

Mobile Satellite Communication Global Coverage - Global Access

COBHAM

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The most important thing we build is trust



‘The Death Zone’ was called alive with mobile satellite communication



Mount Everest's South Col falls into the so-called 'Death Zone' for climbers. So when installing an automatic weather station there, secure, reliable communication was critical. This could not be more true than it was for Ev-K2-CNR, an association promoting technological and scientific research in mountain areas, when installing the world's highest ground automatic weather stations on Everest's South Col in 2008.

Risky areas call for reliable communication

All climbers refer to South Col as the 'Death Zone', which is where the oxygen in the air cannot sustain human life for extended periods of time. So working in such a remote area, it can be very risky without strong preparation and communications.

Gian Pietro, Ev-K2-CNR's Technical Manager explains: "I have to travel a lot and spend time in remote areas, with limited power and definitely no ground communications. In this case an affordable satellite communication system is a priority in your tool set – and it has to be simple, robust and reliable."

EXPLORER 700 offered Ev-K2-CNR:

- Permanent installation in Base Camp: High-speed internet connection, file transfer of video, live broadcast TV.
- Mobile connectivity from Base Camp up the mountain: A customized protective rucksack containing an EXPLORER terminal, one spare battery and a solar panel. This set was used to establish a connection from anywhere on the mountain.

Tailor-made communication

Inmarsat satellite network is both an effective and affordable service. Despite place of operation in desolate mountains, EXPLORER is tailor-made also for rescues and life threatening situations. Gian Pietro concludes: "Of course, we tried many brands, but the EXPLORER hardware was the ideal choice for our requested degree of both safety and affordability."



Communication – a matter of life and death

When it comes to communication infrastructure, aid organizations such as Médecins Sans Frontières never know what to expect when engaging in humanitarian crisis. Before starting up a project an aid worker team is sent out to assess specific needs: medical, sanitary and logistical along with local political issues, security and infrastructure.

Fast transfer of medical and logistical data

However, the geographies in which aid organizations typically engage are beyond traditional communication

infrastructure. Reliable Internet connectivity is vital in order to perform under such harsh conditions.

With EXPLORER terminals aid organizations are able, besides lifesaving telemedicine access, to send reports from crisis area to HQ, call for emergency assistance, order equipment and medicine and use live video-streaming to document situations.



MEDIA

Tornado chasers using Thrane & Thrane technology



KAKE, a major Kansas TV news channel, demands instant 'FirstCam' news in order to compete with breaking news TV channels. KAKE's number one priority is live news – and in an area of the United States, widely known as 'Tornado Alley', live weather reporting is critical. Here is why:

At about 9pm, on the 4th May 2007, a tornado touched down and literally tore the small town of Greensburg apart. This changed the lives of the 1,700 or so people who live there for good. This was no ordinary tornado. It gouged a 1.7 mile wide channel through the town. 11 people died that night and despite a massive rebuilding effort, over a year later, Greensburg was still a broken shell of the thriving small town it was before the tornado struck.

Be live – when you arrive

EXPLORER plays a key role in FirstCam's ability to deliver high-quality video. KAKE's larger news vehicles use microwave technology to deliver footage to the station. But when it comes to everyday live-news – being first on the scene and enabling the cameras to role and broadcast immediately is vital.

Advanced technology secures footage

FirstCam is, along with a vehicular EXPLORER terminal, immediately deployable and enables live video even while moving – which makes the terminal particularly useful for daring tornado chasing.

Following events as they unfold

KAKE ensures it has the technology to help it break the news first. The FirstCam team is

highly mobile and ready to go at a moments notice. Once on the scene they are able to provide live, broadcast quality footage of the events as they unfold – using Inmarsat's BGAN network and EXPLORER terminals from Cobham.

In fact, by using Cobham technology, KAKE was able to broadcast the first live tornado on TV in Kansas - and have since become 'the very source' for severe weather information.



Two explorers made the right choice

Mark Kalch and Nathan Welch partnered with Amazon Watch, for an expedition to highlight the need for a global, sustainable development. All involved were keen to ensure information from the expedition to the outside world. This was a challenge when phone lines and broadband connections are few and far in remote places.

A lifeline to the outside world

Cobham's EXPLORER terminal was the lifeline to the outside world. Its high bandwidth enabled fast data

transfer – and helped the two explorers out of a number of tight spots.

On occasions it provided them with means to contact emergency support as well as notify friends and family. Even though a snow storm had hit them, they were still able to get a call out to the closest town to arrange for assistance.



Global coverage with Inmarsat BGAN

In the middle of nowhere, poor connections, interrupted coverage and blind spots constantly jeopardize continuity of field operations. With EXPLORER terminals, utilizing Inmarsat's BGAN, professionals are always able to operate with reliable coverage anywhere in the world.

With the option for simultaneous voice and broadband data connections (with speeds up to 492 kbps) you are always ensured a connection to your resources – enabling you to stay productive no matter where you go.

Whether your needs are maintaining your daily business, getting access to your usual office applications or requiring a life line in urgent situations or desolate places – EXPLORER meets all these demands. With a

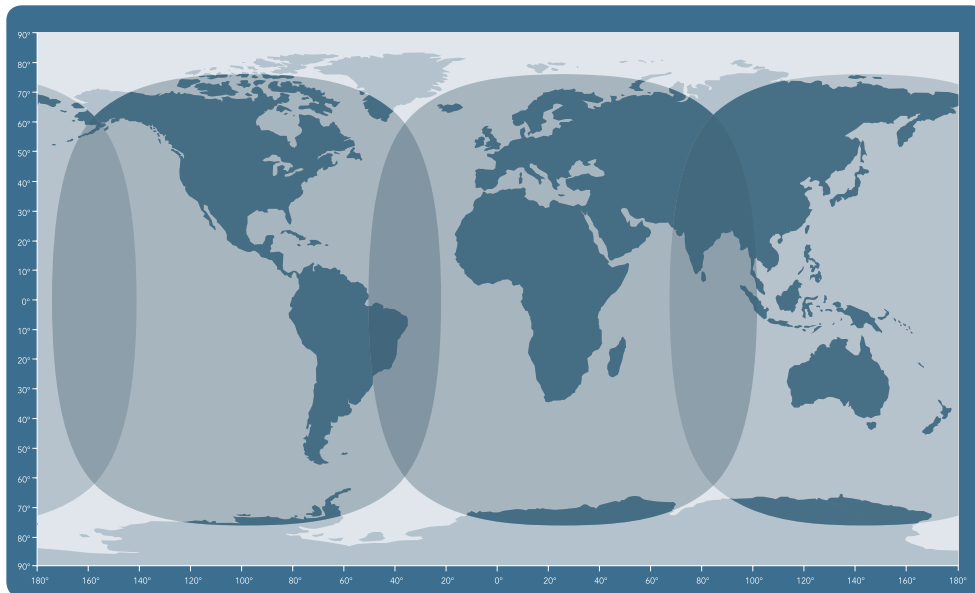
wide range of interfaces and options any demand for solution or application can be met.

An EXPLORER terminal offers remote high-speed internet access for e.g. e-mailing, file transfer, browsing, VPN access. Additionally, streaming functionalities for live video and traditionally phone capabilities are amongst the features coming out of the box when buying an EXPLORER terminal.

Always know your costs

With EXPLORER you will get full transparency with all communication expenses involved. Inmarsat's BGAN airtime prices are lower than those of standard cellular roaming. Besides, BGAN offers fixed, standard pricing with no roaming, so you will always know your costs.

BGAN coverage



This map depicts Inmarsat's expectations of coverage, but does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions.
BGAN coverage February 2009.



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