



Located in Turin, in the heart of Europe SkyPark provides broadband connectivity around the world

Skypark at a glance

- 18 hubs for broadband services located in Turin (Italy) in the heart of Europe
- Coverage of more than 150 countries through capacity on seven satellites in Eutelsat's fleet and roaming agreements
- Staff of 50 engineers, specialised technicians and office personnel
- 24/7 support for bandwidth assignment and quality control
- 120 distributors and integrators who have deployed a wide range of applications including Internet access, trunking for Wi-Fi hot spots and GSM transmitters, VPNs, VoIP telephony, telemetry and remote control for industrial installations and civil security, telemedicine, video-conferencing, e-learning...

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via

instant global connectivity



SPECIAL ISSUE EUTELSAT'S DISASTER RECOVERY SOLUTIONS



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Foreword

As the 2007 edition of Aid & Trade opens its doors in Geneva, the damage to undersea cables connecting Taiwan to neighbouring regions that were severed by the earthquake at the end of December is still being assessed. The lessons learned from this recent incident and other natural or man-made disasters further highlight the need to include satellites as a core requirement in recovery operations. Major disasters such as Hurricane Katrina or the Asian Tsunami have also had the effect of influencing businesses to plan for continuity of operations through satellite-based solutions. When inevitable network failures and disasters do occur, quick actions to implement alternative solutions are vital to help minimise losses, save lives and reinstate business continuity.

Satellites are a natural fit to help businesses and governments secure the links they need to recover quickly. For both disaster recovery and business continuity, the speed and efficiency of intervention depend heavily on planning upstream. In today's competitive international trade environment, the top priority for most businesses is often an increase in IT capabilities to sustain growth rather than a plan of action for a backup satellite link to preserve critical data in a crisis. For governments, greater funding and regulatory will help to place satellite products and services in the hands of emergency response teams.

As a result of recent large-scale crisis situations and improvements in technology, more organisations are now anticipating their needs for a variety of emergency situations in order to keep communications operational with employees, suppliers, clients, media and citizens. They are

now estimating the potential loss of business from network downtime and evaluating what redundant, reliable, and continuity assistance plans they should implement.

At Eutelsat, one of the world's leading satellite operators we have also expanded the coverage supplied by our fleet of 23 satellites and enhanced the connectivity solutions they provide in order to be able to quickly react to requirements for disaster recovery or business continuity. Through our Skylogic broadband affiliate, we have also developed nomadic turnkey communications products that enable a complete network to be installed in a few hours for Internet access, GSM backhaul and other services. We believe that there is more than ever a need for players in the humanitarian chain and network operators to work together to ensure that planning and progress in digital communications enable us to gain valuable time to save lives and preserve trade.

We look forward to meeting you during Aid & Trade to show how our satellite bandwidth and turnkey products can provide backup and redundant solutions for business continuity and disaster recovery. We also welcome the opportunity of developing new partnerships with complementary technologies that take us all a step closer to more efficient service restoration in the interests of governments, enterprises and aid organisations.

