



Rating
Buy

North America
United States

TMT
Telecom Services

Company
AST SpaceMobile

Reuters ASTS.OO Bloomberg ASTS US Exchange NSM Ticker ASTS

Date
22 November 2022

Results

Price at 21 Nov 2022 (USD)	6.51
Price target	32.00
52-week range	13.93 - 5.13

Array Deployment Lowers Technical/ Design Risks

Our Thoughts On The Stock

AST has made significant progress on its plan in recent months, launching its first satellite and successfully deploying the largest-ever commercial communications array in orbit. We think these early milestones materially reduce the technology risk for AST's business, and we are updating our scenario analysis as a result (weighting our "zero value" scenario at a 10% probability vs 25% prior); though to be fair, there are still material execution risks given the relatively early stage of the business and the newness of the company's technology. This reduction in weighting for our downside scenario more than offsets lower near-term EBITDA forecasts (we are assuming a slightly later timeline for the deployment of AST's satellite fleet and the rollout of its commercial service at scale as compared to our prior model).

We remain bullish on AST SpaceMobile's long-term business opportunity given the company's large TAM, highly differentiated technology, partnerships with many of the world's largest mobile network operators (MNOs), and attractive wholesale/ revenue share business model.

We maintain that the business offers a meaningfully positive risk/reward outlook; our \$32 PT (up from \$30) offers a 5x potential return vs the current stock price. At ~\$6.50/share, the market appears to be pricing in a relatively low probability of success, which we do not think properly values AST's long-term potential.

Key Takeaways

- **In our view, AST's progress with BlueWalker 3 has substantially reduced the technical risks for the business plan.** AST's first satellite was launched into orbit on September 10 and is currently testing various mechanical and technical elements for the system in space for the first time. On November 14, AST confirmed that BW3's array was successfully unfolded in low earth orbit, which represents a significant testing milestone, in our view. **The ability to launch and effectively deploy such a large system in space was the most meaningful technical hurdle for the early-stage company, according to critics of the design that we spoke with (when performing our due diligence on AST's business).**

The size of the array is the key technological innovation that should enable SpaceMobile service to connect with standard unmodified cell phones, and a satellite system of this size and shape has not been used before in

Valuation & Risks

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Key changes			
TP	30.00 to 32.00	↑	6.7%
EPS (USD)	-0.48 to -0.50	↓	-4.9%
Revenue (USDm)	13.7 to 13.8	↑	1.2%

Source: Deutsche Bank

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commercial LEO enterprises; nor was it possible to fully test the deployment on the ground due to limitations with zero gravity environmental testing on Earth (according to management, BW3's 693 square foot array is the largest array ever deployed for a commercial satellite).

Importantly, based on the results of the BW3 launch, the array deployment, and early testing so far, the company confirmed that it remains *"confident in our architecture and do not foresee any major changes to the architecture of our Block 1 satellites."* AST continues to target a **2H23 launch timeframe for the first 5 commercial Bluebird satellites**, after which the company will roll out an initial limited service.

We believe that interoperability testing with mass market handsets and terrestrial wireless networks via BW3 will commence early next year, once the company has fully calibrated the array. Demonstrating that the system can effectively (1) communicate with mass market consumer handsets and (2) connect with terrestrial wireless networks, should further de-risk the business plan and lead to a positive rerating of the stock, in our view.

- **AST reiterated that the ~\$200M of cash on its balance sheet at quarter end should be sufficient to cover the business's cash burn over the next 12 months** (including finishing the construction of the first 5 commercial satellites). However, we also think AST will be opportunistic in using its equity financing options in order to preserve cash. During the quarter, AST raised \$17M by issuing stock through its existing \$75M common stock purchase agreement. The company also signed a new "at the market" equity program on 9/8/22 for up to \$150M. AST reiterated its cost projection for the first 20 satellites at an average cost of \$16M (\$300-340M in total); although inflation, supply-chain issues, or other factors could cause that estimate to slip.
- **We are updating our multi-year estimates to reflect our most up-to-date understanding of AST's plans and business model.** We believe that, compared with earlier plans, the company is taking a relatively slower approach to rolling out its business. AST is planning to commence limited service initially, following the launch of its first five commercial satellites in late 2023, which should help reduce its cost of capital when launching the rest of its fleet at scale. In our opinion, this cadence makes sense given the changing market conditions related to high-risk ventures (compared with when AST put together its initial business plan ~2 years ago). Net net, we now assume that AST will achieve EBITDA at scale in 2025, vs 2024 prior.

