

BRINGING ESSENTIAL CONNECTIVITY TO EASTERN GREENLAND

Tusass and SES

CASE STUDY

Industry

Telco & MNO

Location

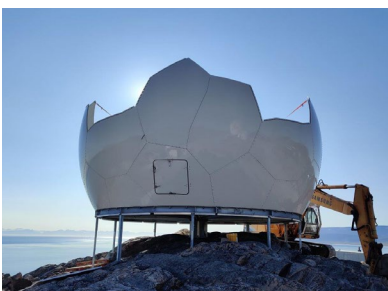
Greenland



SES[▲]

Together with Tusass, we're bringing fully managed fibre-like connectivity to under-served communities and settlements in Eastern Greenland.

SES implemented a fully managed bandwidth solution based on our high-throughput geostationary (GEO) satellite, NSS-10—tripling the capacity Tasiilaq and Ittoqqortoormiit receive to 1.4Gbps.



Reliable telecommunications networks are necessary for the wellbeing of people living in many remote or hard-to-reach places. By enabling members of these communities to stay connected with long-distance loved ones, manage day-to-day business operations, attend virtual medical appointments or classes, and much more, connectivity significantly improves their quality of life. As a result, governments are under pressure to meet digital inclusion goals that enable citizens in isolated regions to stay connected with the rest of the world.

Tusass, Greenland's sole telecommunications provider, is responsible for connecting nearly 60,000 people spread out across 2.1 million square kilometres. As very few roads interconnect the country, most inhabitants can only travel between settlements by boat, plane, or helicopter—which makes reliable connectivity all the more crucial.

Undersea fibre optic cables service the larger cities, including Nuuk and Qaqortoq. Yet, more remote communities previously had to rely on a series of relay radio towers to redistribute lower generation connectivity to these settlements. Greenland experiences temperatures as low as -25°C with winds up to 200km per hour during the winter, which can lead to prolonged connectivity outages caused by heavy wind, snow, or rain. This frustrated Tusass customers, who required high-speed Internet at an affordable flat rate, but were paying for slow and costly service.

To overcome this challenge, Tusass installed ground stations equipped to receive very high speed backhaul connectivity via satellite in several locations across Eastern Greenland. Two of these cities, Tasiilaq and Ittoqqortoormiit—which are home to more than 2,000 Greenlanders on the east coast—initially received 450Mbps of bi-directional data throughput via satellite. However, Tusass wanted to launch LTE networks powered by Ericsson to bring fibre-like performance to these settlements. With our global reach and high-throughput capabilities, they approached us to provide the design and network expertise required to connect Greenland's under-served communities.

SES implemented a fully managed IP transit solution that triples the capacity Tasiilaq and Ittoqqortoormiit receive to 1.4Gbps using our high-throughput geostationary (GEO) NSS-10 satellite. The full duplex satellite link connects the ground stations in both cities to an SES partner teleport in the United Kingdom. This link delivers high-quality last mile connectivity that reaches Tusass customers over 4G and Wi-Fi. As a result, Eastern Greenlanders have access to a reliable broadband Internet solution that is comparable to European fibre networks and managed under a single, robust service level agreement (SLA).

“At SES, one of the things that makes us most proud is the ability to play a key role in helping the users we serve be more productive and raising their standard of living,” said Elias Zaccack, EVP, Global Sales SES Networks, Global Sales. “Whether it's telehealth, education or even entertainment such as streaming and FaceTime, these services—that maybe we take for granted in urban areas—are so important to people living in remote communities.”

Our teams worked together closely to build out the remote terminal infrastructures in both cities.



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1.4
Gbps

These upgrades—which had to be completed within several weeks due to Greenland’s incredibly short warm season—enhance service reliability by protecting antennas with RADOMES, and supporting Ku, Ka, C-band, linear, and circular signals. As a result, these ground stations support signal types used for a wide variety of applications and are optimized to withstand Greenland’s harshest weather.

3x
capacity increase

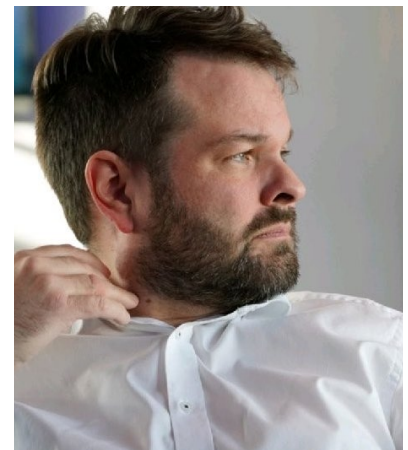
In addition to substantially improving service availability and reliability, switching to a satellite-enabled network has significantly reduced Internet costs for Tasiilaq and Ittoqqortoormiit residents. Eliminating the costs associated with bringing fibre-based connectivity to remote regions via radio relay towers helped Tusass to offer Eastern Greenland customers flat-rate connectivity services, instead of volume-based billing, for the first time.

90%
lower Internet billing

“Previously, our customers in remote areas of Greenland had to pay close attention to their Internet usage,” said Julie Rademacher, Head of Communications for Tusass. “We recently heard from a customer in Tasiilaq who was shocked that his Internet bill had dropped from 9,000Kr to 900Kr in one month. It’s such a relief to him to be able to use the Internet as much as he wants without worrying about the bill moving forward.”

At SES, investing in long-term partnerships that improve the wellbeing of our end-customers is central to who we are. Working closely with Tusass to understand their business needs enabled us to develop a solution that solves existing service challenges and lays the groundwork to continue meeting customer needs as their bandwidth requirements evolve. Our next-generation satellite fleet, which includes SES-17 and O3b mPOWER, are positioned to bridge the divide between what customers experience today and what they expect tomorrow, by offering low latency, high throughput services—wherever end-users are.

“If you’re a large telecommunications company, it’s easy to be prioritised by your vendors, but if you’re a smaller operator, then you really get to know how invested a vendor is in you as a partner. Our experience is that SES’s focus is on its customers—and working with this team has made a huge difference for the people of Eastern Greenland.”



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KRISTIAN DAVIDSEN
CEO OF TUSASS

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