



telent and Tait Communications enable improved firefighter safety on the ground for East Sussex Fire and Rescue Service

New fireground radio solution increases range, improves audio quality and provides enhanced safety features.

Fireground radios provide a vital safety critical communication tool for local communications between firefighters and on-scene incident commanders. They are used by firefighters in breathing apparatus when operating hoses, scaling ladders and entering buildings. East Sussex Fire & Rescue Service (ESFRS) current radios are aging and require urgent replacement.

Tait Communications has been chosen by ESFRS to provide a new safety critical fireground communications solution, improving firefighter safety. The equipment will be supplied and installed by telent, their long-term IT partner and a specialist in the effective operation of the UK's critical national infrastructure.

The solution developed by operational teams at ESFRS working with Tait Communications, in collaboration with telent overcomes these challenges by providing better compatibility with firefighters' breathing apparatus for improved voice and audio performance in digital mode. In addition, new audio accessories with large buttons are incorporated for easier use when wearing protective gloves and an enhanced digital communications range allows multiple radios to be used together over both long and short distances. When the "Push To Talk" button is pressed on the digital radio, it sounds an alert tone indicating to the firefighter to start talking, increasing usability and user confidence especially for breathing apparatus wearers in zero visibility high stress conditions.

Following successful simulated incident trials, telent will supply 350 Tait handheld digital radios to ESFRS. These will be a mix of ATEX units for use by firefighters and non-ATEX units for use by incident commanders, with both units sharing a common battery. Ongoing support and maintenance of the radios will be provided by telent.

Client:



Challenge

ESFRS want enhanced performance from their fireground radios, their current devices are aging and require replacement.

Solution

A new solution developed in conjunction with operational teams at ESFRS working with Tait Communications, in collaboration with telent.

Benefits

Better compatibility with firefighters' breathing apparatus for improved audio performance in digital mode and increased operational range to enhance communications between firefighters at an incident.

“Crucially, this solution will enhance communications between firefighters on the ground, providing them with better protection and ensuring they can carry out their vital work safely,” said Richard Fowler, Assistant Director, Operational Support and Resilience, at ESFRS. “As the radio was designed specifically to meet the requirements of our fire service, it targets the key areas that needed to be addressed to improve our operational capabilities.”

The solution runs on pre-defined operational channels and uses a 4-Watt ATEX radio transmitter, a four-fold increase over typical analogue devices providing increased operational range. It has been developed to work with Dräger breathing apparatus, retaining the benefits of the Lung Demand Valve (LDV) noise suppression, while optimising the clarity and volume of speech on the digital channels.

With the radios able to operate in close proximity, each firefighter may be issued with a radio, eliminating the need for sharing radios at an incident, providing a major safety benefit. To further enhance the coverage range, telent will provide ESFRS with portable repeaters that can be deployed – for example, in a high-rise building – enabling coverage throughout the incident area on demand. Further digital communication options are available to link the fireground radio solution to the Incident Command Unit using Tait Unified Vehicle solution which integrates fireground radio with 4G/LTE, including Wi-Fi connectivity and Bluetooth for hands free voice operation. It will enhance ICU operator’s freedom enabling them to move about and increase productivity and efficiency, with the added benefit of voice recording of radio communications on the channel.

Barry Zielinski, Operations & Services Director at telent, said: “We are delighted to expand and continue our work with ESFRS. Providing safety critical solutions as a trusted IT partner to the emergency services sector is a key focus for telent and we’re proud to be able to deliver communication services to support fire and rescue services across the country as they carry out their crucial work.”

“Tait is committed to providing enhanced safety critical radio communications products and solutions to vertical markets including fire and emergency response,” said Andrew Gill, Managing Director EMEA at Tait Communications. “Along with ESFRS and our long-term partner, telent, we have developed an easy-to-use, high-capability solution that is suited for the intensity of fire and rescue situations. We look forward to continuing our work developing and delivering mission-critical products and services to the sector.”

