

## Case Study

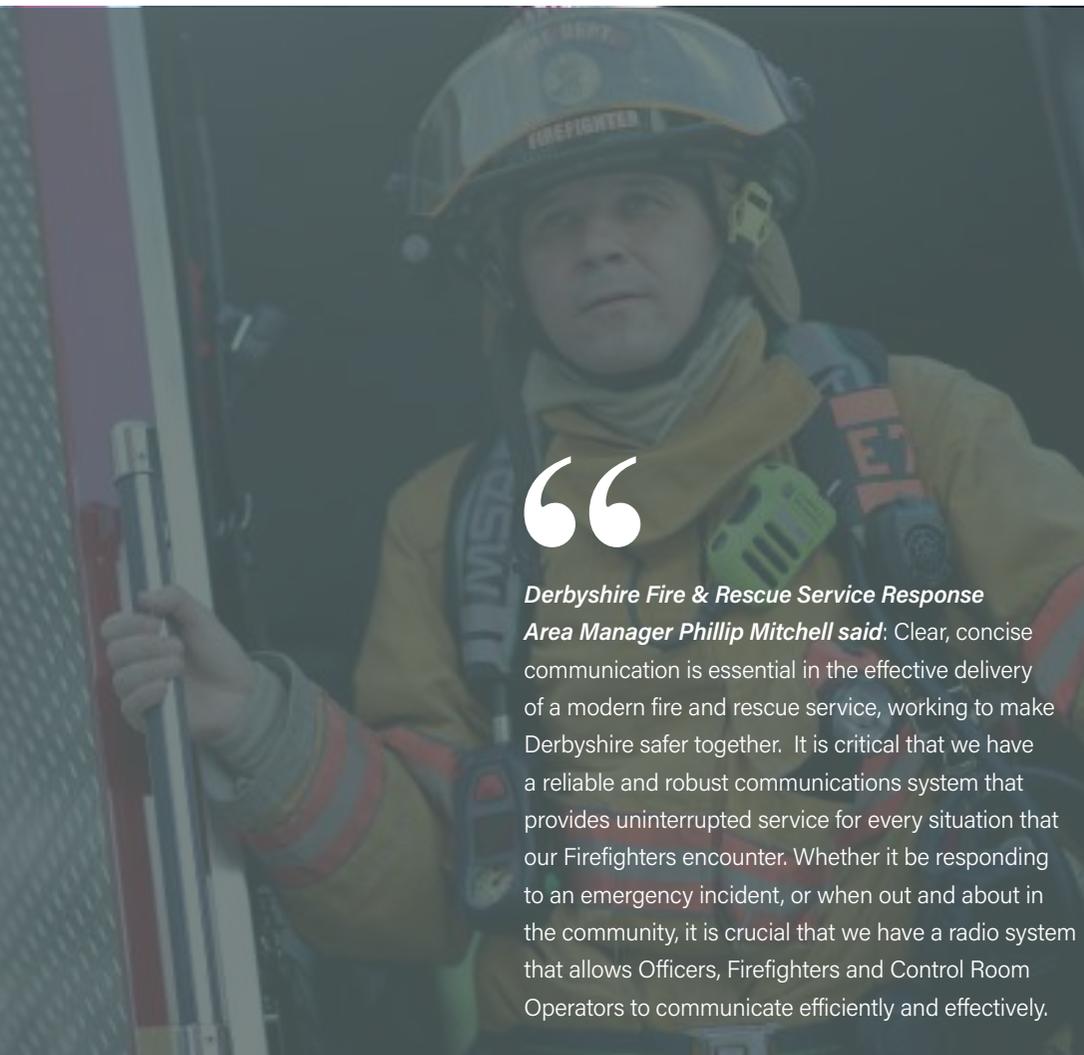
Radiocom Systems assists  
Derbyshire Fire & Rescue Service  
with Digital Transformation

Your Communications Partner.  
*Let's work together.*

T 033 3939 0022 | E [sales@radiocom.com](mailto:sales@radiocom.com)

[www.radiocom.com](http://www.radiocom.com)





“

**Derbyshire Fire & Rescue Service Response**

**Area Manager Phillip Mitchell said:** Clear, concise communication is essential in the effective delivery of a modern fire and rescue service, working to make Derbyshire safer together. It is critical that we have a reliable and robust communications system that provides uninterrupted service for every situation that our Firefighters encounter. Whether it be responding to an emergency incident, or when out and about in the community, it is crucial that we have a radio system that allows Officers, Firefighters and Control Room Operators to communicate efficiently and effectively.

