

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

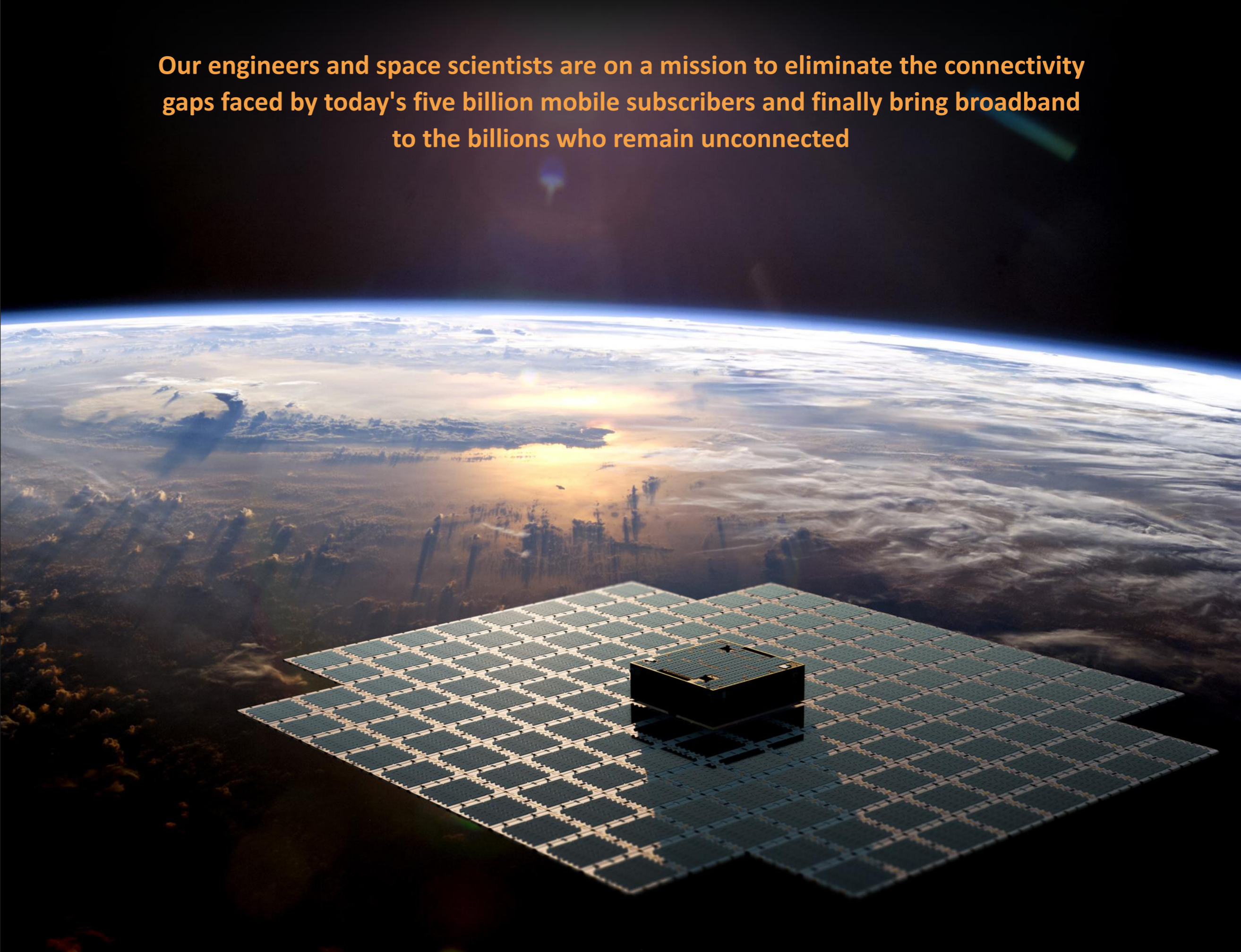
**BEREC Presentation**

April 13 2023

Vikram Raval Head of Global Regulatory Affairs

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

Our engineers and space scientists are on a mission to eliminate the connectivity gaps faced by today's five billion mobile subscribers and finally bring broadband to the billions who remain unconnected

