

# **AST SpaceMobile (NASDAQ: ASTS)**

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# Executive Summary

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**Share Price:** \$80.25   **Price Target:** \$119.61(15% IRR)   **Time Horizon:** 3 years

## Thesis 1 - Symbiotic Partnership Model

- AST's unique, defensible business model allows for capital-efficient hyperscalability while creating moats and BTEs
- This drives deeper conviction in higher estimates of consumer demand and ARPU, resulting in ~2x estimates for subscribers throughout projection period

## Thesis 2 - Overblown Starlink Competitive Risk

- AST's revolutionary technology is a unique engineering marvel that no competitor, including Starlink, is capable of today
- The market overstates the competitive threat from Starlink, driving an unreasonable gap between the companies' respective valuations

## Thesis 3- Significant TAM from Government and IoT unrecognized

- AST applications for government is wide-reaching with strategic partnerships and positioning to get awarded the contracts
- AST technology proven to be revolutionary for the IoT industry which is one of the high-growth industries

# Company Overview

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# Business Overview

*AST SpaceMobile is building the first and only global cellular broadband network in space to be accessed directly by everyday smartphones, affecting 32% of the population without cellular broadband & 5.5bn existing mobile subscribers*

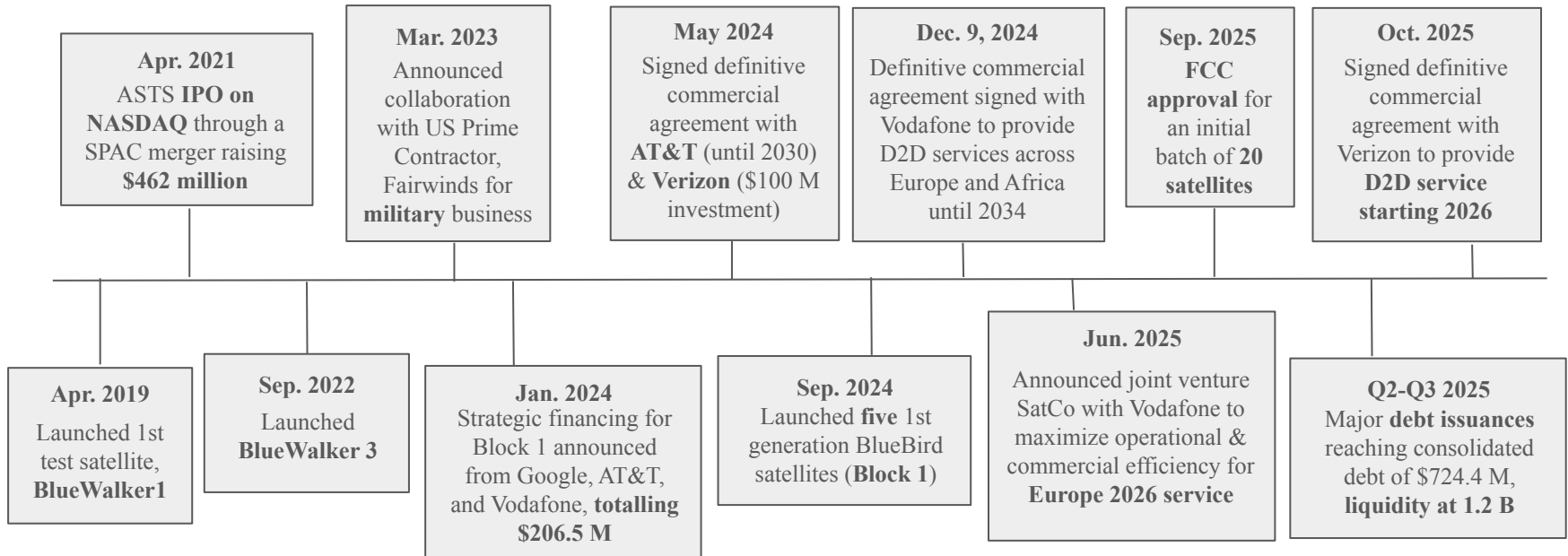
## Overview

- AST is a pioneer in the Direct-to-Device (D2D) satellite industry, providing cell tower services to **unmodified devices** using satellites in Low Earth Orbit (LEO)
- The company, founded in 2017 by Abel Avellan, has a B2B2C business model and is at a major inflection point as commercial service is set to begin imminently
- **Board:** CTO of American Tower, Directors from AT&T, KKR
- **Strategic investors:** AT&T, Google, Vodafone, Verizon, Rakuten

## Select MNO Partners



## Company History



# Business Overview

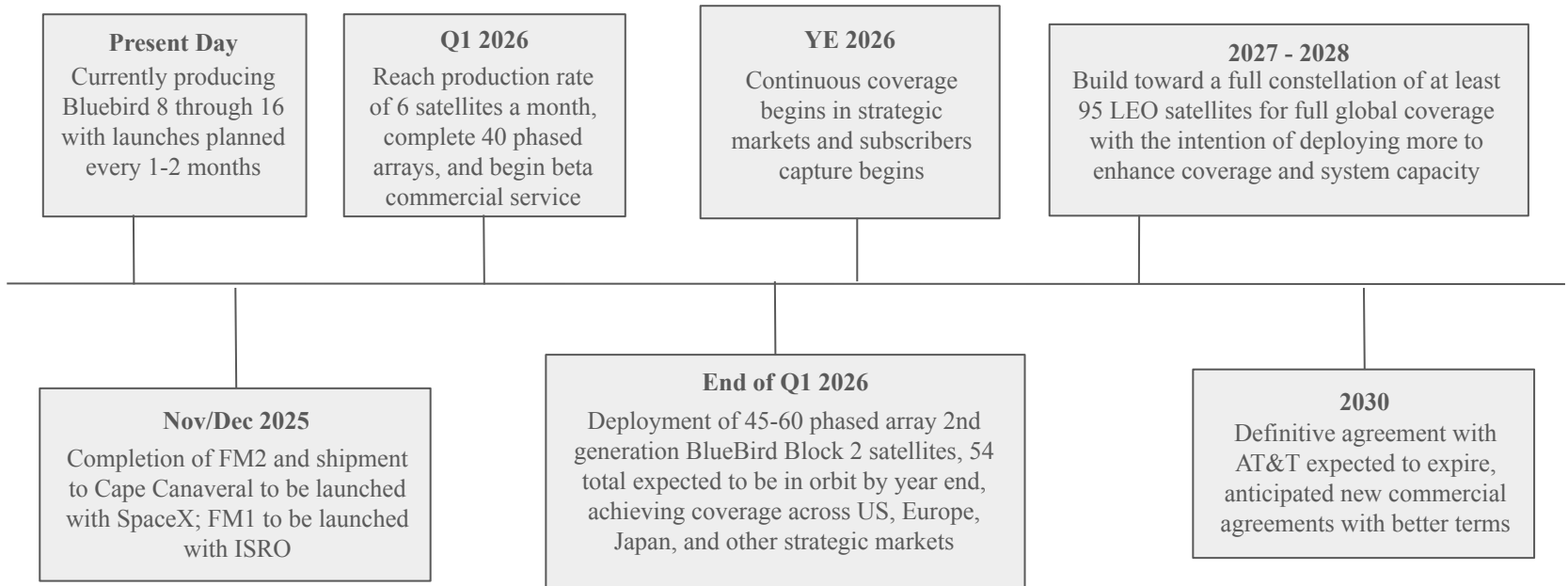
*AST SpaceMobile strives to make cellular coverage without dead zones a reality, providing a service that works with existing terrestrial network coverage and enhances its efficacy*

