DISASTER MANAGEMENT COORDINATION AGENCY

IMPROVES COMMUNICATIONS ON THE ISLAND OF MONTSERRAT

DEPLOYMENT OF A MOTOTRBO[™] LINKED CAPACITY PLUS SYSTEM GREATLY IMPROVES COMMUNICATIONS ON THE ISLAND.

Agencies such as police, airport, hospital and the Red Cross, as well as department heads from Government agencies are managed from the Emergency Operations Center in case of a disaster or emergency. Therefore, this MOTOTRBO Digital System deployment helps ensure all agencies are able to communicate at all times.



Soufrière Hills volcano activity, Montserrat – International Space Station 2009 photo.



Soufrière Hills volcano, Montserrat.

THE AGENCY

The Disaster Management Coordination Agency is the government unit responsible for planning, responding and supporting immediate recovery from disastrous events in the island of Montserrat. In the course of an emergency, the department is responsible for response coordination, damage assessment reporting, incident command support and emergency communication through the Emergency Operations Centre.

THE CHALLENGE

The Island of Montserrat comprises 40 square miles. Life on the island has been dominated by an active volcano since its first eruption in 1995. Due to the many hazards associated with the changing moods of this ongoing volcano, including several phases of



Montserrat's Little Bay, site of the new capital.

explosive activity, the population of the island has decreased to an estimated 5,000 inhabitants.

Having a single telephone service provider with no submarine connection makes emergency communications a challenge for the Emergency Operations Centre management. In order to effectively interconnect, planners and responders required a common platform but each agency had a separate VHF network.

As a consequence:

- No agency was able to speak to each other even when an emergency operations center was activated
- Efforts to link these agencies proved expensive, and required a high level of unavailable skills
- There was also lack of redundancy



Agency:

Disaster Management Coordination Agency

Location:

Island of Montserrat Caribbean

Vertical Market:

Government

Project:

Integrate a communications solution that would effectively interconnect every agency in the system

Motorola Solutions Products:

- 2 MOTOTRBO Linked Capacity Plus Repeater Sites
- MTR 3000 MOTOTRBO VHF repeaters: 6 units
- RFDS (RF Distribution System: Duplexers, Circulators, Preselectors and Multicouplers)
- TT2388A HP Procurve 2510-24 Switches
- TT2387A HPA-MSR20-20 Routers
- DGM[™]6100 Mobile Radios, DGP[™]6150 Portable Radios, DGM[™]8500 Mobile Radios, DGP[™]8550 Portable Radios, DGP[™]8050 Portable Radios, DGM[™]8000 Control Stations
- IMPRES™ Hi-Cap Li-ion Non-FM
- Battery 2150mAH (Spare Batteries)

Benefits:

- Efficient interconnectivity
- Easy to deploy system
 Scalability without recurrent subscription
- Optimized emergency response
- Cost effective solution
- Reliable and secure radio traffic
- Central management

Solution Users:

- Disaster Management Coordination Agency/Emergency Operations Centre
- Royal Montserrat Police Service
- Fire and Rescue Services/ Prison services
- Airport/Red Cross/ Public Works Department
- Cabinet (Government ministers)
- District Disaster Committees





DGM™6100 DGP™6150 DGM*8000 DGP*8050 DGM*8500 DGP*8550

Soufrière Hills view, Montserrat

THE SOLUTION

After exploring various interconnectivity options from several vendors, the MOTOTRBO Linked Capacity Plus digital trunking VHF radio communications system from Motorola Solutions proved to be the most practical, scalable and cost-effective solution for the limited coverage required. It primarily consists of

Sea



MTR3000 Repeaters along with additional components, such as Switching and Routing equipment on a 2 Remote RF Site Repeater Configuration linked by microwave radio, together with a mix of Portable and Mobile Subscribers.

The Red Cross and the Police Force acquired DGM™6100 and DGP™6150 devices to carry out their routine and emergency response operations through the system.

Because the radios operate in digital mode, the system combines the advantages of MOTOTRBO digital signaling: two voice conversations per repeater, integrated digital features and other functionalities with the efficiency of trunking. This allows communication to a large number of subscribers across a wide area with a scalable and easy-to-use system. The system covers the entire 40 square miles of the island.

THE BENEFITS

For the first time, the Disaster Management Coordination Agency is able to efficiently and reliably contact all agencies and persons needed to respond to emergencies and/or unexpected incidents. MOTOTRBO also provides a high level of radio traffic security, cost-effective scalability, together with easy and convenient central management.

Police communications are now secure, so officers are able to conduct reliable routine operations, as well as incident command and response on separate channels from those used for their regular operations.

By including in this project these Motorola services: installation, optimization and training, the Agency ensured that the solution was up and running at its optimized performance. Users were highly satisfied with their enhanced communications.

FUTURE PLANS

The second phase of this deployment foresees installation of a DC back up, GPS tracking, the addition of a Man Down feature for subscribers and the deployment of a mobile repeater unit. MOTOTRBO is a robust and versatile digital system optimized to provide expansion capabilities as future voice and data needs arise.

For more information, please visit www.motorolasolutions.com/mototrbo

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