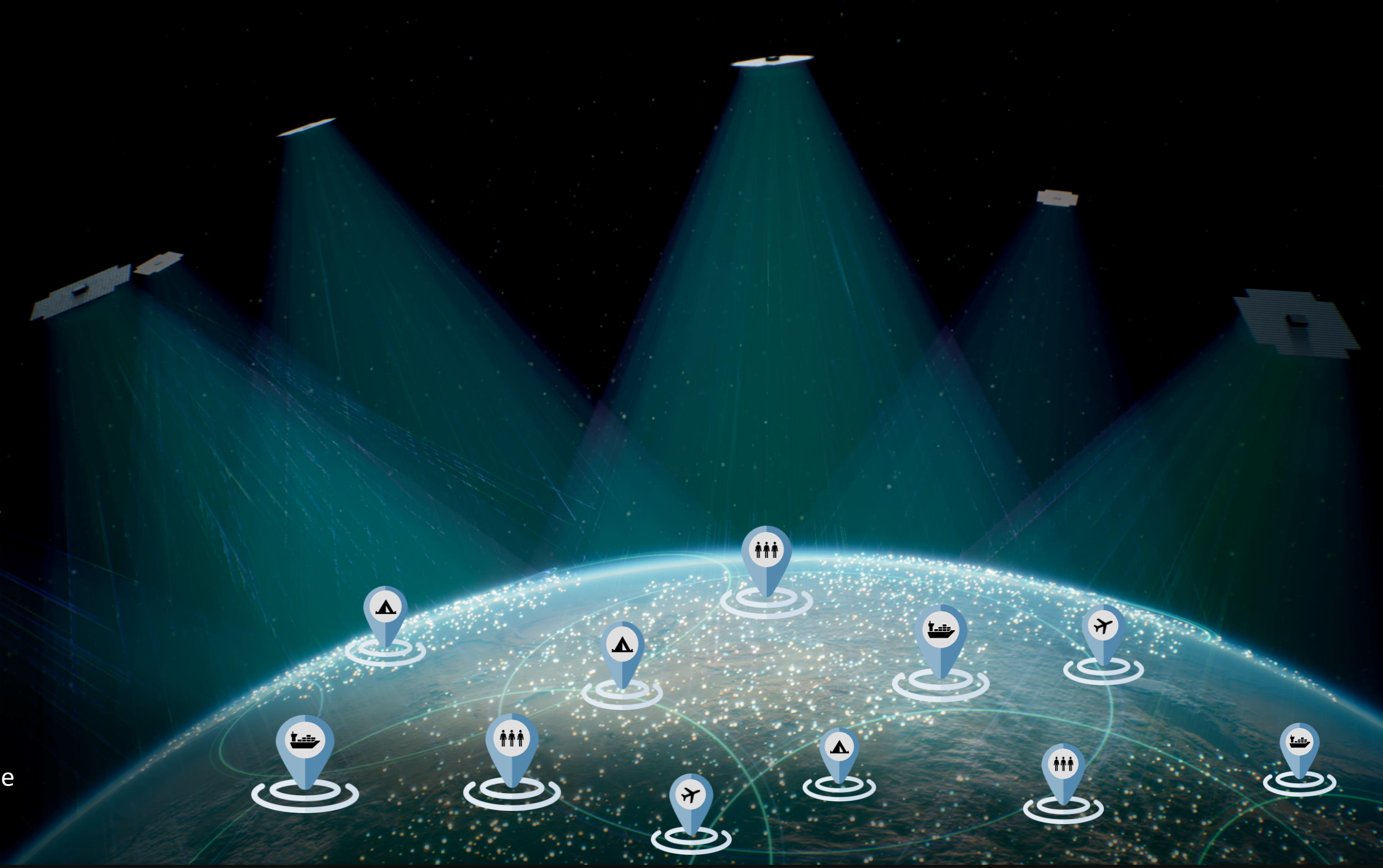


# Transforming connectivity with direct-to-cell technology (5G + LTE)

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



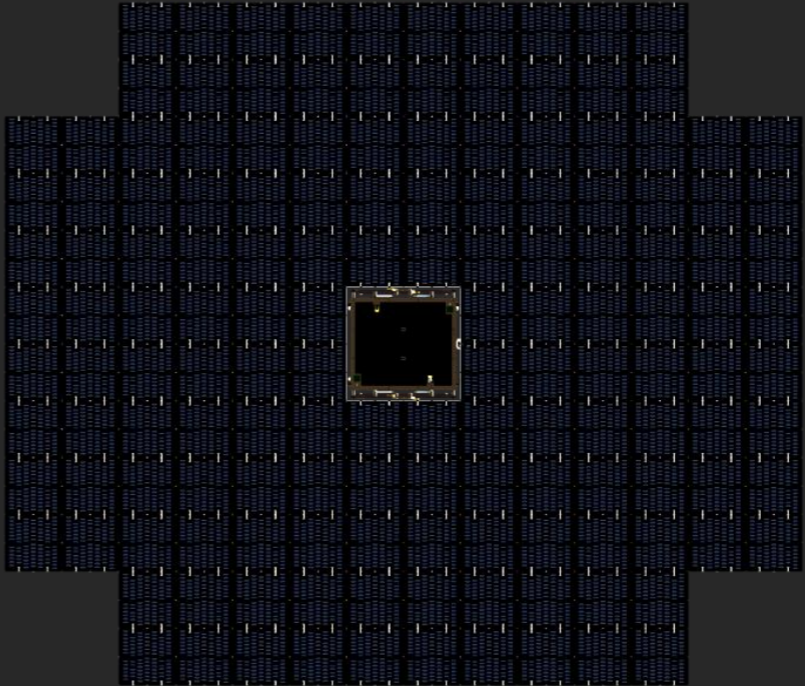
# AST SpaceMobile technology solution

## Differentiated approach compared to existing space-based communications

	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+)
<b>End Users</b>	Mass market mobility and the unconnected	Narrowband service on satphones	Enterprise, Maritime, Aviation, Government, Residential

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

SpaceMobile network designed to closely mirror terrestrial cellular architecture



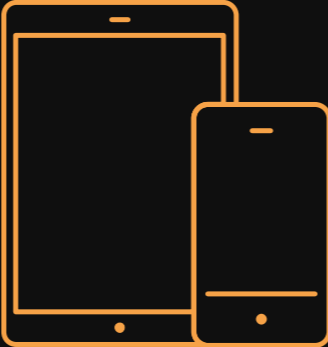
Satellites in low Earth orbit will offer low-latency and attractive look angles