We are also updating our valuation framework. We are now basing our scenario analysis on our 2025 forecasts (vs 2024E prior), when the business will be closer to scale, and are using more conservative multiples (10-20x vs 15-25x prior), to reflect elevated uncertainty in the market today.

We are also adjusting the probability weightings of each scenario (see figure 3). We believe that, **following the successful launch and deployment of BW3's communications array, the probability that the company is worth zero is lower than before** (although still not totally off the table). We are now weighting: (1) management's forecasts (pushed back by 1 year), (2) our model (which is more conservative than the company's projections), and (3) an even more conservative forecast at 30% each, and (4) our "zero value" scenario at 10% (vs a 25% equal weighting for all four



scenarios before).

Net net, our 12-month PT is moving to \$32 (up from \$30 prior), which is 5x the current stock price.



Figure 1: ASTS Estimate Revisions

	Current Estimates				Variance to Prior Estimates			
	2022	2023	2024	2025	2022	2023	2024	2025
Total Revenue	13.8	2.4	204.0	884.1	0.2	(4.7)	(267.1)	(820.5)
Total Opex	151.5	130.5	142.6	161.0	3.8	40.5	57.6	61.0
Adj. EBITDA	(137.7)	(128.1)	61.4	723.1	(3.7)	(45.2)	(324.8)	(881.5)
% Margin	-995.9%	-5441.4%	30.1%	81.8%	-14.6%	-4272.9%	-51.9%	-12.3%
Capex	57.9	215.0	520.0	755.0	(45.8)	(420.0)	(400.0)	405.0

Source : Deutsche Bank estimates, company information.

Figure 2: ASTS Model Summary

	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Total Subscribers (000s)		0	750	15,750	55,750	125,750	230,750	350,750	480,750	615,750
Total ARPU			\$0.52	\$2.06	\$2.06	\$2.11	\$2.15	\$2.16	\$2.17	\$2.18
Growth %				293.8%	0.0%	2.2%	1.9%	0.7%	0.5%	0.6%
Total Revenue	12.4	13.8	2.4	204.0	884.1	2,292.9	4,589.4	7,535.1	10,829.7	14,362.8
Growth %				8563.7%	333.3%	159.3%	100.2%	64.2%	43.7%	32.6%
Adj. EBITDA	(83.8)	(137.7)	(128.1)	61.4	723.1	2,108.0	4,379.8	7,305.6	10,587.0	14,111.7
Growth %				-147.9%	1077.5%	191.5%	107.8%	66.8%	44.9%	33.3%
% Margin				30.1%	81.8%	91.9%	95.4%	97.0%	97.8%	98.3%
Capex	(54.8)	(57.9)	(215.0)	(520.0)	(755.0)	(560.0)	(450.0)	(590.0)	(595.0)	(350.0)
Free Cash Flow	(134.5)	(211.2)	(309.4)	(524.0)	(380.8)	713.1	2,371.6	4,297.0	6,674.8	9,494.2
Growth %					-27.3%	-287.3%	232.6%	81.2%	55.3%	42.2%

*All Dollars in Millions, Except ARPU

Source : Deutsche Bank estimates, company information.



