

Crisis Management

Satellites - Links for Life



About ESOA

The European Satellite Operators' Association was formed in March 2002 to represent the interests of the industry with the European Commission, Parliament, Council and the European Space Agency as well as other international organisations, national governments and regulators. ESOA's goals include ensuring that satellites benefit from the appropriate political, industrial and regulatory environment to fulfil their vital role in the delivery of communications. ESOA is governed by a Board of Directors made up of the CEOs of its Member Companies.

The activities and other details about ESOA can be found at www.esoa.net. Members of ESOA are: Astrium Services, Eurasiasat, Eutelsat, HellasSat, Hispasat, Inmarsat, SES, SES Sirius, Telenor and Telespazio. Arianespace, Astrium Satellites, Avanti, International Space Brokers, Mansat, Marsh, Thales Alenia Space and Willis are Supporting Members of ESOA.

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Recent decades have seen a steady increase in natural catastrophes resulting in loss of life and economic loss.

Weather related events are expected to increase in number and severity in the future, due to the impacts of climate change¹.

Whether in terms of earth observation, monitoring or emergency communications, satellites dramatically impact the ability to effectively plan, coordinate and respond to such disasters.

Footnote: 1. Source Munich Re's 'GEO Data Service'

Tsunami



Tsunami

Sri Lanka

December 2006

The earthquake and resulting tsunami in South-East Asia had a magnitude of 9 on the Richter scale and was classed as a "megathrust". It killed around 226,000 people, 38,000 of whom were in Sri Lanka. It destroyed everything in its path, completely immobilizing the terrestrial communications infrastructure.

The Italian Civil Protection Services, European Coordinator for Community Aid deployed small-sized satellite terminals to enable emergency communications for aid workers and those affected, and provide a full broadband infrastructure to enable detailed exchanges between 3 bases in Sri Lanka (Colombo, Trincomalee and Galle) and the crisis cell in Rome.



Climate Change: Melting Glaciers

Satellite
Terminal



Climate Change: Melting Glaciers

Mount Rosa Glacier

June 2002

With changing climates, ever-present glaciers are now melting. In Macugnaga, Italy, one glacier created an 'Ephemeral' Lake which threatened to overflow and affect residents of a neighbouring town. Video-surveillance and communication was enabled by installing a satellite link on nearby Mount Rosa.



Floods and Mudslides in Mexico



Floods and Mudslides in Mexico

Mexico

October 2007

Telecoms Sans Frontières (TSF) supported the United Nations Disaster Assessment and Coordination (UNDAC) teams in the aftermath of the heavy floods that struck Mexico. Over one million inhabitants of the south-eastern states of Mexico were affected by serious floods and 80% of the State of Tabasco was under water. The TSF team used satellite communications to provide essential networks and deploy a communication centre in Villahermosa, Tabasco.



Volcanic Activity



Volcanic Activity

Stromboli, Italy

January 2003

Satellite terminals flown in by helicopter were deployed within a few hours to restore telephone connections when volcanic activity on the island of Stromboli, Italy disrupted land-based communications.

Civil protection workers had immediate and complete access to communications and received information on Stromboli's volcanic activity and changes in sea levels as part of an early warning system for landslides and tidal waves. A buoy equipped with sensors, launched in the waters 100 metres off the coast of the island, sent signals to a satellite terminal on Stromboli, which relayed data to the headquarters of Italy's Civil Protection Agency in Rome and its offices elsewhere in Italy.

Guido Bertolaso, Director of the Italian National Civil Protection Agency said, "In these difficult times, satellites have solved many problems, demonstrating their versatile nature and their ability to provide broadband connectivity in any situation."



Landslide



Landslide

Valtellina 2007

July 2007

In 1987, the 'landslide of Ruinon' buried the entire village of Sant'Antonio Morignone in Valtellina, Italy. The effects of this landslide are still visible today. In July 2007, 3 days were devoted to national exercises involving civil protection, firemen, regional and local administrations to remember Valtellina and to be prepared for the ongoing serious risk of landslides that still prevails at times of heavy rainfall. The activities used satellite surveillance and communications technology and ranged from early [meteorological] warning to intervention coordination.



Earthquake



Earthquake

Peru

August 2007

In August 2007, an earthquake measuring 7.9 on the Richter scale struck Peru, killing hundreds, injuring many more and destroying around 60,000 houses. Telecommunications were also seriously disrupted, but in less than 24 hours after the disaster, TSF had deployed a crew of emergency telecom specialists from its Americas base in Nicaragua to support rescue teams and affected civilians in the town of Pisco.

TSF installed two satellite-based Emergency Communication Centres (ECCs) in Pisco offering Internet access, voice and fax lines and IT assistance to the whole humanitarian community during the emergency phase of the disaster response.

At least 17 relief organizations involved - such as the United Nations Disaster and Assessment Coordination (UNDAC) teams, the World Food Program (WFP), the International Federation of the Red Cross, Oxfam, and Médecins du Monde Spain - were able to better coordinate their operations on the ground and send assessments and reports on the situation to better respond to the needs of the affected populations.





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