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



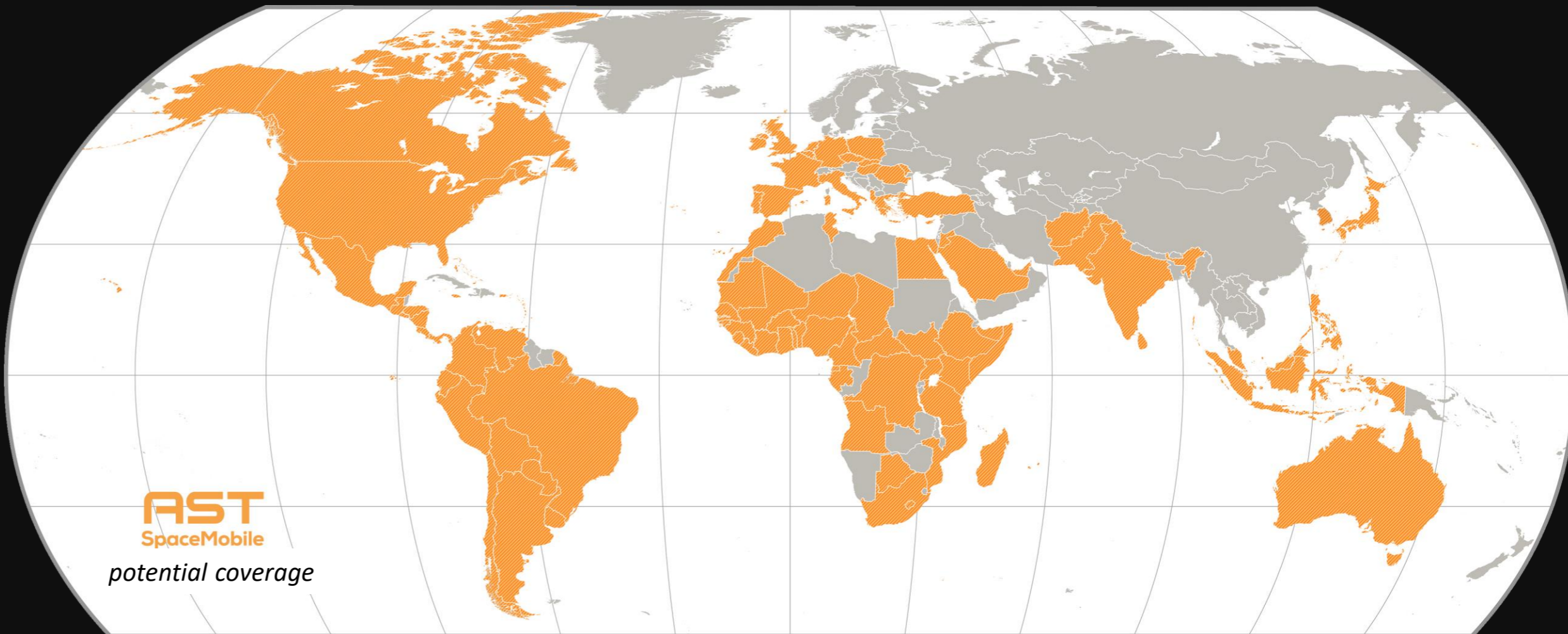
Gateways / Partner Network



Terrestrial Telecom Network

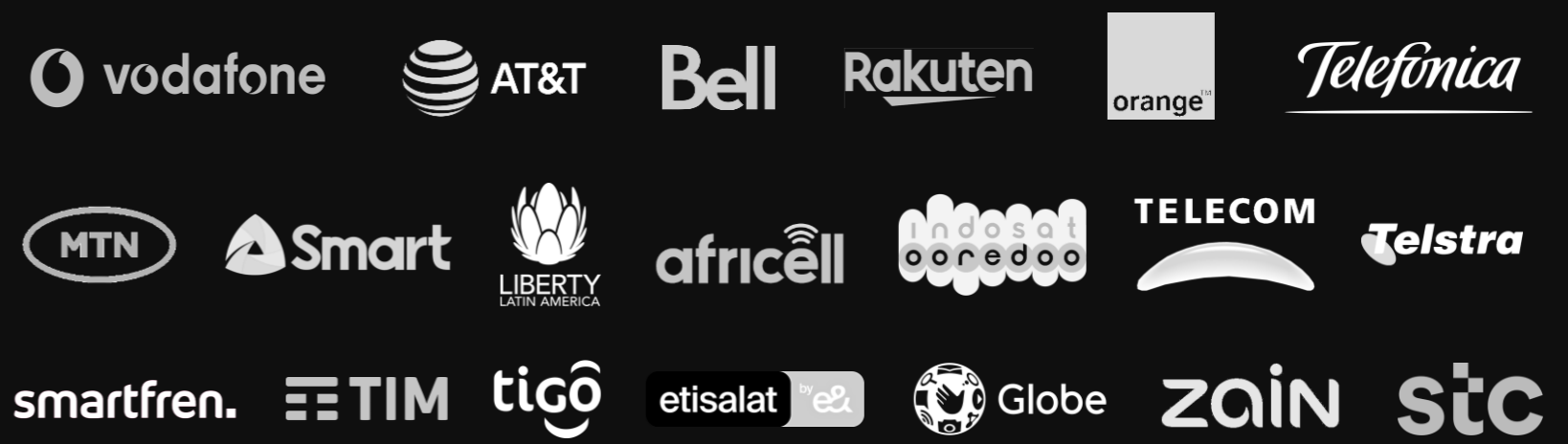
Mobile Network Operators (MNOs) are investors, partners and customers

