



Satellite and non-terrestrial networks: opportunities for telecoms operators



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About this report

This report describes the evolution of non-terrestrial networks (NTN) technologies in relation to the telecoms market. It describes the broadening role of NTN in supporting services, including in IoT, that require ubiquitous coverage. It maps a market landscape in which technologies such as low earth orbit satellite (LEOsat) are enabling new use cases and an expanded role for satellite providers. It sets out the key ecosystem relationships that telecoms operators may seek, with satellite communications providers (satcos), hyperscalers and other investors in broadband infrastructure. It also describes the technical roadmap towards a future converged network that includes connectivity and edge computing at many layers.

The report provides recommendations for operators about the key decision factors that will inform their roles in an NTN-terrestrial ecosystem, and the potential advantages and disadvantages of NTN partnerships.

The report is based on several sources including:

- trackers and internal research focused on satellite communications providers/operator partnerships and co-investments
- extensive research and forecast data conducted by Northern Sky Research (NSR), an Analysys Mason company specialising in satellite and space markets
- interviews with key stakeholders such as AST SpaceMobile, Inmarsat, NTT Docomo and Telecom Infra Project.

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KEY QUESTIONS ANSWERED IN THIS REPORT

- Why should telecoms operators consider incorporating NTN into their business plans?
- What is being done to unify the next generation of networks from an operational and technical perspective?
- What is the potential impact of NTN on 5G business models, including on areas such as coverage, xHaul and new services?
- What are the opportunities and threats to telecoms operators and what are the key factors that they should evaluate when forming partnerships?



WHO SHOULD READ THIS REPORT

- Strategy, planning and network architecture teams within mobile and fixed operators that need to understand the role that NTN will play in their future business models and the available routes to market.
- Executives within satellite service providers and integrators whose customers are interested in broadening their reach and need to see NTN in a broad telecoms/5G context.
- Regulators and policy makers, including spectrum specialists.
- Investors in telecoms infrastructure including financial institutions and hyperscalers.



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About the authors and Analysys Mason

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