Olivier Millières-Lacroix
Eutelsat Commercial Director

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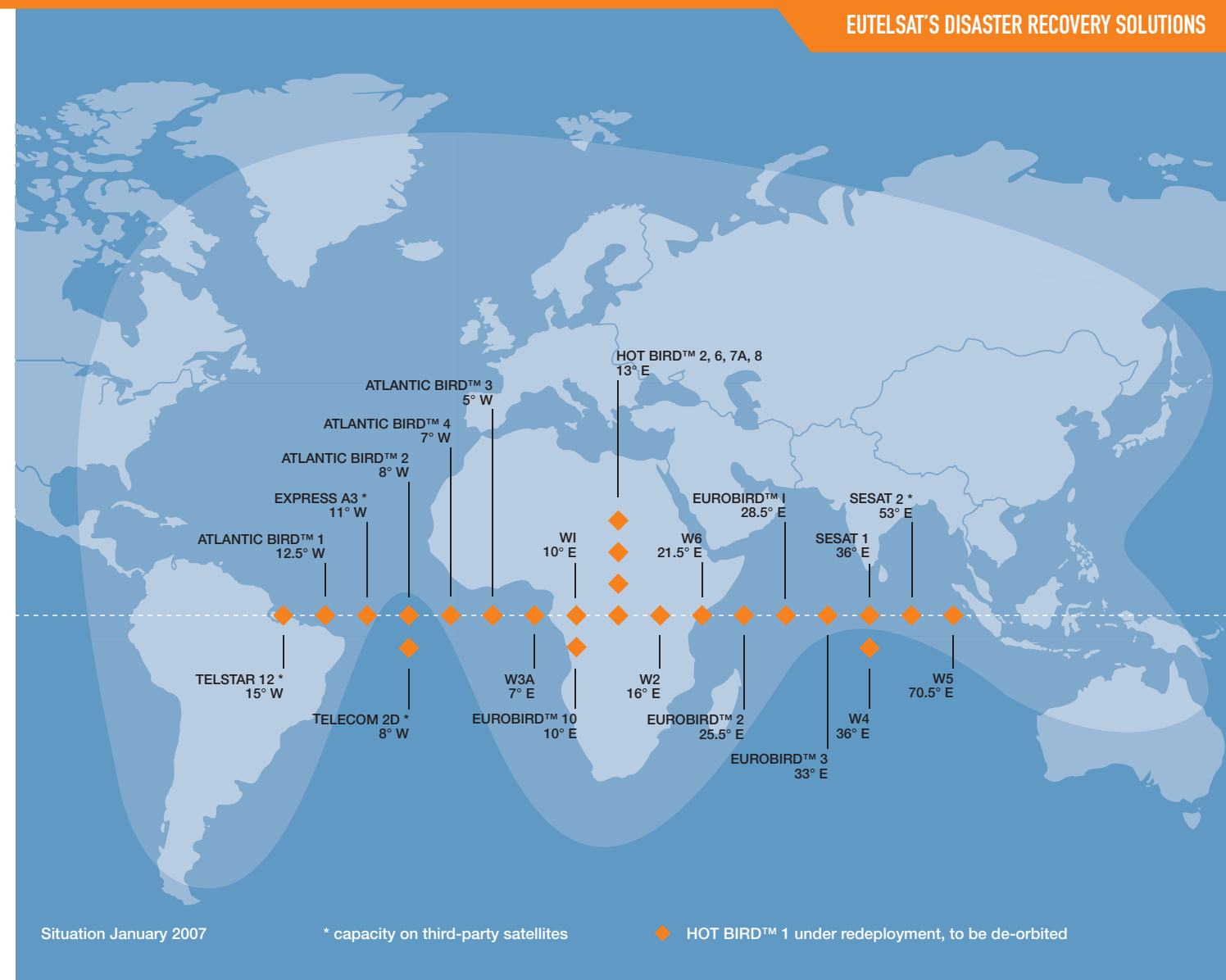
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About Eutelsat

With capacity commercialised on 23 satellites that provide coverage over the entire European continent as well as the Middle East, Africa, India and significant parts of Asia and the Americas, Eutelsat is one of the world's three leading satellite operators.

Eutelsat's satellites broadcast over 2,100 television channels and 970 radio stations, of which over 900 channels broadcast via our HOT BIRD™ video neighbourhood which serves more than 110 million cable and satellite homes in Europe, the Middle East and North Africa.

Our satellites also serve a wide range of fixed and mobile telecommunications services, TV contribution markets, corporate networks, and broadband markets for Internet Service Providers and for transport, maritime and in-flight markets.

Our broadband subsidiary, Skylogic, markets and operates services through teleports in France and Italy that serve enterprises, local communities, government agencies and aid organisations in Europe, Africa, Asia and the Americas.

Headquartered in Paris, Eutelsat and our subsidiaries employ 490 commercial, technical and operational experts from 27 countries.

www.eutelsat.com



Eutelsat Disaster Recovery Solutions

We offer reliable, easy to deploy Disaster Recovery solutions designed to instantly restore voice and data communications between your business locations.



Offering speeds of up to 2Mb/s per user for Internet access or services such as data broadcasting, videoconferencing and VPN (Virtual Private Networks), Eutelsat's Disaster Recovery solutions ensure business continuity at all times, under any circumstances.

How Does It Work?

Eutelsat's Disaster Recovery solutions are based on two major components:

The physical equipment: to enable the communication via satellite. For Internet access only, equipment is limited to one antenna dish and a DVB receiver/modem (see product sheet: D-STAR). For more complex and/or demanding communications networks (for example, direct connection of remote sites to another) at least two dishes are required, (see product sheet: D-SAT, SKYPLEX). For greater ease-of-use in emergency situations, this equipment is available in a portable "Flyaway" version, including an integrated GPS receiver, satellite modem, and Voice-over-IP adaptor, as well as a light, foldable antenna.