## BACKGROUND

Derbyshire Fire & Rescue Service (DFRS) covers a service area of one thousand square miles, which includes a variety of urban and rural communities, with a population of around one million people. Their operational area includes the Peak District National Park, underground caverns and historical sites such as Chatsworth House and Bolsover Castle. The Service operates and maintains 31 fire stations, four area offices and has a joint police and fire headquarters in Ripley, Derbyshire.

As a long-term user of radio communications equipment, DFRS pushed forward with a digital radio communications upgrade in 2019 as part of their commitment to digital transformation within the firefighting industry, choosing Radiocom's Systems Ltd (Radiocom's) as their partner for the design, supply and maintenance of the new system.

*Simon Bingham, Radiocom's Senior FRS Account Manager commented;* "With Radiocom's experience and specialist knowledge in the emergency services industry, we are able to deliver a communications system that will not only satisfy current requirements but can be developed to incorporate upgrades, improved functionality and innovations, and crucially has the capability to expand". *He added;* "Our independence from any one manufacturer gives Radiocom's the flexibility to provide the optimal communications infrastructure for our customers, taking into account such factors as the choice of technology, future proofing and competitive pricing".

After DFRS reviewed a number of leading radio technologies, they chose Radiocom's to supply their upgrade to a Motorola Solutions MOTOTRBO™ radio system to replace the existing analogue radio network. Meeting the high standards of the UK Fire & Rescue Service, MOTOTRBO™ technology is designed to cope effectively within the harshest of environments. The robust equipment has proven longevity whilst providing welcome cost efficiency given current budgetary constraints.

## A MISSION-CRITICAL SOLUTION

Practicality of equipment when in use without impairment of communications and functionality is vital to fire and rescue services, simplicity of operation too given the pressures under which firefighters work while wearing protective equipment.

The aim of the new system was to create robust and clear communications with functions which address the specialised needs of firefighters. The radios selected by Derbyshire Fire & Rescue Service were the rugged, easily operated MOTOTRBO DP4601e and MOTOTRBO DP4401Ex ATEX GPS enabled hand portables which in addition to all the expected basic functions have the following features ideally suited for FRS purposes:

- The highest level of encryption (AES256) to guarantee privacy and protection from interference.
- Transmit interrupt function to clear a channel for emergencies.

- An integrated accelerometer to sense a fall of the radio and/or its operator and generate an automatic call for emergency assistance.
- A prominent orange emergency button to summon help with one touch.
- Location and telemetry sensors.
- Design for easy operation when wearing gloves.
- The latest energy technology also delivers up to 28 hours of battery life for 3-shift working, and an improved receiver boosts range by up to 8% compared to previous models.

Programmed and aligned to work within NOG (National Operating Guidelines) the new radios have provided the fire service with a resilient, operational ready communications device that they can rely on during unpredictable situations.





## EASE OF MANAGEMENT, UPGRADING & MAINTENANCE

Allowing for functionality and connection to be delivered across multiple handsets provides a fire service with a seamless operating communication system. As such, Radiocom's provided a connection interface between the MOTOTRBO IMPRES Remote Speaker Microphones and Interspiro breathing apparatus. Now, even when in the depths of a building they will hear every broadcast which is imperative should an emergency evacuation be initiated.

Preventing downtime was also high on the list for Derbyshire FRS, interoperability is at the heart of every radio communications system within the UKFRS. With the Motorola Solutions WIFI Radio Manager software installed at their Derbyshire HQ, a centralised database can now communicate with every hand portable on their fleet giving them direct control of their radio system.

This solution allows for their IT department to initiate equipment configurations & updates to the radio firmware regardless of the radio's location, leaving operations unaffected and saving them money in the long term.

Additionally, a 'Service from the Start' warranty was added to every hand portable radio to overlap their standard warranty. The result, says Derbyshire FRS allows the fire service to budget for device maintenance, reduces unexpected repair costs, provides protection for accidental/physical damage and lowers the total cost of ownership.





## RAPID IMPLEMENTATION

The implementation of the new radio system was swift. Within four weeks from agreement of the initial specification the new system had been configured and deployed to the frontline, Derbyshire FRS staff being concurrently trained in its operation.

