



# UK FIRE & RESCUE SERVICE DEPLOYS MOTOTRBO™ RADIOS

FOR MISSION-CRITICAL INCIDENT GROUND COMMUNICATIONS



## UK FIRE & RESCUE SERVICES

UK Fire and Rescue Services provide prevention, protection and response services for UK citizens. The Services are responsible for so much more than firefighting, with staff working to keep communities safe, educating people and helping to prevent fires and other incidents occurring. Working alongside the police and local councils, they also respond to floods, road traffic collisions, rail incidents and confined space rescues, for example.

## CHALLENGE

This Fire & Rescue Service was previously using an analogue radio system. It wanted to upgrade to a digital system, to ensure crystal-clear incident ground communications, better radio battery life, ease of management, and to be in line with other Fire and Rescue Services nationally. The Service once again turned to long-term Motorola Solutions Platinum partner, Radiocom Systems Ltd. Radiocom has been providing hire, sales, maintenance and managed services for voice and data communication systems and solutions across a multitude of industries worldwide for over 47 years; Radiocom is on the Fire & Rescue Service's procurement framework and has worked with Services throughout the UK since 2004.

## CUSTOMER PROFILE

**Organisation:**  
Fire & Rescue Service in the UK

**Partners:**  
Radiocom Systems Ltd

**Industry:**  
Emergency Services  
& Public Safety

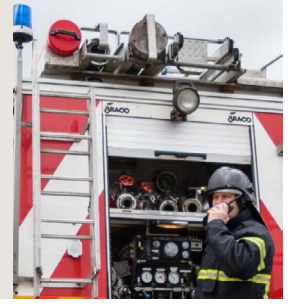
**Location:**  
UK

## Motorola Solutions Products:

- MOTOTRBO™ DP4801 Ex ATEX portable two-way radios with ATEX certified omnidirectional remote speaker microphones (RSM)
- MOTOTRBO DP4601e portable two-way radios with omnidirectional RSMs
- MOTOTRBO SLR 5500 repeaters
- IMPRES™ batteries and IMPRES multi-unit chargers
- Motorola Solutions 5-year service package
- MOTOTRBO Radio Management customer programming software

**“The total package Radiocom and Motorola Solutions provide – from ease of programming, updating and management via Radio Management, to the next-day radio replacement with Motorola Solutions’ service – ensures this Fire & Rescue Service can rely on their mission-critical incident ground radio communications.”**

Simon Bingham, Senior Account Manager, Radiocom



## SOLUTION

Radiocom is supporting a gradual digital roll-out across the entire area covered by this Service; digital radios have already been deployed to all appliances (mobile fire units, fire engines and fire trucks) and the roll-out is now continuing with fire officer radios (in small vehicles, attending major incidents to manage situations) and at fixed locations. The flexibility of the MOTOTRBO handsets allows them to be used in analogue mode, until the whole system is ready for digital switchover.

Radios are worn by all team members attending a call-out for incident ground communications; for example, a firefighter who has entered a burning building can communicate instantly and clearly with his colleague who is manning the hose control pump at the rear of the fire engine. When appliances from numerous stations attend, all users can communicate seamlessly across the initially established ground comms channel; however, if needed, further pre-set channels, such as a BA telemetry channel and a spare channel can be set up on different frequencies. Each frequency listed in the current licence is the centre of a 25 kHz channel. This spacing reduces the risk of interference from radios transmitting on adjacent frequencies by providing a guard band either side of the 12.5 kHz operating channel.

The Service is deploying over 1,000 units, with the MOTOTRBO DP4601e portable two-way radio as the mainstay, fire ground radio. Management teams particularly appreciate the DP4601e’s audible channel announcement and visual battery and channel indicator, as well as its robustness and IP68 rating, which means it can be fully immersed in water and still work optimally. The radios operate with the IMPRES 2100 mAh Li-ion battery, which is also IP68 rated and gives 15 hours of use per charge, as well as advanced features such as automatic, adaptive reconditioning and end-of-life display. The MOTOTRBO DP4801 Ex ATEX portable two-way radios, meanwhile, are used for specialist responses: for example, if a firefighter has to attend an incident at a petrochemical site or other environments containing potentially explosive gas and dust. Radios are charged using IMPRES multi-unit chargers and some personnel also use ATEX or standard accessories, such as the remote speaker microphone, which clips to their

uniform and enables easy hands-free communication; the wind porting feature helps to lessen background noise. The Service is also going to install some permanent MOTOTRBO SLR 5500 repeaters at key locations across the area it covers for enhanced communications network performance.

The Service uses the MOTOTRBO Radio Management customer programming application for software and firmware updates and to track assets, especially after a big incident, when radios may be returned to a different fire station. This ease of programming and tracking, together with Motorola Solutions’ service package, was a key factor in the Service’s decision to deploy MOTOTRBO radios. With the comprehensive cover, the Service can protect its radios against accidental damage or fire damage, to ensure the Service is always able to provide the mission-critical communications its teams rely on.

## BENEFIT

The MOTOTRBO radios are delivering clear, reliable incident ground communications, which is helping the Service to proactively and effectively handle incidents. Simon Bingham, Senior Account Manager, Radiocom, summarises: “Having worked with every Fire and Rescue Service in the UK, we understand their needs and draw on our extensive experience, working to the Crown Commercial Service Network Services RM3808 framework, to ease procurement for the Services. We don’t just provide radios – we provide wrap-around support, from regular meetings, debriefs and assisting with any troubleshooting.”

### Usage:

- Incident ground voice communications
- Segregated frequencies to provide an incident ground channel and, when needed, a BA (breathing apparatus) channel and spare channel

### Benefits:

- Reliable, clear, mission-critical group communications helping teams work more efficiently in potentially life-threatening situations
- Possibility of operating the MOTOTRBO radios in analogue mode during roll-out ensures easy continuity
- Radios are robust and waterproof, ideally suited to the emergency services sector
- Reduced maintenance costs by programming, updating and managing the radios via Motorola Solutions Radio Management software
- Radios can be damaged in the harsh operating environments, and the Motorola Solutions service contract with next-day replacement ensures teams always have the radios they need to hand