When operational, SpaceMobile service will be available to MNOs on a wholesale basis, with existing relationships



Strategic Investors

Select MNO Partners

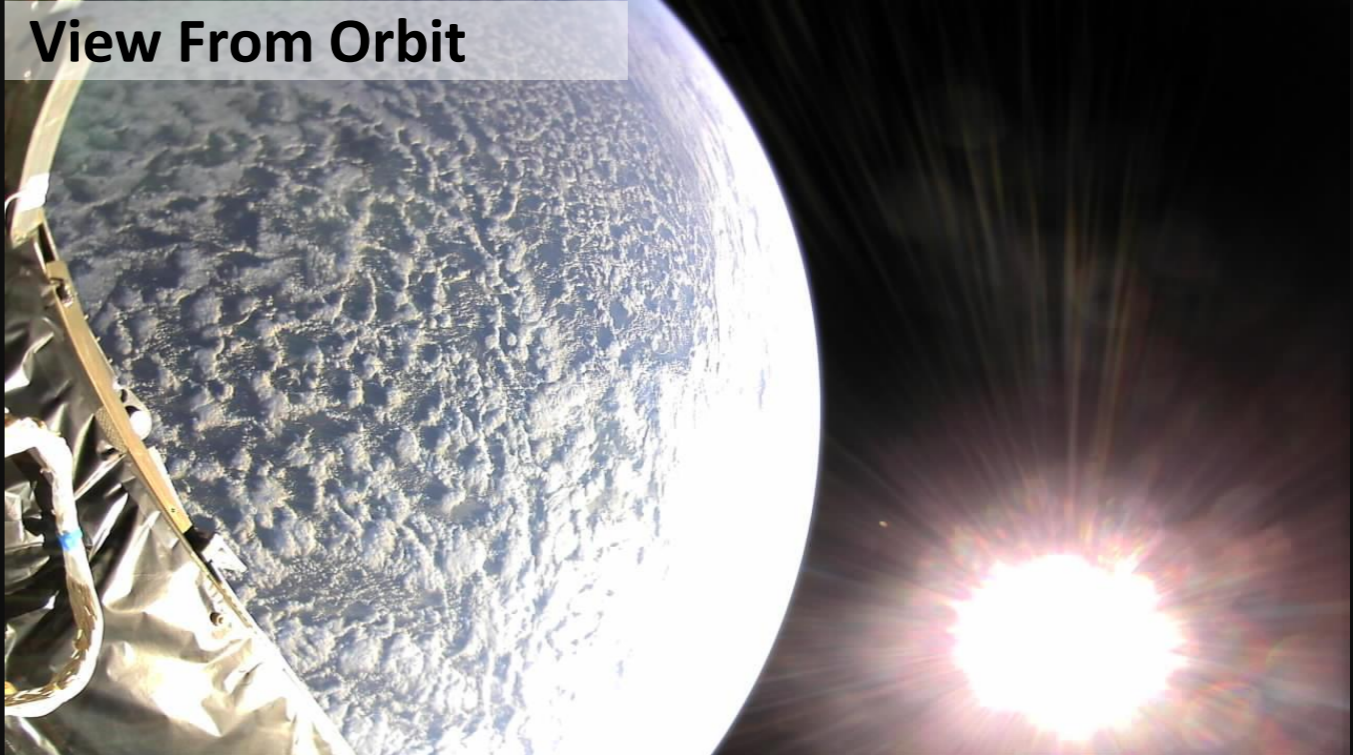