## Future Applications

- Goal of deploying Flight Model 2 (FMS) the second block of the BlueBird series, **45-60 satellites by the end of 2026** for commercial usage
- **Technology disruption:** AI, remote IoT (farm machinery, oil rigs), autonomous vehicles
- **Market dominance** in an emerging market with massive TAM, has already secured a dominant share of early telecom deals



## Manufacturing/Production Roadmap



# Costs Overview

*AST SpaceMobile has signed a multi-launch contract with SpaceX, ISRO & Blue Origin responsible for the deployment of their BlueWalker 3 satellites, Bluebird Block 1, and the satellites of Bluebird Block 2*

## Manufacturing & Launch Costs

- Post making supply chain resilient each Bluebird satellite costs **\$21-23 million** to manufacture and launch
- **\$1.3 billion** is needed to fund the full 2026 deployment of Block 2 satellites
  - AST raised \$1.1 billion as of April 2025 and with a recent \$575 million in a convertible debt offering, ASTS now has over **\$1.5 billion in balance sheet liquidity**

### Launch Cost

- Falcon 9 can be modified to take **6 BlueBird satellites with every launch** and Blue Origin's New Glenn rockets allow for **8 satellites per launch**
- Current cost of a commercial Falcon 9 launch is **\$69.85 million**, but AST can reuse boosters which would save them \$15 million with every booster reused
  - Can be reused up to 31 times
- Blue Origin launch cost is around **\$110 million**, making the cost per satellite \$13-14 million



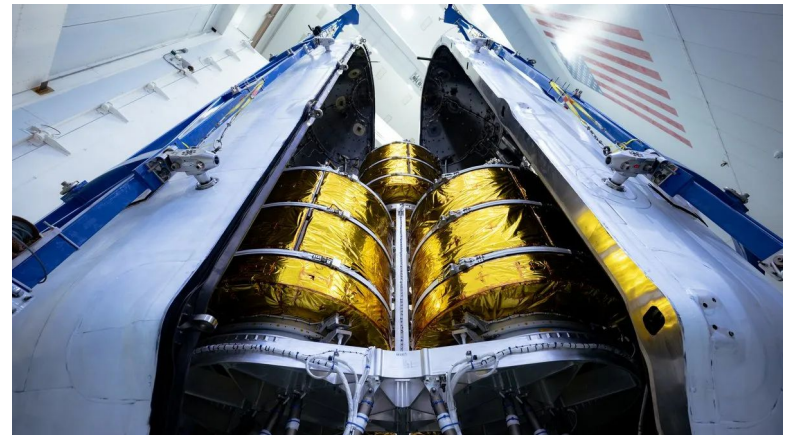
## Launch Contracts

### Completed Launches

- Launch of BlueWalker 3 cost AST \$22.75 million
- The launch of Block 1 with SpaceX Falcon 9 cost ASTS \$52 million dollars and launched 5 satellites simultaneously

AST has contracts to **launch up to 60 satellites** through Blue Origin, SpaceX and ISRO in India, **providing redundancy in launch operators**

- Contract with Blue Origin states that they can launch up to 8-10 times annually through 2028
- Management indicates capacity for the launch of 45 satellites and up to 60 is secured for launch



# Industry Overview

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# Drastic Transformation in Satellite Economics Make Space Infrastructure Viable

*Over the past 20 years there has been unprecedented cost reductions in both manufacturing and launch services*

## Launch Cost

- The cost of launch to LEO has been reduced by a factor of 10 or 20.
- Launch data from 2000–2020 found **an average 5–6% yearly decrease in launch cost per kg**
- **With rocket recovery and reuse providing additional cost savings of 30 to 50 percent and number of competitors providing rocket launch**

Conventional launch vehicles:  
\$10k–\$20k per kilogram to LEO  
Space shuttle much higher at  
\$62k/kg to LEO

SpaceX's Falcon 9 rocket  
+ an advertised price:  
~\$2,700 per kg to LEO

Falcon Heavy reduces it by  
half to \$1.4k/kg

2000s

2010s

2020s

## Manufacturing Cost

- More efficient:
  - Between 2013 and 2021, **the throughput (data rate) per kilogram of satellite weight increased about 6×** as operators deployed high-throughput (HTS) and very-high-throughput satellites (VHTS) with advanced spot-beam technologies [csp.aerospace.org](https://csp.aerospace.org)
- Decreased average mass of satellites in orbit
- Reduced unit costs and shortened build times for satellite hardware

- **Cost to produce a given amount of satellite capacity has dropped by roughly 90% in the past decade.**

# Terrestrial Network Limits Create Permanent Coverage Gaps Only Satellites Can Bridge

## Megatrend 1: The Mobile-First Internet Revolution Create Strong Demand for Mobile-Cellular Data

### Necessity

64% of global website traffic comes from mobile devices in 2025.

5.81bn unique mobile users exist (70.7% of global pop.), and increasing each year.

### Recession Resilient

During the 2008 financial crisis, mobile subscriptions continued growing globally.

