# 

CASE STUDY SOLUTION INTEGRATORS



## For More Than 22 Years, Black Box Has Provided Motorola with Structured Cabling Services to the Highest Quality and Most Rigorous Standards

#### **INDUSTRY:** Telecommunications

#### **BACKGROUND & CHALLENGE:**

Since 2001, Black Box 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 Motorola Solutions. The Airwave service is a nationwide mobile radio service designed to serve the needs of the police and other public safety organizations 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 analog services. This meant that the project required a high-quality installation with maximum reliability and resilience.

#### **SOLUTION:**

AIRWAVE uses TETRA technology. TETRA, which stands for Terrestrial Trunked Radio, is an open ETSI (European Telecommunications Standards Institute) standard for digital trunked radio - designed to maximize 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 can range from a single base station to a system with national or international coverage.

Given the sensitivity of the project, the first criterion for Black Box was to provide security-cleared and reliable resources for the project, under the direction 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 Operations Manager. Neil assembled 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 spread across the UK, interconnected via a WAN (Wide Area Network). A total of 17 sites would be installed, including eight backup sites and a test and development site.

Black Box was contracted by Motorola to pre-wire the seventeen sites with a structured cabling system, each of approximately 800 STP CAT5e connections for the Motorola equipment and specialist co-axial links for the WAN connectivity. All cables had to be fully tested and documented. Motorola then delivered its equipment, pre-configured and installed within 19" cabinets, to the site. Black Box also assisted in patching the entire system via master patch panels, installed by Black

> Box. The wiring standards were extremely high, more akin to factory assembly than a field environment. However, Black Box engineers met the challenge and maintained high-quality standards.

The project commenced in early 2001 with a pilot site. Black Box used this opportunity to demonstrate their skills and abilities and gain Motorola's confidence. The pilot was a great success and Black Box continued the partnership with Motorola to complete the other cluster sites. Despite the project's complexity and security concerns, 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 staff.

855.324.9909



### **OUTCOMES:**

Working with Motorola, Black Box was able to contribute to a facility that has a direct positive impact on public safety. Attention to detail and adherence to rigorous standards were cornerstones of the skills required for successful delivery. Black Box rose to the challenge, enabling Motorola to build a long-term relationship based on trust that has now endured for more than 22 years. With this project under control, the relationship has expanded to other locations, including Northern Ireland, Ireland, Ilse of Mann, the Channel Islands, and Norway.

"Black Box had the privilege of being invited to install the network infrastructure for Motorola for the Airwave project. The project was an opportunity to demonstrate the highest level of delivery in terms of time, cost, and quality. In addition, the benefit of serving the public gave the entire team a sense of delivering a network that would truly 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 Owen, Project Manager, Black Box

"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 end result would be a satisfied client.

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

Peter Obeney , Motorola

#### **GET IN TOUCH**

For more information about our services or for a quote, please contact us at **855-324-9909**, <u>Contact@blackbox.com</u> or visit <u>BLACKBOX.COM</u>.



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