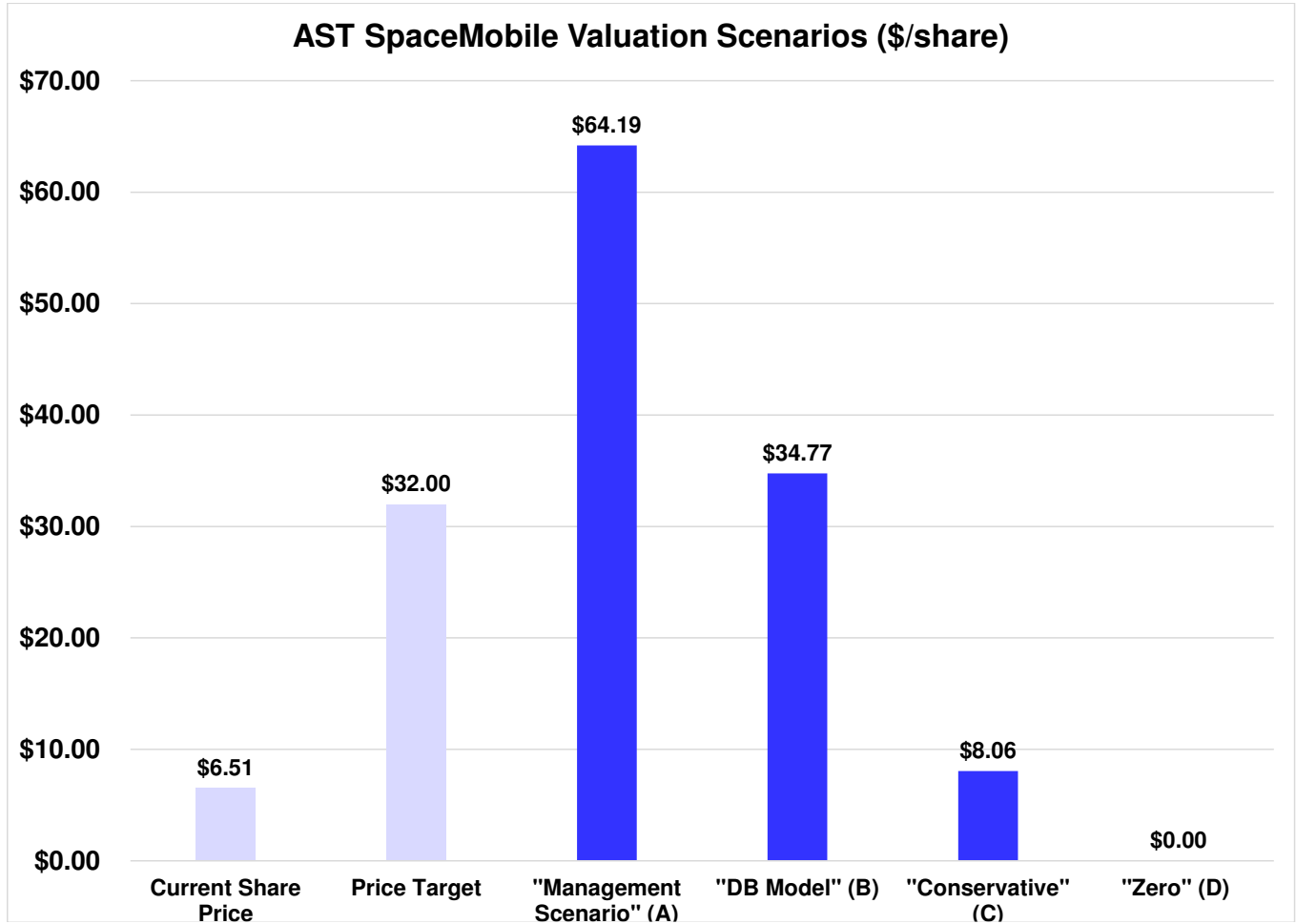
Figure 3: Our \$32 PT is based on weighting four different scenarios, two positive and two negative

ASTS Valuation				
	"Management Scenario" (A)	"DB Model" (B)	"Conservative" (C)	"Zero" (D)
Adj. EBITDA ('25E)	1,014.0	723.1	317.4	
EV/EBITDA Multiple (CY)	20.0x	15.0x	10.0x	
<u>Enterprise Value ('25E)</u>	<u>20,280</u>	<u>10,847</u>	<u>3,174</u>	
Net Debt ('25E)	1,450	654	817	
<u>Market Cap ('25E)</u>	<u>18,830</u>	<u>10,193</u>	<u>2,356</u>	
Discount Rate	15.0%	15.0%	15.0%	
<u>Market Cap ('23E)</u>	<u>14,251</u>	<u>7,714</u>	<u>1,783</u>	
Stock Price ('23E)	\$64.19	\$34.75	\$8.03	\$0.00
Shares Outstanding ('23E)	222.0	222.0	222.0	
Scenario Weight	30.0%	30.0%	30.0%	10.0%
			Price Target	\$32.1

Source : Deutsche Bank estimates, company information.



Figure 4: Our \$32 PT represents a probability weighting of four scenarios; these scenarios imply an asymmetrically positive risk/reward ranging from +\$58 to (\$7) per share (compared to ASTS' current price)



Source : Deutsche Bank estimates, company information.