*“Despite the economic downturn, current global ICT developments are unlikely to change drastically, given the pervasive nature of information and communication technologies”*  
— Analyst during 2008 Financial Crisis

### Explosive Growth

Internet Consumption and mobile-cellular subscription (>20 % CAGR 2007-2023) has seen explosive growth.

Active mobile broadband has achieved 94.6 subscriber per 100 people (up from 0 in 2005)

## Megatrend 2: A Permanent Infrastructure Gap That Only Satellites Can Bridge

### Current Cell Tower Solution

**High initial costs** of cell towers dramatically slow down connectivity expansion in the developing world

**Traditional terrestrial tower networks will never reach full global coverage**, as there are no economic incentives to expand into low-population-density and low-income areas

### Traditional Satellite Solutions

*“If you’ll recall, traditional satellite services, offered by **companies like Iridium**, require users to purchase expensive, specialized satellite phones or dedicated hotspot devices. These devices are often bulky, have a user experience distinct from modern smartphones, and come with high-priced service plans, relegating their use to government agencies, maritime operations, and niche enthusiasts like hardcore wilderness adventurers.”* — AST material

**Didn’t catch the megatrend of lowered space economics and got bankrupt**

**With increasing demand of mobile connectivity, universal connectivity will be needed in the future.**

**The physics and economics of terrestrial networks create permanent coverage gaps that only “new” satellite solutions can bridge.**

**→ AST sits at the center of these megatrends and is perfectly positioned to complete humanity's transition to universal connectivity**

## Competitive Landscape

*For decades, satellite communication has been a viable but niche solution constrained by significant BTE for both the average consumer as well as new entrants from attempting to offer broadly applicable solutions*

	Legacy Offerings			New Generation Solutions	
	GlobalStar	Iridium	Skylo	AST	Starlink
Enterprise Value	\$4.1 Billion	\$3.7 Billion	\$515 Million	<b>\$28 Billion</b>	\$300 Billion
Target Market	Proprietary Satellite Data <b>for Apple 14</b> Handsets and Higher	Proprietary Satellite Data <b>for Iridium</b> Handsets and Select IoT Devices	Proprietary Satellite Data for <b>Select Google and Samsung</b> Handsets	<b>Cellular Broadband to Existing Mobile Handsets</b>	Cellular Data to <b>Select Handsets that Support 1.9GHz Spectrum</b>
Functionality	Emergency SOS and iMessages	Voice, Data and Texting	Emergency SOS and Texting	<b>Full Broadband Data, Voice, Texting</b>	Texting and Data
Targeted Per Device Speed / Latency	<b>9.6 kbps</b> “Up to 256 kbps Gen 2 Sats” Latency: <b>15 seconds</b>	<b>176k–704 kbps</b> Latency: <b>3-10 seconds</b>	<b>50–256 bytes per second</b> Latency: <b>5-15 seconds</b>	<b>&gt; 35 mbps</b> <b>&lt; 30 ms</b> <b>(Will Improve When Ligado Deployed)</b>	<b>&lt; 5mbps</b> <b>&lt; 30ms</b> <b>(Will Improve With AWS-4 Deployed)</b>
Peak Speed	?	?	?	<b>21 mbps</b>	17mbps
Communication Array Size	Gen-2: Estimated at <b>2 Sq Meters</b>	Iridium NEXT: <b>4 Sq Meters</b>	Depends on which GEO Service is being used	<b>BlueBird Block-1: 64 Sq Meters</b> <b>Block-2: 200 Sq Meters</b>	Gen V2: 6.2 Sq Meters <b>Gen V3: 25 Sq Meters</b>
Pricing	2 Years Free, Subscription Thereafter	Emergency Service: “Low or No Cost” Texting: Something Similar to Garmin at \$11.95 / Month	\$6 / Month	<b>Bundled with Premium Plans / Add On for Lower Tier Plans \$10–15 / Day Pass \$2–6 / Month in Underserved Countries</b>	“Free” for Premium Plans \$10 / Month Introductory \$15 / Month Regular
Offering Day	Q4 2022	NA	Summer 2025	<b>Late 2025</b>	Q3 2025

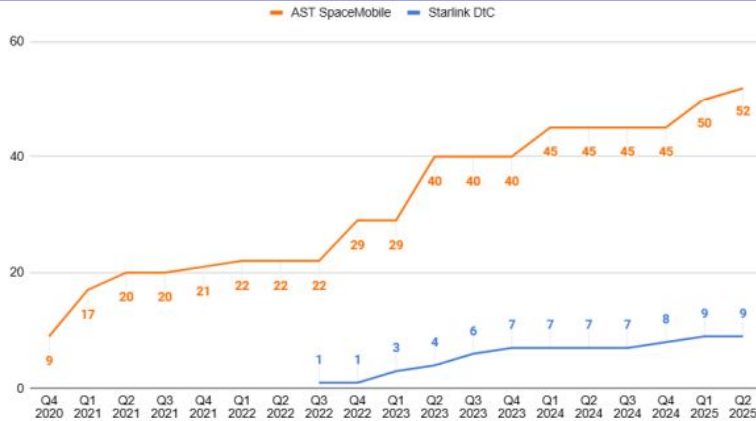
# **Investment Rationale**

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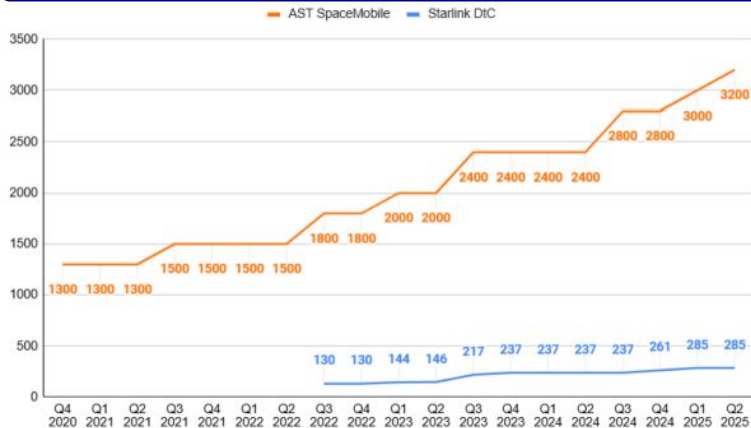
# Thesis 1 - Symbiotic Partnership Model

*AST's unique 'super wholesale' go-to-market strategy is inherently a multi-tenant business model that boasts economies of scale and reinforcing barriers to entry*

