



Greenland Expedition

• BGAN is the only mobile satellite service to offer broadband data with simultaneous voice, through a single, truly portable device on a global basis.

It is also the first service to offer guaranteed data rates on demand – up to 256kbps – for live video broadcast.

The Climate Change College (CCC) is an international collaboration between its founder and polar explorer, Marc Cornelissen, conservation group WWF and international ice-cream brand, Ben & Jerry's. Its aim is to raise awareness of the impact of climate change and call for solutions to reduce the emission of greenhouse gasses.

In 2006 the CCC recruited six 'ambassadors' aged between19 and 25 years for a field trip to Greenland to study the effects of climate change on the island's icesheet and to work alongside glaciologists.

The ambassadors spent 10 days during May at an experimental location called T05 in central Greenland. Although the station is in radio contact with the outside world, it does not have access to terrestrial or wireless networks. The CCC used Inmarsat BGAN to provide a satellite-enabled mobile broadband link for data communications and back-up voice.

Expedition leader Marc Cornelissen used an HNS 9201 BGAN terminal supplied by service provider Radio Holland, who also provided airtime and systems integration. The expedition used the HNS 9201 to transmit live video, send pre-recorded video and still images, and for email and voice communications.

Applications

On arrival at T05, Cornelissen set up the HNS 9201 in a communications and video-editing tent, where it stayed for the duration of the field trip. Cornelissen and the ambassadors used the HNS 9201 for several hours every day. Team members took turns with the terminal to send email, make voice calls and update their web blogs. The longest period of continuous operation was six hours, when the terminal was used for interviews with the Dutch media and then to upload video and still images to a FTP site.

On one occasion, Cornelissen used Skype to transmit video images from the camp for live broadcast on Good Morning Netherlands, a Dutch early morning television programme. The broadcast lasted for several minutes while Cornelissen and an ambassador took the camera on a 'guided tour' of the site and provided commentary. The segment was of such high quality that is was re-broadcasted later in the programme.

Another highlight was a videoconference via BGAN between Cornelissen and the ambassadors in Greenland and the Dutch State Secretary for the Environment, Mr Pieter van Geel, in the Netherlands.

Climate Change College solution diagram



Key benefits

- Reliable broadband communications in a remote Arctic setting
- Rugged, compact and lightweight HNS 9201 BGAN terminal ideal for expedition conditions
- Simple to set up and operate, even for novice users
- Transmission of live video for immediate television broadcast
- High-speed data for transmitting stored video and high-resolution images
- Guaranteed availability of data rates required for media interviews at short notice



About HNS

Hughes Network Systems, LLC (HNS), is the world's leading provider of broadband satellite network solutions for businesses and consumers. Headquartered outside Washington, D.C. in Germantown, Maryland, US, HNS maintains sales and support offices worldwide and operates manufacturing facilities in Gaithersburg, Maryland. HNS is certified to the ISO-9001 standard.

Quotes

'On previous expeditions we only had satellite capacity to send a few lowresolution images from the icesheet, but using the HNS 9201 BGAN terminal we were able to transmit live video and much larger still images. This was a great leap forward that helped us to maximize publicity for the expedition and its objectives.'

Marc Cornelissen, expedition leader and CCC founder

'It was great to be able to use the latest broadband technology so easily in the middle of the Greenland icesheet – the connection speed and ease of use was about the same standard as my broadband connection at home. The unit we used was tough, portable and easy to use and enabled us to communicate easily with the outside world during the expedition.'

Ben Richards, 2006 Climate Change College ambassador

'Radio Holland was delighted to act as system integrator for the 2006 Climate Change College expedition and to provide the solution through its airtime subsidiary Radio Holland Connect. Marc Cornelissen was very happy with the service and looks forward to cooperating with us again.'

Floris Slikker, managing director, Radio Holland Connect

How to buy BGAN

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inmarsat.com/bgan

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