SECURE COMMUNICATIONS FOR SOMALIA'S POLICE FORCE

MOTOTRBO™ OPTIMISES OFFICER SAFETY WITH RELIABLE, SECURE AND EFFICIENT VOICE AND DATA COMMUNICATIONS

SOMALIA'S POLICE FORCE

Somalia's Police Force plays a key role in establishing and maintaining security in Mogadishu, Somalia's capital and largest city, with a population of 2.12 million. The Police Force previously used analogue radios to manage communications and wanted to install a new network to deliver greater capacity, coverage, reliability and security. The United Nations Assistance Mission in Somalia (UNSOM) led the drive to install the new system. Full implementation was made possible when Japanese Trust Fund money could be secured for the initiative.

Motorola Solutions has a long history working within the United Nations' System and recommended that the new network be built around MOTOTRBO. MOTOTRBO is Motorola Solutions' high-capacity and high-performance digital two-way radio system, which has proved itself repeatedly as a system which is suitable to harsh environments and simple to operate and maintain for the end-user. To ensure robust operation in an area where power supplies can be unreliable, Motorola Solutions designed robust steel containers for the network's three sites which function as utility hubs. Besides housing all the radio frequency (RF) equipment, the hubs also provide basic power through generators or solar panels to operate lighting, printers and charge radios at local Police stations.

Following extensive project preparation and detailed site surveys, Motorola Solutions pre-built, configured and tested the entire system in Germany to guarantee an accelerated system roll-out in Somalia. The first phase of the deployment is now complete, with network coverage due to be extended over the country as territory is recaptured from rebels by Government Forces. Motorola Solutions will provide maintenance for a year but has also completed nine weeks of training to transfer knowledge and enable the Police to manage the system. The network provides encrypted communications to prevent eavesdropping, high quality audio calls, and data services including GPS tracking in key operational areas in the capital. It is helping officers to respond quickly to incidents and better safeguard themselves, colleagues and citizens.

CUSTOMER PROFILE

Organisation:
UNSOM / Somalia's Police Force

Industry:
Public Safety

Location:
Mogadishu, Somalia

Motorola Solutions Products:

Containerized RF site featuring:
- 2 x 20ft Robust steel containers and a 10ft container
- 3 x Pump up 12m masts, 1x Pump up 12m mast in 10ft container, 1 x 12m lattice mast
- 8 x MTR3000 Base Stations / Repeaters
- 2 x Point-to-Point links
- Solar panels for 10ft container
- Generators
- Battery banks in 10ft container
- IMPRES™ multi-unit battery chargers
- PCs running TRBOnet™ Plus

Field-based hardware:
- 130 x DP4801 Portable Two-Way Radios
- 60 x DM4601 Mobile Two-Way Radios for police vehicles
- 7 x DM4601 mobile radios in desktop setup for local police stations
- IMPRES Batteries and further multi-unit battery chargers

> "Our number one priority is to ensure our officers have secure, reliable and high-performance communications wherever they need it in Mogadishu. We have achieved this with the MOTORTBO two-way digital radio system that was pre-tested and installed without issue. It provides our officers with the lifeline of instant communications that they need to complete their missions, respond quickly to incidents and better protect the public."
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> Chief of Police, Somalia's Police Force

THE CHALLENGE

The Police Force of Somalia wanted to upgrade its analogue two-way radio system. Its main objective was to install a secure and reliable system, with enhanced voice and data services that would provide coverage across all areas of the capital. The system needed to be sustainable on a long-term basis and easy to deploy, operate and maintain in the tough local environment. The radio sites would need to be self-reliant in terms of power to ensure trouble-free network operation.

THE SOLUTION

The United Nations has a long-standing relationship with Motorola Solutions and the project team took the decision to install a MOTOTRBO digital two-way radio network. The network was installed as part of a Utility Hub Project, which provides not only RF coverage, but also a basic power supply for the Police Force.

To help ensure the reliability and performance of the system, Motorola Solutions designed three secure containers which house all the hardware and software to run the network. This includes independent solar power sources with battery arrays, 12m masts – that can be manually pumped up – all RF equipment, Point-to-Point site linking using IP, charging points for user radios and inbuilt computers which run TRBOnet™ Plus to enable GPS tracking, dispatching, operations coordination and monitoring and maintenance of the system.

Before installing the network, Motorola Solutions conducted detailed site surveys, and built and tested the equipment in Germany. It has also provided a vital, comprehensive nine-week knowledge transfer and training programme to help the Police Force operate, maintain and troubleshoot the system. During the first 12 months of the contract, Motorola Solutions will also provide service support; this service may be extended to cover the whole system in a possible second project phase.

The network enables a range of services. These include secure voice calls (that cannot be eavesdropped on) across the main areas of the capital, channel capacity to support 200 users and GPS tracking with emergency buttons to call for help.

THE BENEFITS

The MOTOTRBO system ultimately ensures a more responsive police force and helps keep officers safe with instant, clear, reliable and secure calls that cannot be listened in to. It also provides dedicated safeguarding features including an emergency button on radios and GPS tracking that means assistance can be sent immediately to officers in trouble. The MOTOTRBO radios are robust and easy-to-use and the IMPRES™ batteries ensure radios last during long police shifts.

The self-contained, self-powered cabinets are easy to install and maintain and provide strong reliability to ensure that, whenever officers press the call button, they can trust that they will have the lifeline of communications. The cabinets also provide everything that's needed to monitor, maintain and run the network as well as PCs used as dispatch consoles for officers to coordinate operations for all 200 users.

The network design, build and installation service provided by Motorola Solutions helped accelerate deployment, with pre-configuration and testing conducted by Motorola Solutions in Berlin. This pre-commissioning and network approval helped ensure the trouble-free installation.

To help boost the skills of local people, Motorola Solutions worked with local partners and provided nine weeks of training for employees to learn how to use, monitor and maintain the system. This will help ensure long-term value from the network – a key benefit for the Japanese government that has funded the network. In addition, Motorola Solutions provides a comprehensive support service package with a combination of remote and on-site technical support.

The network's coverage will be extended in future, with Motorola Solutions due to add new sites in operational areas outside of Mogadishu.

Motorola Solutions Services:
- Site survey
- System Staging (Configuration and setup of system before shipping)
- Installation in Somalia
- Training and knowledge transfer by Systel, a Motorola Solutions' Distribution Partner
- One year maintenance (Including post deployment visits)

Applications:
- TRBOnet™ Plus:
- GPS Tracking
- Dispatching
- Text messaging
- System monitoring and analytics

Benefits:
- **Enhanced communications** – better radio coverage, free texting, clear voice calls ensure improved incident response
- **Improved security** – including voice encryption, GPS tracking, priority calls and remote radio disabling
- **Ease of deployment, maintenance and use** – of both the MOTOTRBO network and the containers
- **Power independent solution**
- **Easily scalable**

To discover the advantages Motorola Solutions' two-way radios can bring to your business, please visit
www.motorolasolutions.com/mototrbo

MOTOROLA SOLUTIONS