## MNO Partnerships



## MNO Subscribers TAM



## Benefits to AST

- **MNO-First Approach:** As a symbiotic ecosystem partner, AST has established overwhelming dominance in global MNO market share while Starlink has stagnated
- **Capital-Efficient Hyper-Scalability:** Through a B2B2C business model, AST partners with MNOs and can leverage their scale, brand recognition, and marketing muscle
- **Commercial BTE:** Without access to the MNO customers and their spectrum, new entrants cannot justify the fixed costs for building LEO constellations

## Benefits to MNOs

- **Ubiquitous Coverage:** Through AST, MNOs can promise consistent, high-performance coverage anywhere, improving customer retention and acquisition
- **New High-Margin Revenue:** D2D service will provide ARPU uplift while generating massive CapEx / OpEx savings
- **Widening Moats:** Improving reach, cost structure, product offerings, and competitive generates **network effects** that compels carriers around the world to join AST's platform

**As a first mover that has already secured a dominant share of early telecom deals, AST is ideally positioned to be a winner-take-most player and holds a competitive position that will be nearly insurmountable to dislodge**

# Thesis 1 - Symbiotic Partnership Model

## What The Market is Getting Wrong

- Multiple analysts assume AST achieves **25% D2D market share** in the base case, sharing with Starlink, Apple/Globalstar, EchoStar, ViaSat and Kuiper
- TAM estimations are **orders of magnitude lower** than the true opportunity, ignoring unconnected population and underestimating connected TAM
- Mischaracterization of AST's service as a mere utility rather than an **'insurance policy' against connectivity gaps**—a powerful driver of purchasing decisions

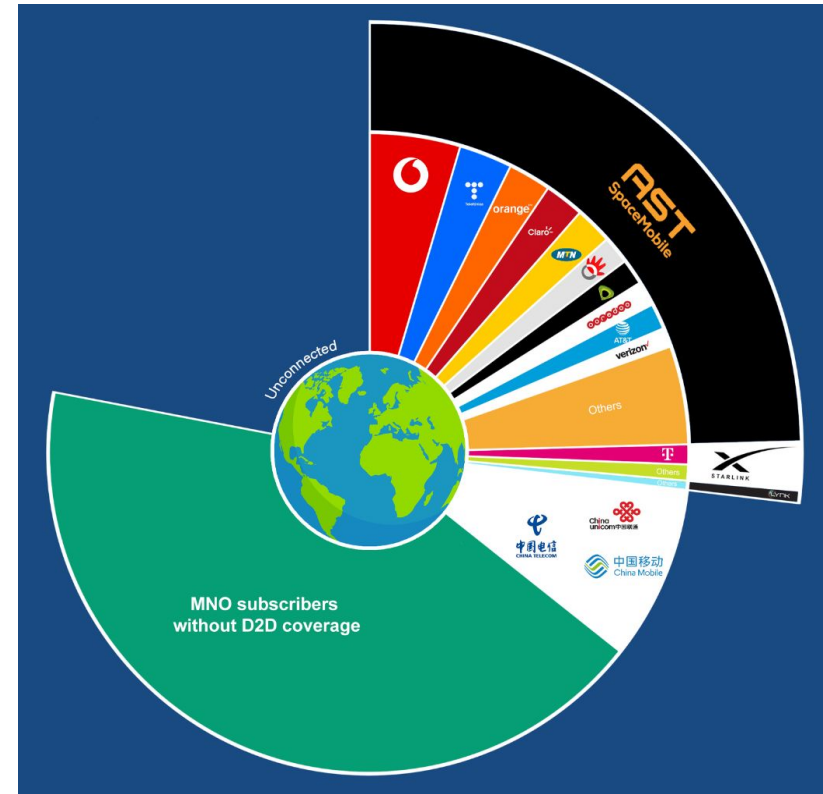
### AST SpaceMobile, Inc. Commercial TAM Framework

Revenue Per Pass (Daily/Weekly)	\$10
Number of Times Pass Is Used Per Year	5
Total Devices (millions)	5,600
Penetration	4%
Revenue Share	50%
<b>Commercial TAM (\$ millions)</b>	<b>\$5,600</b>
Estimated Market Share	25%
<b>Revenue Opportunity (\$ millions)</b>	<b>\$1,400</b>

Sources: William Blair Equity Research

*Note: Our base case assumptions imply greater market share, greater # of Times Pass is Used and higher penetration*

## MNO Subscriber Bases



& we're **A**ll in on those beautiful waffles 🍷🍷🍷

**AST SpaceMobile** @AST\_SpaceMobile · Oct 28

We welcomed @ATT Chairman and CEO John Stankey to Midland for a firsthand look at the rapid development of our next-gen BlueBirds.

## Thesis 2.1: Overblown Starlink Competitive Risk - Commercial

*Starlink loses on every front—simply put, AST SpaceMobile is a fundamentally better business*

### 1. Weaker economic engine

- Starlink is absolutely dominant in non-terrestrial fixed broadband and operates a hardware-centric, **direct-to-consumer business model** that requires **substantial upfront and ongoing capital**
- Each new subscriber in fixed broadband demands a dedicated dish and router, which requires complex supply chain logistics and scales customer acquisition **only one installation at a time**
- Comparing to AST, **this is an inferior business model with worse economics** as it is **more capital intensive** and several orders of magnitude **more complex**



### 2. Much smaller whitespace for growth

- AST's technology can seamlessly connect to offer mobile broadband directly to **unmodified mobile devices**, avoiding the need for specialized equipment like satellite phones, unlocking a massive, multibillion-dollar global TAM
- For Starlink, consumers are required to purchase ~\$599+ of expensive new hardware (eg. for a new router and a large, fixed terminal) or pay a higher recurring monthly fee to adopt the service (fixed and non-T-Mobile D2D wireless customers)
- Starlink's **added friction** and **required changes in user behavior** drives down adoption relative to what is possible with AST, and the fixed broadband business is structurally unable to connect everyone in the world at affordable costs

**If Starlink can scale to \$7.5 billion in revenue within 5 years, what would a company with a larger TAM, self-reinforcing network effects, and a wholesale distribution model achieve?**

## Thesis 2.2: Overblown Starlink Competitive Risk - Technology

*AST has systematically de-risked its “impossible tech” through a series of landmark achievements*