The broadband service: Eutelsat offers both dedicated broadband services (see: IP Connect description) and shared broadband services (see: IP Access description), depending on the requirements of your business

Benefits

- Ensure instant recovery of voice and data communications in case of outage
- Maximise uptime and effectiveness of your network infrastructure
- Minimise loss of revenue and productivity due to network disruptions
- Quick and simple to configure
- Easy to integrate to your existing communications infrastructure

Broadband Services
www.eutelsat.com/products/broadband-services

Instant connectivity around the world to restore your network

Emergency networks, disaster assistance and business continuity services

Companies and governmental administrations or humanitarian organisations, all require efficient broadband networking solutions for bandwidth-intensive applications such as Internet access, digital media streaming, distance education, file transfer, multicasting, and Virtual Private Networks. Eutelsat's portfolio of satellite business services offers low-cost solutions for always-on or on-demand connectivity, ideally suited to extend and back-up terrestrial networks.

Key services

- LAN interconnection
- Satellite VPN solutions
- Videoconferencing
- Voice and fax transmissions
- Telephony and voice over IP
- Satellite & Wi-Fi technology

Telemedicine services

When medical professionals need telemedicine systems to interact in the examination of a patient on the other side of the world, they must be sure that images, data and audio can be sent and received in real-time, in high resolution and with guaranteed confidentiality. Eutelsat's telemedicine services enable teleteaching, videoconferencing, video image transfer, remote control for teleconsultation, emergency diagnosis and intra-operative telepathology.

Key services

- X-ray radiographs, MRI
- Electrocardiography (ECG)
- Blood pressure (BP), temperature & weight monitoring
- Ultrasound images
- Scans
- Teleconsultation
- Videoconferencing
- Real-time diagnosis in radio-imagery
- Emergency diagnosis
- Intraoperative telepathology

Distance education and e-learning services

You can reinforce training messages using the latest multimedia tools to develop structured distance tutoring. With improved bandwidth and effective data compression, multimedia files can be swiftly downloaded while simple web-based training modules can be accessed via modem.

Key services

- Interactive teaching & tutoring
- Desktop-based applications
- Live meetings, events and conferences
- High quality streaming video
- Videoconferencing, rich media
- DRM (Digital Rights Management)



REDSAT, a nomadic telecommunications solution serving firefighters in extreme conditions



Selected by the Regional Fire and Relief Services (SDIS) in the south of France, REDSAT is a turnkey service developed by Satxpro that enables a complete communications network to be deployed in 20 minutes for connections between regional firefighter central command and relief locations. www.satxpro.com

The Challenge

The requirement from the SDIS was to have an emergency transportable system which would enable access to its secure central computer

network as well as provide telephone and fax connectivity. The system also needed to provide high-speed Internet access from mobile command posts in order to access maps, and simulate the propagation and direction of a fire in order to pilot and synchronise on-site activity as efficiently as possible.

The Solution

The REDSAT solution proposed to the SDIS is based on Eutelsat's D-Star product which comprises a transportable antenna and electronics packed into a case which can be transported by helicopter. The satellite bandwidth allocated to the user can be used anywhere in the coverage across Europe served by the satellite selected. The basic ground station supplies four telephone lines and fax connection to the SDIS and Internet connectivity for e-mail and file exchange. Extension modules can also be added to respond to particular requirements including monitoring from aircraft, telemetry and video transmission. Alternative satellite capacity can also be activated when the SDIS volunteers its firefighting expertise to other parts of the world.

The REDSAT product is available with automatic or manual antenna-pointing. The antenna can be deployed on-ground or mounted on a vehicle.

Benefits

Simple and quick deployment. Can be set up by one person in 20 minutes.

- Deployment in extreme conditions: high resistance to wind and storms. Delivered in reinforced travel cases.
- Broadband access, telephone, fax, Internet, VPNs and ad-hoc applications.
- Possibility to extend satellite coverage with no modification of the terminal.



Volcano monitoring and broadband communications on Stromboli

On the island of Stromboli, Italy, where volcanoes are still active, the Civil Protection Agency is responsible for providing help to the local population and for coordinating information, evacuation and relief efforts in case of an emergency.



