



## Nokia Radio Technology to Enable AST SpaceMobile's Direct-to-cell Phone Connectivity From Space

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- Nokia wins five-year global 4G and 5G deal from AST SpaceMobile
- AST SpaceMobile plans to bring cellular connectivity directly to 4G and 5G devices via low Earth-orbiting satellites in collaboration with mobile network operators
- Nokia and AST SpaceMobile committed to finding real-world solutions to expand universal coverage and close the digital divide around the world

MIDLAND, Texas--(BUSINESS WIRE)--Jul. 28, 2022-- AST SpaceMobile, Inc. ("AST SpaceMobile") (NASDAQ: ASTS), the company building the first and only space-based cellular broadband network accessible directly by standard mobile phones, today announced that they have signed a five-year 5G deal with Nokia. Under the deal, Nokia and AST SpaceMobile will work to achieve their joint ambition to expand universal coverage and connect underserved communities around the world. The planned launch of AST SpaceMobile's BlueWalker 3 test satellite later this year will kick off global testing with mobile network operators on six continents.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20220728005646/en/>



AST SpaceMobile's mission is to eliminate the connectivity gaps faced by over five billion mobile subscribers worldwide and to bring cellular broadband to approximately half of the world's population who remain unconnected. Their approach will mean that subscribers outside the reach of cellular coverage could have access to broadband speeds without having to invest in specialized hardware and be able to roam from land networks to space networks for the first time. Through its mobile network operator relationships, AST SpaceMobile has entered into agreements and understandings with mobile network operators which collectively service over 1.8 billion cellular customers.

Nokia's AirScale Single RAN equipment aims to enable AST SpaceMobile in providing mobile services to new and existing subscribers in regions currently not served by terrestrial communication

Nokia and AST SpaceMobile committed to finding real-world solutions to expand universal coverage and close the digital divide around the world. (Photo: Business Wire)

networks. This includes connecting devices globally on land, at sea, or in flight. Nokia will provide equipment from its comprehensive, energy-efficient AirScale portfolio including its AirScale base stations powered by its latest generation of Nokia's ReefShark System-on-Chip (SoC) chipsets. AST SpaceMobile will benefit from Nokia's modular baseband plug-in cards which add capacity where it is needed offering flexibility and efficiency. Nokia will also provide its NetAct solution for network management and seamless daily network operations as well as optimization and technical support services.

"Connectivity should be considered an essential service like water, electricity or gas. Everyone should be able to have access to universal broadband services that will ensure that no one is left behind," said Tommi Uitto, President of Mobile Networks at Nokia. "Nokia has a long history of delivering connectivity solutions that have had a major and positive impact on society. We have worked closely with AST SpaceMobile on this important initiative for two years which seeks to provide crucial connectivity from space to underserved communities around the world. We are of course proud our technology is playing an important role in underpinning the networks."

AST SpaceMobile plans to launch its BlueWalker 3 satellite for testing in early to mid-September from Cape Canaveral, Florida. BlueWalker 3 is a low Earth orbiting satellite and has an aperture of approximately 64 square meters (693 square feet), which is designed to communicate directly with cellular devices via 3GPP standard frequencies. Ultimately, AST SpaceMobile is aiming to deploy approximately 100 satellites to achieve substantial global mobile coverage.

"With the integration of Nokia's AirScale system, AST SpaceMobile and Nokia are taking an important step toward closing connectivity gaps all over the world," said Scott Wisniewski, Chief Strategy Officer at AST SpaceMobile. "Nokia is supporting us with dozens of engineers and development professionals, including leading architecture research experts at Bell Labs, the world-renowned industrial research arm of Nokia. In the coming months, we are scheduled to launch our BlueWalker 3 test satellite into low Earth orbit, which has a 64-square meter phased array antenna designed for direct-to-cell connectivity. With this satellite, we plan to conduct testing all over the world with leading mobile network operators, leveraging Nokia's

technology solutions on the ground.”

Nokia is committed to equitable opportunity for all and access to education, healthcare, jobs, and community digital services. [Nokia supports the 2025 targets set by The Broadband Commission for Sustainable Development](#) that aims to ‘connect the other half’ in the next five years. They are involved in several projects underway around the world including in El Salvador and Kenya. These public/private initiatives are designed to bring public services such as schools and hospitals online. They are intended to vastly improve internet access as well as create the foundations that will enable everyone to participate in the digital economy.

## Resources

[Nokia AirScale](#)

## About Nokia

At Nokia, we create technology that helps the world act together.

As a trusted partner for critical networks, we are committed to innovation and technology leadership across mobile, fixed and cloud networks. We create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Adhering to the highest standards of integrity and security, we help build the capabilities needed for a more productive, sustainable, and inclusive world.

## About AST SpaceMobile

[AST SpaceMobile](#) is building the first and only global cellular broadband network in space to operate directly with standard, unmodified mobile devices based on our extensive IP and patent portfolio. 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. For more information, follow AST SpaceMobile on [YouTube](#), [Twitter](#), [LinkedIn](#) and [Facebook](#). Watch [this video](#) for an overview of the SpaceMobile mission.

## 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 may 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 and level of deployment of 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’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; (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 SEC, including those in the Risk Factors section of AST SpaceMobile’s Form 10-K filed with the SEC on March 31, 2022.

AST SpaceMobile cautions that the foregoing list of factors is not exclusive. AST SpaceMobile cautions readers not to place undue reliance upon any forward-looking statements, which speak only as of the date made. 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 incorporated by reference into AST SpaceMobile’s Form 10-K filed with the SEC on March 31, 2022. AST SpaceMobile’s securities filings can be accessed on the EDGAR section of the SEC’s website at [www.sec.gov](http://www.sec.gov). Except as expressly required by applicable securities law, AST SpaceMobile 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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