Critical, unique cellular broadband technology currently deployed in orbit

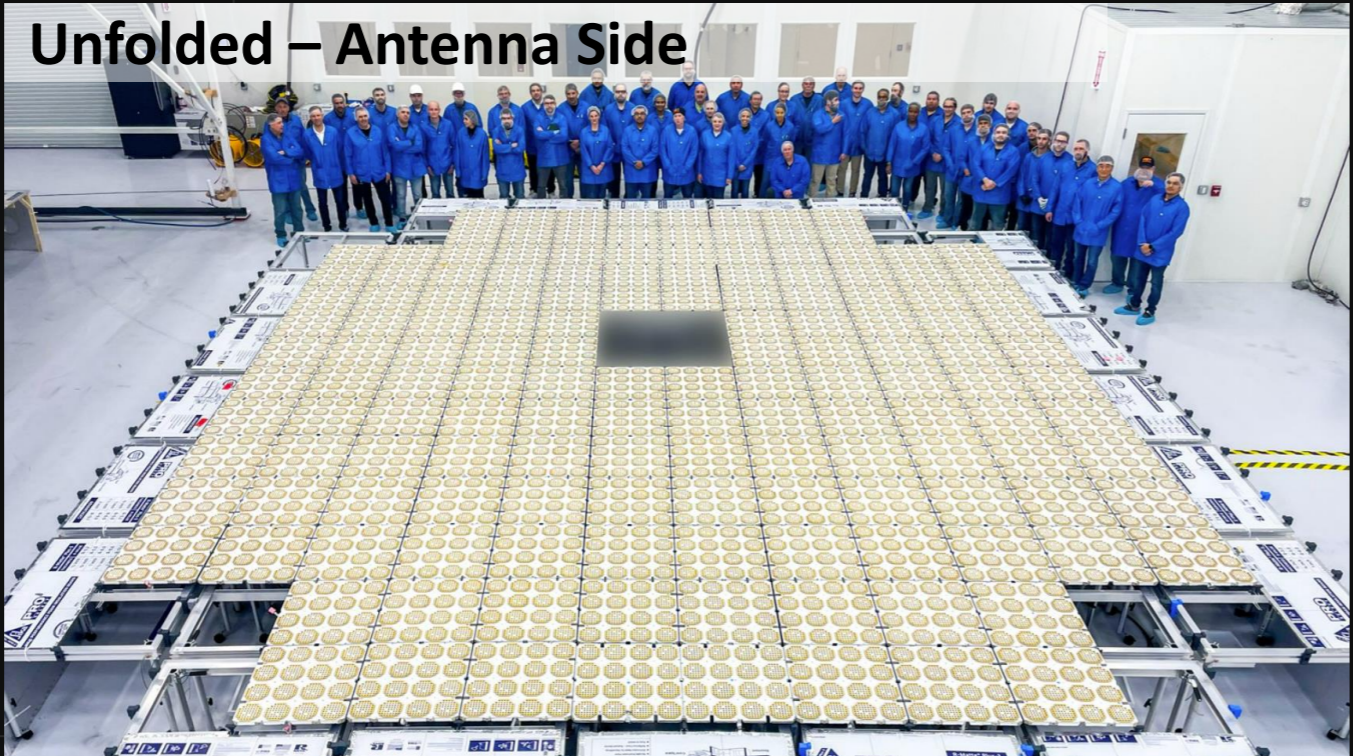
The first and only in-orbit deployment of innovative satellite technology designed for cellular broadband direct to unmodified cell phones