### Milestones

**Sep - Nov 2022**  
Launch and deployed  
BlueWalker 3

**Jun 2023**  
Successful 4G LTE  
connectivity and achieved  
download speeds of 10Mbps

**Sep 2023**  
21 Mbps speeds achieved on  
BW 3; 5G calls lasted several  
minutes indoors and outdoors

**Apr 2025**  
Vodafone no-coverage remote  
Wales-Spain & Rakuten  
Tokyo-Fukushima video call

**Jul 2025**  
First-ever native voice call and  
text using AT&T spectrum and  
passing through the AT&T  
core network

**Oct 2025**  
Successful PoC for connecting  
standard IoT devices with  
BeWhere

**Apr 2023**  
Completed world’s first  
space-based 2-way voice call  
using unmodified smartphones

**Sep 2023**  
Confirmed 5G capabilities  
with a higher download speed  
of 14 Mbps

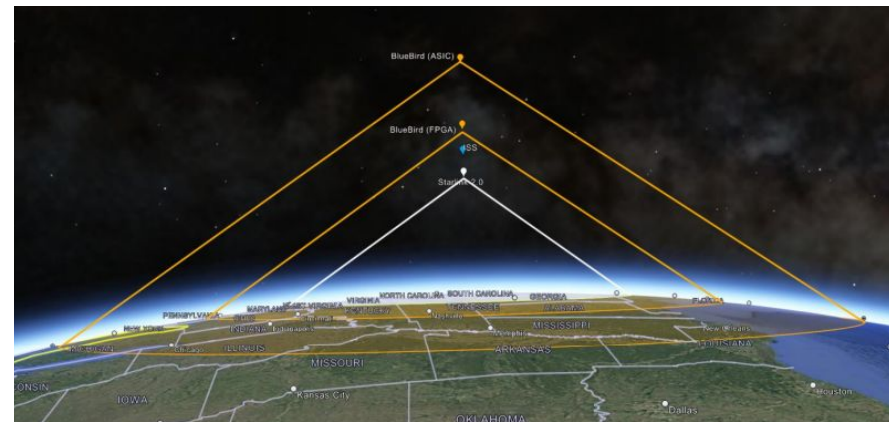
**Sep - Oct 2024**  
Launch and unfurling of  
BlueBirds 1-5 (Block 1)

**Jun 2025**  
Successful tests for  
USINDOPACOM forces,  
showcasing a key US military  
use case

**Oct 2025**  
Canada’s 1st space-based 4G  
VoLTE voice call, broadband  
data connection & video  
streaming using everyday  
smartphones

### Unique Engineering Marvel

- FCC petitions show Verizon calling into question the feasibility of AST’s proposed system; short reports also attacked the project, deeming it a ‘pie in the sky’
- AST methodically faced every key challenge with actual results, proving **its technological premise is no longer theoretical**
- Demonstrated capability to deliver **true broadband connectivity**, placing AST’s D2D platform squarely in **a league of its own**
- The core innovation lies with the **exceptionally large phased array antennas** that generate a strong enough signal to be received by the small, low-power antennas inside a typical phone



## Thesis 2.2: Overblown Starlink Competitive Risk - Technology

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*AST's purpose-built architecture and superior design forge several technical moats vs. Starlink*

### Beamforming

- AST uses advanced phased-array beamforming to focus signals on small phone antennas, compensating for Doppler shifts and lower power
- Patented protocols enable high-throughput links without phone modifications
- SpaceX has beamforming experience but has optimized its satellites for terminals; adapting for phones requires new algorithms and testing, risking patent infringement

### Mechanical Unfurling

- AST's mechanical engineering involves deploying massive foldable antennas in orbit for signal strength.
- Reliability in vacuum and temperature extremes is critical
- SpaceX deploys smaller structures and has to overcome patents
- Bigger effective area of 2400 sq ft and steerable beams deliver higher link margin to standard handsets, enabling true direct-to-device without dishes and scaling via software-defined payloads.

### ASIC

- The customer AST5000 chip processes 10 GHz of bandwidth and is radiation hardened and works with low power consumption
- The ability to transfer data and bits depends on channel size and width per beam. The cell on Starlink have smaller channel width of 5 MHz, while for the next gen bluebirds AST has 40 MHz per cell

### Software

- AST has already developed a cellular-specific stack (3GPP NTN compliant) and benefits from patents and first-mover advantage. The software handles orbital handovers, signal routing, and MNO integrations
- The software defined payload runs LTE/5G waveform with dynamic beam steering, MIMO, adaptive coding and modulation, interference and power control and over the air updates into operators' cores

AST's purpose-built architecture and superior design forges several technical moats vs. Starlink

## Thesis 2.2: Overblown Starlink Competitive Risk - Technology

“Passing through AT&T core network” vs “Starlink D2D bypasses the MNO core”

By integrating with their partners network core, AST is able to lock up the most profitable telecom markets in the world by offering its services as a seamless add-on to its ecosystem partners' 35 customers' existing mobile plan, billed directly by their trusted p adoption at all.

In contrast, SMS traffic on Starlink D2D bypass that uses a carrier-integrated messaging layer (v (Short Message Service Center). This workarou

### Downside Case:

- Apocalyptic scenario where Starlink threatens small BA market and IFC penetration only grows at a ~1% y/y clip
- Starlink takes 90% of GOGO's share for large BAs and GOGO's small/mid size share gets cut in half by 2028
- GOGO re-rates to 6.0x as market views the biz as a melting ice cube

### Base Case:

- Starlink accesses the large and mid size BA IFC market
- GOGO loses 4% y/y mid size market share and 5% y/y for large size BAs
- IFC penetration grows in line with expert projections, following s-curve
- ATG/LEO churns 2% and satellite 10% y/y

### Bull Case:

- Starlink fails to enter small/mid size BA market and GOGO only loses 10% of large BA market share
- GOGO takes 20% international share by 2028
- GOGO re-rates to a conservative 11.0x as the stock exits on mid-teens top-line growth (16% y/y in 2028)

ASTS TECHNICAL

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infrastructure that is optimized for broadband internet with its terminals using many small s aggregate capacity and redundancy. Our take is that many tiny satellites should work just fine broadband, but the fact is this: without similarly sized phased arrays its next generation V3 D satellites, the D2D service offering of T-Satellite will remain the absolute disaster it is today. I change, and Starlink pivots towards a constellation architecture much closer to AST's massive array antenna's, we'll change our minds. But even if that happens tomorrow, it will likely still years for Starlink to catch up technologically. Again, that's in the absolute best case – and ad the fact that it's Elon cracking the whip in the first place.