Figure 5: Our \$32 PT implies that ASTS would trade at 14x 2025E and 5x 2026E EV/EBITDA, which we think is very reasonable given the company's growth outlook (assuming success)

ASTS Valuation Multiples	2022	2023	2024	2025	2026
Share Price	\$6.51	\$32.00	\$36.78	\$42.28	\$48.60
Growth	-18.0%	391.6%	15.0%	15.0%	15.0%
EOP Shares	212.4	222.0	228.2	228.2	228.2
Market Capitalization	1,382.5	7,104.1	8,394.6	9,649.6	11,092.2
Net Debt	(175.1)	26.3	475.3	856.1	142.9
Minority Interests + Other	(202.4)	(202.4)	(202.4)	(202.4)	(202.4)
Adjusted Enterprise Value	1,005.0	6,928.0	8,667.5	10,303.2	11,032.7
Unlevered Free Cash Flow (Fully Taxed)	(192.8)	(307.6)	(501.6)	(321.3)	790.5
Yield (CY)				-3.1%	7.2%
Yield (CY+1)	-32.0%	-4.6%	-3.7%	7.7%	
EBITDA	(137.7)	(128.1)	61.4	723.1	2,108.0
EV/EBITDA (CY)				14.2x	5.2x
EV/EBITDA (CY+1)	1.4x	9.6x	12.0x	4.9x	
Levered FCF (Fully Taxed)	(211.2)	(309.4)	(524.0)	(380.8)	713.1
Levered FCF Yield (CY)				-3.9%	6.4%
Price/FCF (CY)				(25.3x)	15.6x
Price/FCF (CY+1)	(3.6x)	(18.7x)	(22.0x)	13.5x	

Source : Deutsche Bank estimates, company information.



Appendix 1

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Disclosure checklist			
Company	Ticker	Recent price*	Disclosure
AST SpaceMobile	ASTS.OQ	6.51 (USD) 21 Nov 2022	2, 8

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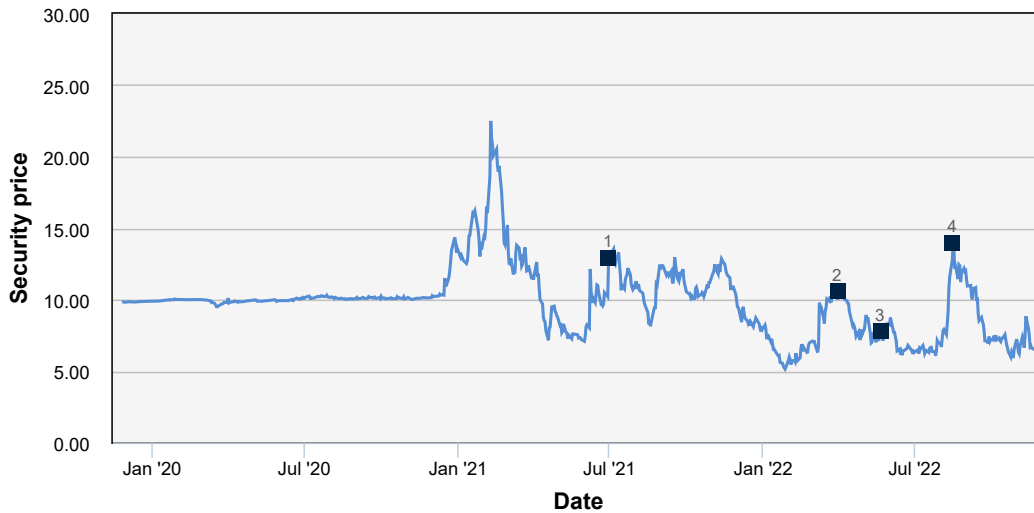
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Historical recommendations and target price: AST SpaceMobile (ASTS.OO)

(as of 11/22/2022)



Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

** Analyst is no longer at Deutsche Bank

- | | | | | | |
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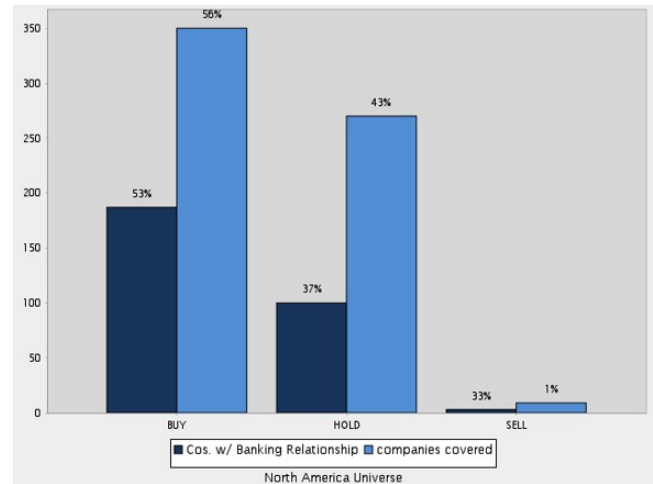
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