“Satellites have solved many problems, demonstrating their versatile nature and their ability to provide broadband connectivity in any situation.”

Guido Bertolaso, Director, Italian National Civil Protection Agency

The Challenge

The Italian Civil Protection Agency needed a solution that would enable its agents working near the volcano to have immediate access to a full set of communications links in an emergency. It also needed a solution for remote monitoring of Stromboli's volcanic activity and changes in sea levels to enable rapid evacuation in case of landslides and tidal waves.

Of crucial importance to the Agency were:

- Access to voice and data communications at all times, even during volcanic activity
- Use of multimedia services to allow detailed reporting on the volcano's activity
- Equipment transportability and ease of deployment to ensure continuous communications with field agents in case of a disaster.

The Solution

The Italian Civil Protection Agency selected Eutelsat to provide its Disaster Recovery infrastructure. The systems selected operate through Eutelsat's D-STAR and D-SAT broadband services, which function independently from terrestrial infrastructure. They enable videoconferencing and moni-

toring services, and ensure that telephone connections are restored if disrupted during volcanic activity. The equipment used is extremely compact, which transportable to the region by helicopter and deployable within a few hours.

Benefits

Eutelsat's D-SAT and D-STAR Disaster Recovery solutions offer the Italian Civil Protection Agency the ability to:

- Run high speed networks independently from terrestrial infrastructure, including video, audio and data communications
- Ensure continuous connectivity with field agents and quick response in case of an emergency.



Emergency communications system for tsunami relief operation

The Italian Civil Defence Agency quickly engaged in the relief effort for victims of the tsunami, across South East Asia in December 2004.



The Challenge

Operating from three cities in Sri Lanka, the Italian Civil Defence Agency needed a solution that would help its field agents working in the devastated region to establish communications between their on-site locations as well as with the Agency's headquarters in Rome. They were looking for a solution that would combine the following characteristics:

- Be independent from terrestrial infrastructure, since the tsunami had destroyed all communications infrastructure in the region

- Be "portable" and user-friendly enough to be easily deployed on the field
- Allow voice communications as well as e-mail, instant messaging services and Internet access for full reporting on the relief effort.

The Solution

The Agency found the answers to its needs in Eutelsat's Disaster Recovery solutions, and chose Eutelsat's Italian subsidiary Skylogic to supply Internet access, telephony and video communications to its relief headquarters in Sri Lanka. These communications comprise PCs, Wi-Fi access points and Internet connections operating through a D-STAR satellite broadband terminal. The operation was carried out in four days, in collaboration with Eurosatellite and MBI technical staff, who are part of the Eutelsat/Skylogic WorldWide Deployment Team, which managed all on-site installations.

The network also supplies VoIP telephone and videoconferencing services between Sri Lanka and Rome. Connections were established through capacity on Eutelsat's W6 satellite, whose steerable beam was oriented over the region, and through

Skylogic's teleport in Turin, Italy.

Benefits

Eutelsat's D-STAR Disaster Recovery solution enabled the Italian Civil Defence to:

- Quickly establish a complete communications system in a region where all terrestrial infrastructure had been destroyed;
- Offer communications solutions to field agents, such as e-mail, instant messaging and Internet access.



Instant global connectivity for humanitarian agencies

NetHope is a collaborative organisation formed by the world's largest humanitarian aid organisations, providing IT equipment and solutions in countries where its members execute their programmes and projects.

The Challenge

NetHope is responsible for maintaining and operating the voice and data communications infrastructure of member humanitarian organisations in over 40 countries, from Paraguay to Nepal. In order to simplify the task of its network administrators, NetHope was looking for one common voice and data communications solution for all its member organisations, future and present. It had to be:

- Universal, to provide coverage to all areas in the world, even the most remote ones
- Easy to use and maintain, so as to enable humanitarian staff to connect anytime, anywhere
- And of course cost-efficient.

The Solution

To meet these requirements, NetHope adopted Eutelsat's 2-way satellite broadband connectivity D-STAR system. Eutelsat's D-STAR offers NetHope a one-stop, one price broadband access solution for all its member organisations around the world. The network uses capacity on four satellites and coincided with the commercial entry into service of the African beam on Eutelsat's recently

W3A satellite, whose broadband capacity is operated through a new IP hub located at Eutelsat's Turin premises.