### BEAMFORMING

- ASTS uses advanced phased-array beamforming to focus signals on small phone

### MECHANICAL UNFURLING

- ASTS is the first to be deploying massive foldable antennas in

### ASIC

- ASTS is the first to be deploying massive foldable antennas in

### SOFTWARE

- ASTS developed a cellular-specific stack (3GPP NTN compliant) and benefits

## Thesis 2.3: Overblown Starlink Competitive Risk - Regulatory

*AST has none of Starlink's interference issues and works in perfect harmony with terrestrial carriers*

### Starlink Interference Issues

- Apr 2023: FCC announces NPRM for the Supplemental Coverage from Space (SCS), a step to establishing rules for the satellite-to-cell phone service
- Mar 2024: FCC unanimously approves SCS rules and sets a -120 dB interference limit; *Note: everyone, including Starlink, agrees to this limit*
- Aug 2024: SpaceX/T-Mobile asks the FCC for a waiver or adjustment to the limit, seeking a roughly nine-fold increase to the limit
- Oct 2024: Major carriers like AT&T and Verizon file technical objections, citing the requested increase would cause harmful interference and threaten to sue
- Nov 2024: FCC defers action on SpaceX's waiver request
- Mar 2025: FCC conditionally grants SpaceX higher interference levels
- Apr 2025: Rival satellite operators and carriers challenge the waiver and file petitions

**Bottom line:** Starlink's poorly designed and inferior D2D architecture can't comply with the FCC's SCS rules without powering down its satellites

### AST Regulatory Momentum

- Jan 2025: FCC grants Special Temporary Authority to conduct testing and move toward commercial service using AT&T's and Verizon's low-band spectrum
- Sep 2025: FCC marked the Bluebird license application as "ready for final review and decision," advancing to the final stages of full commercial authorization in the US
- SatCo expects to launch commercially across 15 member states in the EU given positioning as a sovereign European Infrastructure entity.

**AST has a clear regulatory path to operate in the US and EU**

### Data Sovereignty

- AST ensures data traffic flows directly through terrestrial partner networks, keeping data local at the ground station level and fully compliant
- Regulatory advantage over Starlink in Europe and ROW, as Starlink routes traffic through its own satellite-controlled network, raising a host of regulatory and security concerns

"[AST] is a completely sovereign satellite solution ... as opposed to some other solutions. Your data may not be staying in Canada—who knows where it's going?"

**Blaik Kirby, Bell Canada President of Consumer and SMB**

# Thesis 3

*Unrecognized TAM in the form of Government Contracts and IoT potential*



**CONNECTING MILITARY PERSONNEL ACROSS THE GLOBE**

## GOVERNMENT USE CASES



**MISSILE DEFENCE SYSTEMS, RADARS, UAVS ETC.**



**FIRST RESPONDERS**

### DOMESTIC GOVERNMENT CONTRACTS

- Prime contractor for proliferated low earth orbit programme, where DoD is estimated to spend 40 billion over next three years
- Part of Defence Innovation Unit's Hybrid Space Architecture Programme
- Through FirstNet AT&T was awarded a 100 billion dollar contract over 25 years. AST will be the only space satellite network provider to ensure coverage everywhere. Received approval in may by FCC to start testing on band 14 spectrum, which is the public spectrum owned by the first responders authority.

### FOREIGN GOVERNMENT CONTRACTS

- Formation of SatCo, which has technology transfer with the aim of supporting european digital sovereignty.
- EU launching IRIS<sup>^</sup>2 Program where they aim to send 263 satellites in low orbit Total funding is 10.6 billion euros, with the aim of decreasing dependance on Starlink
- AST agreement with STC from saudi which is majority government owned, and part is to build a NOC in Riyadh
- AST agreement with Singapore's Defence Science and Technology Agency for emergency response in May 2025.