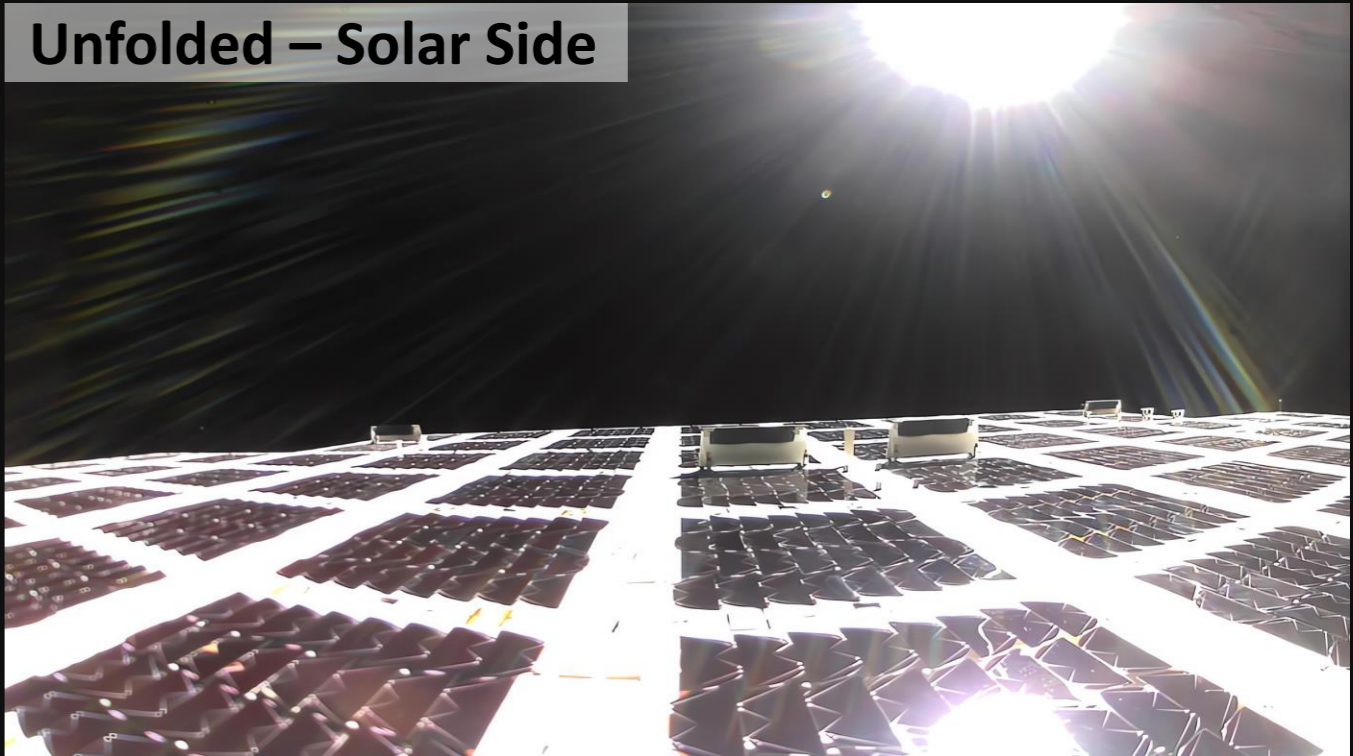
Stowed



View From Orbit



Unfolded – Antenna Side



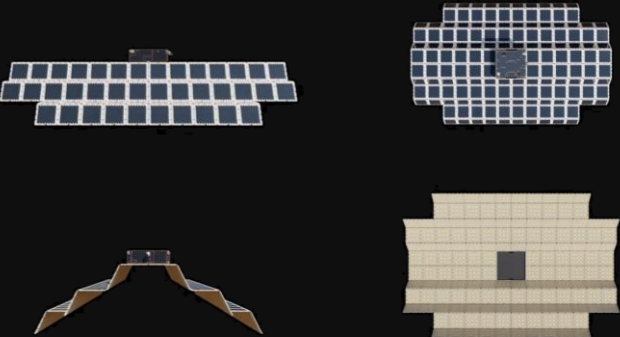
Unfolded – Solar Side

# 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



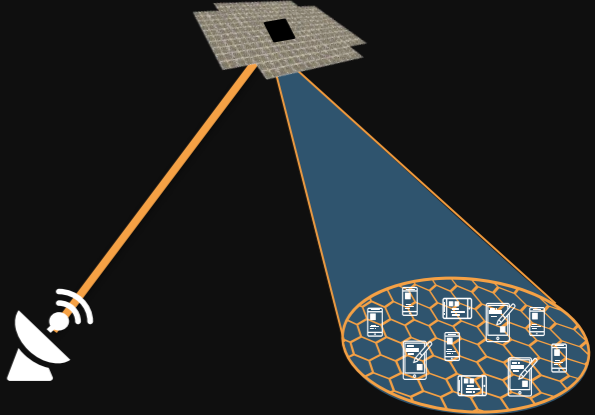
## Satellite Flight Control

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



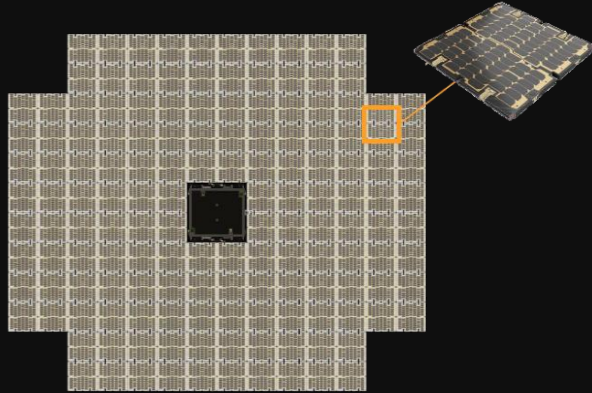
## Patented Technology

- ✓ Validated our patented doppler and delay compensation



