



UK MANUFACTURER DEPLOYS FUTURE-PROOF MOTOROLA SOLUTIONS DIMETRA™ EXPRESS TETRA SYSTEM

FOR ROBUST AND SCALABLE MISSION-CRITICAL COMMUNICATIONS COUPLED WITH EXTENDED CAPABILITY



CHALLENGE

There was previously an ageing legacy DECT communication system in place at the company's main manufacturing site but the system was prone to failures, costly to run and no longer supported by the supplier. The manufacturing company wanted to upgrade to the latest in resilient, redundant and secure communications technology.

Motorola Solutions Platinum partner Avoira had been in contact with the manufacturer for several years and, when this requirement was put out to tender, Avoira worked with the business to deliver a full scope of the project. During this process the potential of the system to deliver further functionality such as priority calling, alarm management, Skype for Business integration and duplex communications was raised; it soon became evident that Motorola Solutions' DIMETRA Express was the ideal system to meet the company's requirements.

CUSTOMER PROFILE

Organisation:
Manufacturer

Partner:
Avoira

Location:
UK

Motorola Solutions Products:

- DIMETRA Express TETRA system comprising:
- 1 MTS4 Base Station with 3 receivers
- 116 MTP6650 TETRA portable radios with spare batteries
- Man Down Notifier (MDN) Licences
- Network Manager Application
- 5-year Service support for radios and infrastructure

Software:

- GlobalView Systems Interax Software
- Microsoft Teams

“As always, we worked closely with the client to identify their objectives and the most appropriate solution. More than this, our close and longstanding relationship with Motorola Solutions ensured a seamless implementation and integration of the DIMETRA Express TETRA system, one of the first deployments of its kind in the UK. The fact that Avoira is fluent in a range of technologies was also to the client’s advantage, not least in the migration to Microsoft Teams.”

Dave Jessop, Radio System Sales and Accounts Manager, Avoira

“Whether it is a straightforward single site, a complex multi-site Capacity Max System or a fully integrated DIMETRA Express installation, it is essential that our hardware and software are correctly integrated into the customers’ processes and equipment and that the end result satisfies the initial requirements. We partner with specialists like Avoira to ensure that this is achieved. We also rely on our Partner Community to give us ‘voice of the customer’ feedback to help our Product and Strategy Teams design the communications equipment of the future.”

Craig Calvert, Channel Sales Director, Motorola Solutions



SOLUTION

Motorola Solutions distributor, Airsys, supplied the hardware to Avoira, who installed the system, one of the first DIMETRA Express systems in the UK. The MTS4 is configured with 3 base radios enabling 12 channels, one of which is reserved as a control channel. The system offers redundancy as, should one of the base radios fail, the remaining two will cover capacity in the interim. However, any issues are normally resolved before this happens, as Motorola Solutions Network Manager software is used to monitor the system; moreover, the infrastructure and radios are protected by Motorola Solutions 5-year service packages for proactive maintenance and swift and effective response, in case of any issues. This ensures optimal system uptime and maximum ROI.

Workers at the site have been equipped with MTP6650 TETRA portable radios with spare batteries and Man Down Notification enabled, to enhance worker safety. The priority call feature, meanwhile, ensures super users, such as medical and fire teams, can always access the system, even when the network is very busy.

The infrastructure includes duplexed receive and transmit antennas and Avoira set up the system to include full duplex interoperability with the manufacturer’s telephone system; to make the migration easier for users, each radio was configured with a similar user interface to the previous DECT system and all user contacts were copied over. Avoira also managed the integration of the radio system with the company’s communications and collaborations platforms via a specialist controller. Initially, this platform was Skype for Business. However, during the project, the manufacturer migrated to Microsoft Teams, and Avoira, who has recently been awarded status as a Microsoft Gold Partner, used its knowhow to seamlessly handle the transfer.

The manufacturer’s system also allows for much more than the already wide range of functionality and features delivered by the DIMETRA Express infrastructure. Firstly, the business wanted its complex Fire and Equipment Alarm systems to be integrated into its TETRA system. For this part of the project Avoira called on its partner GlobalView

Systems Ltd, a specialist in creating and supporting intelligent alarm handler software to enhance two-way radio systems. GlobalView integrated its InteraX Advanced Alarm Handler and InteraX Centralised Lone Worker software into the DIMETRA Express platform, so specific on-site or lone worker alarms could be identified and immediate messages could be distributed to the most suitable radio handsets or user groups on the system. The three-stage escalation path ensures alarms are always handled effectively, with a full reporting suite in case of subsequent need for investigation. GlobalView also helped to manage the integration of the DIMETRA Express system into the manufacturer’s OSISOFT PI operational data system used on site, as some alarms are processed through this.

BENEFITS

This Motorola Solutions DIMETRA Express deployment has been such a success that the manufacturer is looking to roll out this system globally. At the current site, meanwhile, the infrastructure is offering reliable, crystal-clear, mission-critical communications coupled with wide-ranging enhanced functionality for users. The modular nature and flexibility of the system will allow for full scalability and extended capabilities, in line with company growth and evolving operational requirements; and, with inbuilt redundancy and strong ongoing maintenance, service and support agreements, the business will be able to maximise the capabilities and potential of its future-proof system to handle multiple on-site requirements, both now and into the future.

Indeed, despite having already achieved so many goals, the business is already planning the second phase of the deployment to include functionality such as voice recording and GPS positioning across the site. The latter will be achieved via the radios’ Global Navigation Satellite System (GNSS), with some internal areas also requiring the installation of Bluetooth beacons to pick up locations via the radio’s inbuilt Bluetooth® 4.1 wireless technology. Audio accessories are also being considered, including accessories which could be used with Breathing Apparatus, in case of a fire or emergency.

Benefits:

- Reliable internal and external coverage and enhanced audio quality across the entire manufacturing site
- System redundancy ensures fail-safe, mission-critical communications
- The solution was installed initially in parallel with the previous DECT system, with no loss of service
- DIMETRA Express supports full duplex telephone interoperability, priority calling and seamless integration into other communications and collaboration platforms
- Enhanced features such as Lone Worker, Man Down and alarm management are increasing user and site safety
- Future-proof, modular system allows for scalability and further functionality, in line with changing operational requirements
- Full turnkey solution, with suppliers and partners working closely in successful collaboration
- Ongoing support and service packages ensure high system availability