Motorola
Industry: Communications
Technology: Cabling

The background

Over many years Black Box Network Services has built a solid and long standing relationship with Motorola. As one of their preferred suppliers of network infrastructure products it was Black Box that Motorola turned to when they were tasked with a critical and high security project based in the UK called Airwave, managed by MMo2. The Airwave service is a nationwide mobile radio service designed to serve the needs of the police and other public safety organisations in England, Wales and Scotland. The Airwave service uses digital technology to provide the highest quality communication service, introducing many important features that have never been available on existing analogue services. This meant that the Project Deliverable required a high quality installation with maximum reliability and resilience.

Description and Scope

AIRWAVE uses TETRA technology. TETRA, which is short for Terrestrial Trunked Radio is an open ETSI (European Telecommunications Standards Institute) standard for digital trunked radio - designed to maximise the use of the radio spectrum by sharing available radio resources amongst users on demand and exploit the advantages of digital transmission. Potentially any set of users within the coverage area of a TETRA system may communicate with each other - this may range form a single base station system to one with

The project commenced in early 2002 with a pilot site. Black Box used this opportunity to show their skills and abilities and to win the confidence of Motorola. The pilot was a complete success and Black Box continued in partnership with Motorola to complete the other cluster sites. Despite the project complexity, and the security issues, Black Box was able to ensure continuity with the project installation team. This greatly enhanced the quality of service delivered with thorough project understanding, and a true teamwork approach, working alongside Motorola personnel.

Summary

Working with Motorola on this project, Black Box was able to contribute to a facility that will have a direct positive impact on public safety. Showing attention to detail and meeting exacting standards were cornerstones of the skills required for successful delivery. Black Box rose to this challenge, which allowed the client to build a relationship with the supplier, based on trust and confidence of delivery received to the highest quality and standards expected by Motorola.

"Black Box Network Services was privileged to be invited to install the network infrastructure for Motorola on the Airwave MMo2 project. The project was an opportunity to demonstrate the highest level of delivery in terms of time, cost

national or international coverage.

An obvious first criterion for Black Box, given the sensitivity of the project, was to provide security cleared and reliable resources for the project, under the leadership and management of one key individual who would manage this project on behalf of Black Box.

Neil Owen (Black Box) was appointed as the Field Operation's Manager. Neil put together a hand picked Black Box project team that fully understood the scope of the project, therefore, gaining the client's confidence in Black Box's delivery capabilities.

The project was to consist of a cluster of sites, geographically dispersed across the UK, interconnected via a WAN (Wide Area Network). A total of 9 sites would be installed, one of which would be a back-up site, and another would be a test and development site.

Black Box were contracted by Motorola to pre-wire the nine locations with a structured cabling system, each of approximately 1200 STP CAT5e connections for the Motorola equipment and specialist co-axial links for the WAN connectivity. All cables then had to be fully tested and documented. Motorola then delivered their equipment, pre-configured and installed within 19" cabinets, to the site. Black Box also assisted with the patching of the whole system via Black Box installed master patch panels. The wiring standards were extremely high, more akin to factory assembly than a field environment. However Black Box engineers met this challenge and maintained these high quality standards.

and quality. Added to this, the benefit of serving the public gave the whole team a feeling of delivering a network that really would have a beneficial impact on the population at large.

This project was more than another business opportunity; it was the chance to make a difference."Neil OwenBlack Box Network Services

"From the first pilot installation to the last, Black Box demonstrated to Motorola that they can deliver on time and within costs, two of the most important milestones of any project. And, just like any other project, target dates shifted, complexities changed and quantities varied. Throughout these changes, Black Box changed with us to ensure that the final result would be a satisfied customer.

When problems needed resolving, Black Box was always on hand to assist Motorola in finding a timely solution. Motorola would certainly consider using Black Box Network Services for any future, large scale networks."Peter ObeneyMotorola