## End-to-End Testing

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





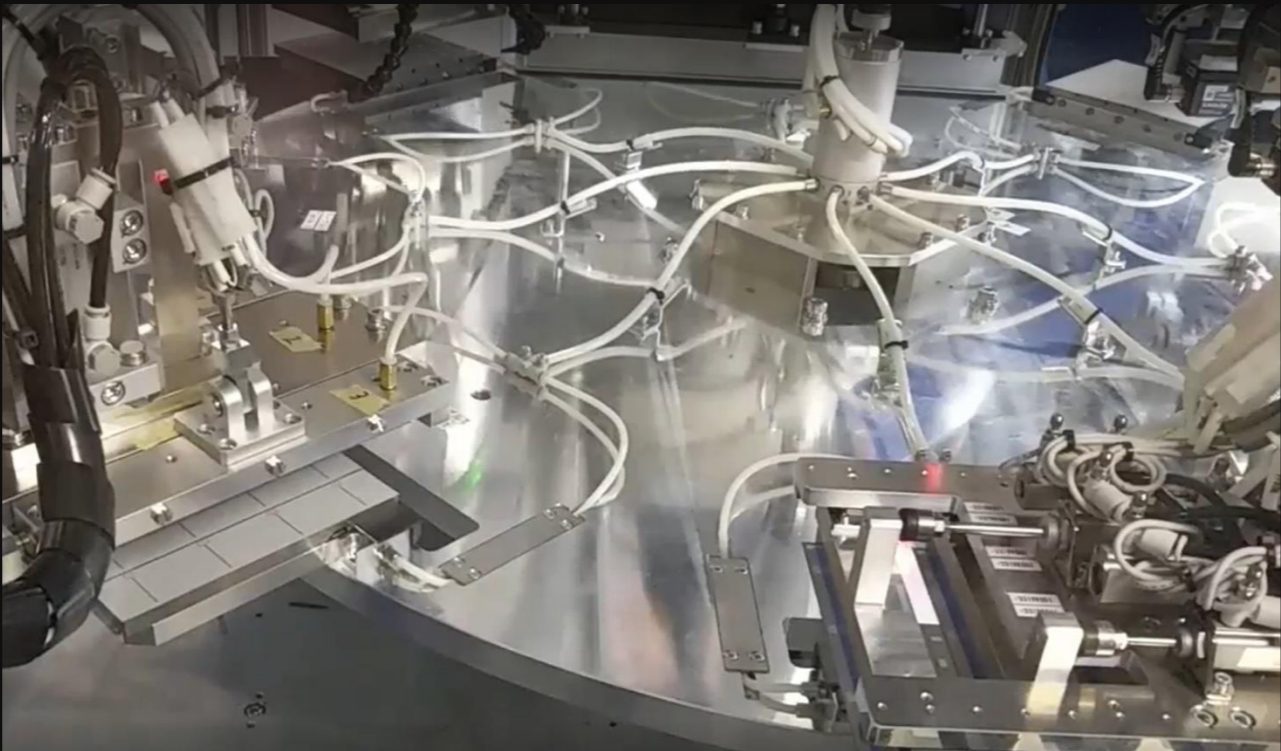
Vertically  
integrated  
manufacturing to  
support rapid  
constellation build

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



# AST SpaceMobile differentiation



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



Novel technology solution applicable to mobile market to extend operators' coverage



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