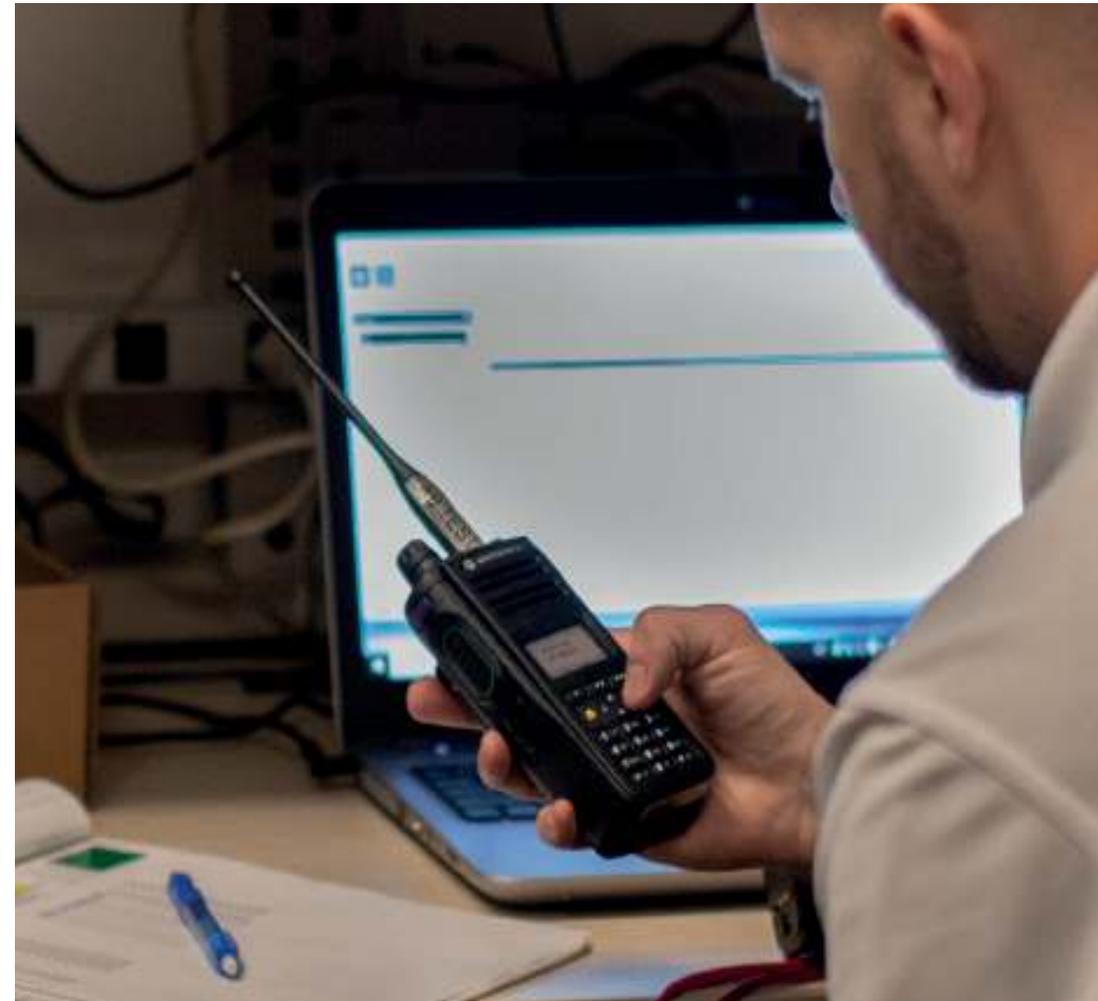
The new MOTOTRBO radio system has transformed Derbyshire FRS system's effectiveness, stability, and risk mitigation with a scalable, future proof communications solution.

Derbyshire FRS concluded "Given the mission-critical nature of our services we needed a company that we could rely on for expert advice and a highly professional implementation of the system roll out and reliable future support. Radiocom's justified our choice of partner proving to be extremely proficient in all aspects of their work during the tight turnaround of this demanding project.

When it came to the system deployment, the fleet migration was handled with the utmost efficiency. Our new digital radio system was seamlessly integrated into our operations without a minute's downtime."

### About Radiocom's

Radiocom's Systems Ltd is Motorola Solutions' leading UK partner. As a trusted advisor and supplier for over nineteen years Radiocom's have supplied and supported substantially all the UK fire and rescue services with voice and data communications equipment, system integration and managed services.





Let's work together.

**T 033 3939 0022 | E [sales@radiocomms.co.uk](mailto:sales@radiocomms.co.uk)**

Radiocomms Systems Limited, Units 2 & 3 The Chase Centre,  
8 Chase Road, London NW10 6QD

Crown  
Commercial  
Service  
*Supplier*



**[www.radiocomms.co.uk](http://www.radiocomms.co.uk)**

Image source Unsplash