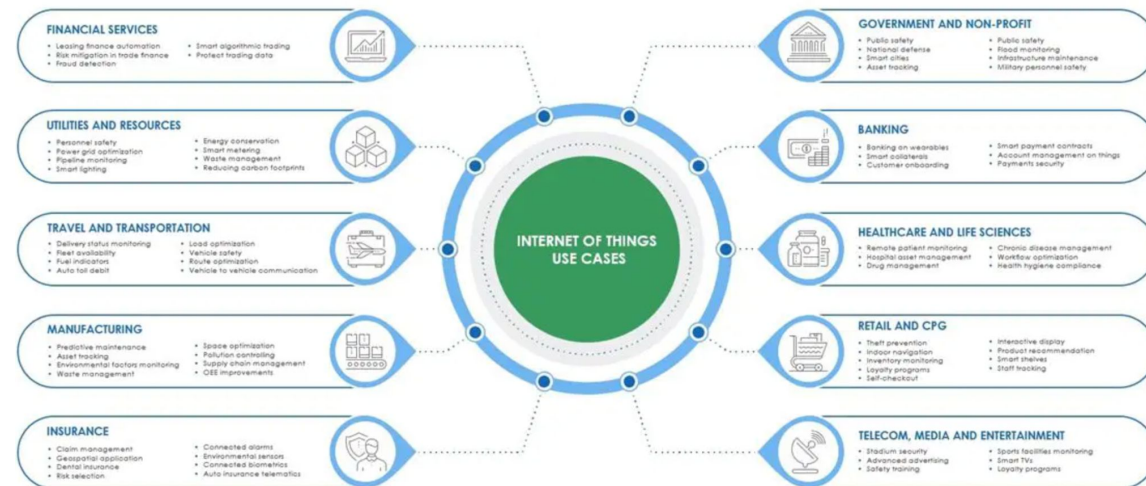
# Thesis 3

## Unrecognized TAM in the form of Government Contracts and IoT potential

18.5 B IoT devices

Only 7.5m IoT Devices  
connected to Satellites

Current Satellite  
ARPU 15x Cellular IoT

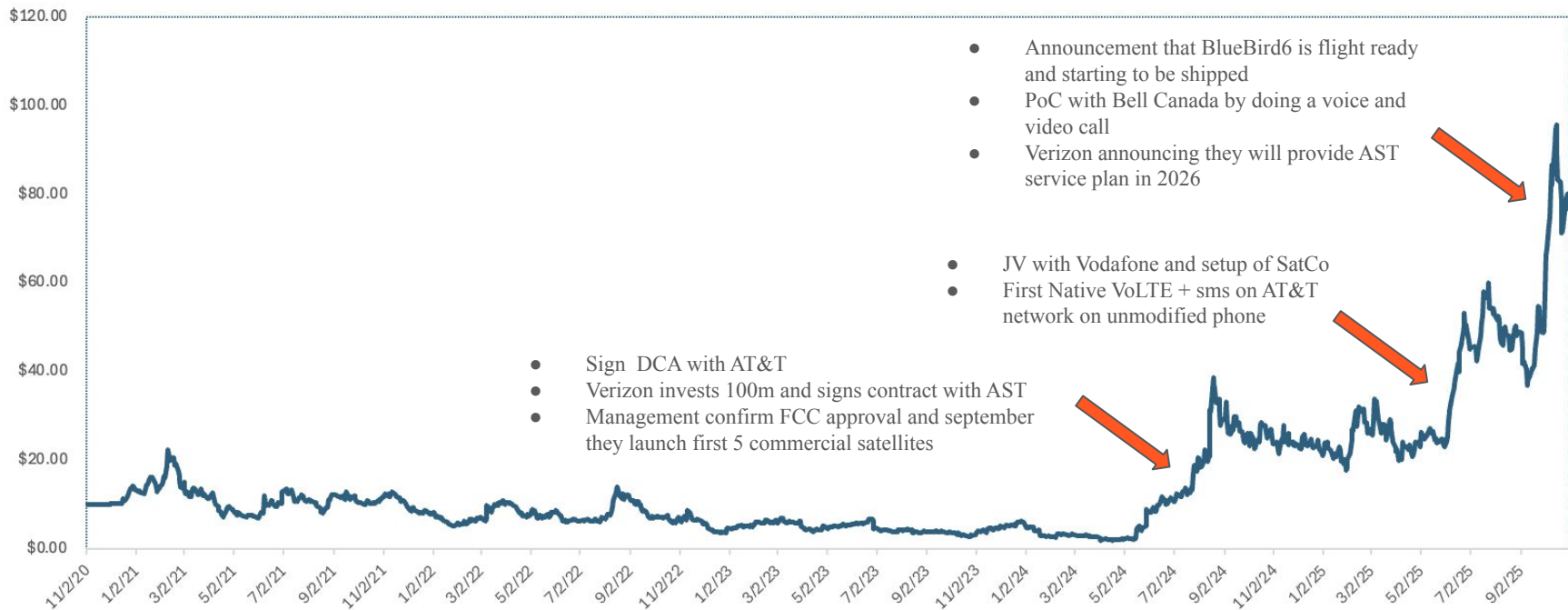


- Traditional IoT satellite providers need a satellite gateway for IoT devices to connect to but AST is the only one which IoT devices can directly connect to
- On Oct 28th: A standard, off-the-shelf BeWhere LTE IoT tracking device successfully connected to and transmitted location and sensor data directly through an AST SpaceMobile BlueBird satellite

# Set-Up

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# Investment Setup



## The Opportunity

### Recent Dip & Opportunity:

- 10/17: Barclays double downgrades ASTS to 'Underweight' and **maintained a \$60 PT, with \$120 PT Bull Case**. ASTS falls to the low 80s/ high 70s
  - 10/22: AST announces capital raise of \$1bn in convertible senior notes due 2036 at 2% coupon, with an initial conversion price of ~\$96.30/share. Stock plummets 7% in AH **due to dilution fears** and closed around \$71 (9.5% intra-day drop)
- > These create an attractive buying point
- Robust forward looking catalyst path, with major announcements expected during Q3 investors call which will result in stock shooting up

# Catalyst Path

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## Q3 Earnings (11/10/2025)

- Update on launch and manufacturing cadence for Block 2 BlueBirds
- More color on additional FCC approvals for new launches
- AT&T Commercial Ramp up with pilot programs, and more color on pricing structure
- Saudi Commercialization visibility with 170 million precommitted revenue, and additional commitments totalling 1 billion dollars over 10 years

## Q4 25/ H1 26

- FM1 launch scheduled for 1st Week of December
- Verizon and AT&T commercialization ramp up
- GTM of SatCo in partnership with Vodafone, and additional agreements with European MOCs with rumored 21 network providers haven already contacted Vodafone
- Continued launches and increase in network density with more evidence of throughput claims and dataspeed
- Government contracts with EU and the US as IRIS<sup>2</sup> and DIU's HSA programme moves forward

## Valuation & Risks

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“Never ever invest in the present, visualize the situation 18 months from now, and whatever that is, that’s where the price will be, not where it is today”

~Stan Druckenmiller

# DCF Valuation

Summary DCF									
	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E	FY33E
<b>Total Revenue (mm)</b>	--	\$323	\$1,793	\$3,386	\$4,885	\$6,192	\$7,306	\$8,227	\$9,148
<i>Y/Y growth</i>		#DIV/0!	455.2%	88.9%	44.3%	26.7%	18.0%	12.6%	11.2%
<b>EBITDA</b>	(\$262)	\$110	\$1,351	\$2,375	\$3,402	\$4,362	\$5,243	\$6,034	\$6,861
<i>Y/Y growth</i>		(141.9%)	1,129.8%	75.8%	43.3%	28.2%	20.2%	15.1%	13.7%
<b>FCF</b>	(\$1,087)	(\$1,226)	\$763	\$1,263	\$1,996	\$2,697	\$3,339	\$3,911	\$4,513
<b>PV of FCF</b>	(\$1,067)	(\$1,075)	\$597	\$882	\$1,245	\$1,503	\$1,661	\$1,737	\$1,790

## Perpetuity Growth:

Final Projection Period FCF	4,512.8
Perpetuity growth rate	9%
WACC	12.0%

**Terminal Value** 161,567.2

## Weight

Sum of PV of FCF	\$7,273	10.2%
PV of Terminal Value	\$64,071	89.8%
<b>Enterprise Value</b>	<b>\$71,343</b>	

<b>Enterprise Value</b>	<b>\$71,343</b>
Less: Net Debt	\$352
<b>Equity Value</b>	<b>\$71,695</b>
Shares Outstanding	400
<b>Implied Share Price</b>	<b>\$179.24</b>
Current Price	\$80.25
% Upside / (Downside)	123.3%