Benefits

Eutelsat's D-SAT Disaster Recovery solution enables NetHope to:

- Improve communications with humanitarian staff in remote areas around the globe
- Offer Internet access and other basic communications solutions to aided populations

"The adoption of Eutelsat's solution means we are one step closer to creating real and lasting change for many children who now live in communities with little or no access to modern communications technologies"

Edward Granger-Happ, CTO, Save the Children



Telemedicine for field operation and disaster relief

Telemedicine applications using satellite technology can be the most effective solution to support medical rescue teams in the field.



The Challenge

In the event of natural or man-made disasters, medical rescue teams frequently face situations where terrestrial telecommunications are disrupted and where medical interventions are constrained to personnel available on-site. Medical rescue teams consequently need fully independent solutions so that they are equipped to quickly deploy a mobile medical infrastructure and efficient telecommunications to coordinate with remote reference medical experts and logistics centres.

The Solution

Eutelsat, together with the service provider Telemedicine Technologies, has designed a satellite-based telemedicine solution called MEDSKY which is fully adapted to the needs of rescue teams working on the field.

MEDSKY is a turnkey product comprising a satellite terminal (based on D-STAR or D-SAT) and client software in order to offer services including Internet and co-working features such as audio and video-conferencing, updating of medical files and sharing of medical images. The MEDSKY client software can be installed on any Windows-based PC and can be duplicated on as many workstations.

Benefits

Eutelsat satellite telecommunication solutions combined with MEDSKY Telemedicine solution can enable medical rescue team to:

- Quickly establish a complete communications systems (Internet, Voice, Data) in a region where all terrestrial infrastructure had been destroyed;
- Enable medical and logistic co-ordination through co-working intuitive applications;
- Organize satellite high rate communications between the Mobile Field Hospital deployed on the disaster field and the reference hospital allowing real time exchanges as videoconferencing or on-line/off-line telediagnosis...



Interview with Arduino Patacchini, CEO of Skylogic and Eutelsat Multimedia Director



Skylogic's new teleport SkyPark, opened one year ago. What are your objectives with SkyPark?

By establishing one of the world's largest teleports for broadband access in the heart of Europe, Eutelsat and its Skylogic subsidiary are pursuing two major strategic objectives. The first is to increase the resources we offer to support the continued development of our broadband activities in Europe, the Middle East and Africa. With 18 hubs dedicated to broadband services, we can now offer clients from a single point extensive geographic coverage across more than 150 countries through capacity on seven satellites in Eutelsat's fleet and a roaming agreement with Speedcast for eastern Asia.

The second objective is to broaden the scope of satellite-based services to new applications developed by our industrial partners and distributors. These new services include remote moni-

toring of industrial sites, civil security, telemetry, telemedicine, e-learning, data broadcasting, business TV and feeding new fixed and mobile local networks. To support these new fields of innovation, SkyPark assembles a unique set of signal treatment equipment and human expertise through a permanent team of 50 engineers, specialised technicians and support staff for 24/7 support and quality control services.

What are Skylogic's main markets?

Skylogic's first market today is supplying broadband Internet access to businesses, ISPs, Wi-Fi hot spots and public institutions located beyond range of terrestrial broadband networks. To do this, we use small satellite-based two-way terminals. Our second market is satellite-based telecommunications solutions for civil security, disaster recovery and business continuity. In addition to providing emergency restoration and site surveillance solutions, our satellite-based products allow the rapid deployment of rescue or surveillance equipment such as teleconsultation kits which combine diagnosis modules with a system for transmission of images and data to

specialist doctors or to beacons monitoring conditions on the ground, temperature of the sea and the height of the waves, so that any abnormal variation of the environment can be reported to a satellite terminal. New generations of transportable broadband satellite terminals are also facilitating the setting up of backbone connections to a GSM relay or a Wi-Fi antenna in just a few hours. In addition to these ground-based services, we have developed a wide range of maritime services which supply seamless broadband telecommunications at sea to a wide type of clients ranging from coast-guards to ice-breakers, fishing vessels, ferries and cruise ships. In the same dynamic, we have teamed with Viasat to supply satellite-based in-flight communications, via a tail-mounted antenna and a Wi-Fi hot spot installed inside the aircraft. ARINC, a world leader in aviation communications, has recently announced it is the first to introduce these in-flight services over European airspace with 40 business jets already operational.