

ENABLING LIVE STREAM FROM ANTARCTICA

Industry
Maritime & ESG

Location
Antarctica

We're working with ClimateForce to take onboard internet to the next level



Together with ClimateForce, we're bringing dedicated connectivity on board 2041 Foundation's 2022 expedition to deliver a historic climate message to viewers around the world



March 2022 Expedition Route

For environmental activist and 2041 Foundation founder Robert Swan, capturing the attention of digitally distracted audiences around the world to inspire them to act on climate change required unprecedented connectivity. Antarctica is the one continent unreachable by fibre—temperatures that plunge below -58 degrees and constantly-shifting icy surfaces pose the biggest challenges to connecting Antarctica to the fibre grid. Having braved multiple expeditions to Antarctica, Swan was no stranger to environmental challenges. But to enable live streaming from a ship in one of the most remote locations on earth, he would need to look to the stars.

2041 Foundation operates under a bold mission: to prevent the exploitation of Antarctica's natural resources by oil rigs and mining, which could legally be set up on the continent once longstanding protections fall away in the year 2041. To raise awareness of climate action

and its importance to everyone across the globe, Robert Swan, 18 expedition leaders, and 80 crew and staff led a marine voyage to Antarctica in March 2022. Joining them on board the ship Ocean Victory were 150 brave participants from all walks of life.

We worked with our partner, Speedcast, to provide the managed service for the expedition. While SES provided the space segment capacity, Speedcast managed the onboard equipment, hub, teleport, backhaul, and customer support. These services ensured passengers and crew could stay connected with their families and friends back home.

While 2041 Foundation had run expeditions in the past, this would be the first time it would have access to a dedicated connectivity service for streaming real-time sessions with the outside world. Before SES stepped in, a live HD stream on Ocean Victory would have been impossible.



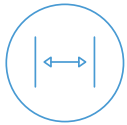
Photos by Trenton Branson



Powering broadband connection for the voyage:



36MHz of C-band capacity on SES-6 C



Increased throughput to 50/13Mbps



Internet supply to 80 crew members and staff

In December 2021, Robert contacted SES and asked if we could support an expedition in March 2022. SES-6, located at 40.5°W, has a strong C-band beam which spans North and South America, and covers the Antarctic peninsula. To provide the strongest possible connectivity, we allocated 36MHz of C-band capacity on SES-6, which upgraded the throughput to 50/13Mbps. This increased capacity not only allowed 2041 Foundation to stream video in HD. It also included upgraded internet reserved for the crew, and limited official feeds for 2041 ClimateForce, Oddizzi, RTL Luxembourg, Colt, and Bellron—where audiences around the world could tune in.

A powerful increase in capacity would be of no use to Robert Swan and his team if the solution failed mid-voyage. That is why we teamed with Speedcast to design, test, and implement the solution well before the departure date. Around three weeks prior to the expedition, we connected the vessel to SES-6. To ensure the system worked, we provided capacity for a total of two months, conducting tests on the vessel from Ushuaia, Argentina.

Our dedication to providing on-the-ground support extends to even the most remote locations. To help the team manage connectivity on-the-ground, Gez Draycott, VP of Sales Engineering at SES, personally supported all the live feeds on board.

“We had a static route configured, which meant that live feeds were hardwired from the laptop via an Ethernet cable directly into the Speedcast switch,” says Draycott. “This ensured the full upload capacity was allocated to the live feed uplink from the vessel.”

With the support of SES and Speedcast, 2041 Foundation told the story of Antarctica to audiences around the globe, inspiring viewers to act towards preserving one of the most vital places on the planet. Among the viewers who tuned in, 1,500 schools and over 30,000 school children joined the live stream via Oddizzi.

SES is proud to support 2041 Foundation via our Environmental, Social, and Governance (ESG) strategy. This expedition allowed us to further our Climate Action pillar by increasing environmental awareness around the globe and learning about our role in advancing environmental sustainability.



“This is a complete first in history for us to be able to communicate from our ship back to the real world live,” says Swan. “The whole SES team has been working hard to make sure we have that facility, to get our message back to the real world and challenge people to act.”

2041
FOUNDATION

2041foundation.org

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Published in May 2022.
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