## Summary Capitalization

Market Cap	\$132,800
ST Debt	\$5
LT Debt	\$168
Preferred Equity	\$0
<b>Total</b>	<b>\$132,973</b>

	Weight	Cost	WxC
Equity	99.9%	12.1%	12.0%
Total Debt	0.0%	5.6%	0.0%
Preferred Equity	0.1%	0.0%	0.0%
<b>WACC</b>			<b>12.0%</b>

# Multiples-Based Valuation

Multiples-Based Valuation									
	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E	FY33E
<b>Total Revenue (mm)</b>	--	\$323	\$1,793	\$3,386	\$4,885	\$6,192	\$7,306	\$8,227	\$9,148
<i>Y/Y growth</i>		#DIV/0!	455.2%	88.9%	44.3%	26.7%	18.0%	12.6%	11.2%
<b>EBITDA</b>	(\$262)	\$110	\$1,351	\$2,375	\$3,402	\$4,362	\$5,243	\$6,034	\$6,861
<i>Y/Y growth</i>		(141.9%)	1,129.8%	75.8%	43.3%	28.2%	20.2%	15.1%	13.7%

## Multiple-Based Valuation:

FY27E EBITDA	\$1,351
FY28E EBITDA	\$2,375
EV/EBITDA Multiple	20x
<b>Enterprise Value on FY27</b>	<b>\$27,014</b>
<b>Enterprise Value on FY28</b>	<b>\$47,492</b>
Enterprise Value on FY27	\$27,014
Enterprise Value on FY28	\$47,492
Less: Net Debt	\$352
<b>Equity Value on FY27</b>	<b>\$27,366</b>
<b>Equity Value on FY27</b>	<b>\$47,844</b>
Shares Outstanding	400
<b>Implied Share Price on FY27</b>	<b>\$68.41</b>
<b>Implied Share Price on FY28</b>	<b>\$119.61</b>
Current Price	\$80.25
% Upside / (Downside)	<b>149.0%</b>

# Comps

## Satellite Data Services Comp

Company		Sales (\$)		EBITDA				EBIT				Capital Exp		FCF	
Name	Ticker	FY1	FY2	Margin		Margin		Margin		Margin		FY1	FY2	FY1	FY2
				FY1 (%)	FY2	FY2 (%)	FY1	FY1 (%)	FY2	FY2 (%)	FY1	FY2	FY1	FY2	
AST SpaceMobile A	ASTS-US	56.52	284.98	-184.06	-325.65	51.90	18.21	-270.50	-478.58	-205.39	-72.07	-847.09	-836.90	-1020.64	-748.34
EchoStar A	SATS-US	15135.42	14902.33	1281.54	8.47	1527.95	10.25	-705.93	-4.66	-457.39	-3.07	-1628.41	-1745.79	-1659.03	-1559.01
Globalstar	GSAT-US	264.91	293.25	125.58	47.40	140.92	48.05	7.74	2.92	25.59	8.73	-15.22	-25.00	124.49	149.54
ViaSat	VSAT-US	4669.02	4815.25	1565.50	33.53	1609.30	33.42	89.23	1.91	134.97	2.80	-1146.57	-1062.24	185.39	222.36
Iridium Communications	IRDM-US	878.26	897.32	498.23	56.73	512.34	57.10	233.24	26.56	231.76	25.83	-90.10	-82.17	303.71	321.02
Gogo	GOGO-US	906.03	934.33	220.82	24.37	240.03	25.69	153.57	16.95	182.85	19.57	-79.00	-30.00	85.00	126.00
SES SA A	SESG-FR	2896.50	3264.58	1464.22	50.55	1571.12	48.13	216.22	7.46	238.80	7.31	-665.46	-558.63	647.31	584.26
<b>Average</b>					<b>-14.94</b>		<b>34.41</b>		<b>-61.06</b>		<b>-1.56</b>			<b>-190.54</b>	<b>-129.17</b>
<b>Median</b>					<b>33.5%</b>		<b>33.4%</b>		<b>2.9%</b>		<b>7.3%</b>			<b>124.5</b>	<b>149.5</b>

# Risks & Mitigants

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## Execution Risk



- Block 2 is a tiled repeatable build, which according to expert means that efficiency in production is going to increase by 20-30%
- At risk input materials already procured for production
- AST has breadth of partnerships for launches with BlueOrigin, SpaceX and ISRO

## Ability to Scale Revenue



- Diversification of revenue sources: Government, First Responders, and locked in distribution with over 50 Tier-1 MNOs
- Strategic investments made by AT&T, Verizon, Google, and Rakuten
- Geographic diversification of customers and partners
- Revenue Sharing agreement with CAC following on distribution partners

## Additional Capital Requirement



- Based on Q2 earnings they had over 1.5 billion in Cash, which CEO emphasised was enough to fully fund their expansion plan of 45-60 satellite by end of 2026
- Completed offering of \$1 Billion in convertible senior notes due 2036

## Competition



- Significant Technical and Business Model moats over Starlink
- More agreements and contracts with MNO's
- Has first mover advantage in Asian, and Middle Eastern Markets
- International governments reluctance to depend on Starlink

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# Margin of Safety

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*Robust portfolio of assets, technologies and spectrum ensure significant downside protection which could potential represent over 40% of EV. Business contracts structured with greater payment upfront minimising risk*

## Sources of Margin of Safety

### Cash Runway Secured

- 1.5 Billion Cash on Balance Sheet
- Non Dilutive Government and Agency Support through FirstNet and US EXIM which represents \$1 Billion plus in low cost funding capacity

### Commercial Partner Commitments

- MNOs have milestone contracts with precommitted payments such as 170 million from SRC
- Commercial Agreements with Google and potentially Amazon centered around strategic alignment which provides cash, milestone funding and potential integration

### Hard Assets

- Hard Assets include their spectrum bandwidth which they have acquired, their IP with over 3000 patent and patent pending claims and Satellite Tech
- Based on acquisition by of bandwidths from EchoStar by SpaceX places value of L band which AST controls post testing in the neighborhood of \$10-15 Billion

### Strategic Optionality

- Being designated as a prime contract unlocks potential of billions of dollars of contract in which government contracts are structured as upfront payments with recurring payments achieved at milestones

# Appendix