

5G for Satellites

How to realize a 5G strategy for your satellite fleet

Enable 5G NTN services and secure a strong market position

Potential of 5G for a satellite fleet

The common reasons for satellite operators planning to add 5G to their satellite fleet and service portfolio are to secure a strong market position and to monetarize current / future satellites and unused capacities. By entering new markets, satellite operators can gain market share and generate revenue streams from new verticals. Use cases range from logistics and agriculture to mining and prediction of natural catastrophes. Up to a billion connected devices are expected. As the mobile and satcom industry will merge into one network, combining the terrestrial with the non-terrestrial network, adding 5G to a satellite fleet will provide global coverage in a standardized mass market.

Some of our Partners:



Realize 5G as a satellite operator

How do these challenges resonate with you?

- What is link budget, data rates for connections and system capacity (e.g. device number) based on satellite system's capability
- How to maximize system performance with 5G NTN services
- Optimal usage of actual capacity based on chosen system configurations
- How to design system configurations for future satellites
- Performance of 5G NTN services deployed in "practice"
- What will my business case look like? Expected revenue, pricing models, etc.

Our solutions:



5G Studies on 5G NB-IoT, eMTC or New Radio



Service link emulator for 5G IoT NTN



Commercial 5G Waveforms for non-GEO & GEO satellite systems

GateHouse SatCom: Your Software Partner for 5G from Space for NB-IoT, eMTC & New Radio

For our customers, we are space software experts, facilitating their path to 5G services for their unique satellite system (NB-IoT, eMTC and NR). GateHouse SatCom is a software-only-company contributing to the 5G NB-IoT standard by 3GPP.

Implement 5G NTN supported by satcom waveform experts

Validate network performance & business case for 5G NB-IoT, eMTC or New Radio



Pre-assessment

Value:

Make sure to only invest resources for technology which fits your system.

Goal:

Verify viability to support 5G services

What:

Preliminary analysis of individual system parameters to estimate link budget & feasibility of satellite payload configuration

Feasibility

Value:

Choose best network option & have data for establishing 5G business case & commercial viability

Goal:

Understand how to enable 5G services with system set-up & its performance trade offs

What:

Detailed simulation of link performance & analysis of system capacity & satellite payload configuration trade-offs for diff. scenarios

Pilot

Value:

Confirm business case & network performance w/o investing in full commercial system

Goal:

Demonstrate service link with network emulator

What:

Define test cases, timeline & integration into existing system infrastructure applying system test emulator based on results/conclusion of feasibility study

Realize your 5G satellite strategy

Get in touch with us to learn how you can realize 5G NB-IoT, eMTC or New Radio on your current / future satellite fleet to compete in the evolving market. Our Sales Executive, Juline Hilsch, juh@gatehouse.com is happy to connect with you.

You can also find us on www.gatehouse.com.