Business Combination, Mr. Avellan is not receiving any base salary from the Company.
5. Includes 11.0 million AST LLC 2019 Incentive Equity Options. Except as otherwise provided by the AST Board of Directors, each AST Incentive Equity Unit will be redeemable for one share of Class A Common Stock on the later of April 6, 2023 and the six-month anniversary of the vesting date.

