CASE STUDY WEST SUSSEX FIRE & RESCUE SERVICE CHOOSES AFFINI TO IMPROVE FIREFIGHTER SAFETY

BACKGROUND

West Sussex Fire & Rescue Service (WSFRS), located in the South of England, serves a population of just under one million people. The area includes almost 2000Km2 of forests in the South Downs National Park, large urban areas which include an international airport, and popular coastal towns along the English Channel. Given the geographical landscape and dispersed population, WSFRS required a bespoke radio communications solution to meet their specific, complex needs.

PROBLEM

As WSFRS' incumbent fireground radio equipment reached the end of its life, they decided to take advantage of technological advancements to improve safety for their firefighters and the efficiency of their operations. Moreover, WSFRS wanted to invest in a digital communications solution that would pave the way for future migrations and support their choice of breathing apparatus, whilst providing interoperability with adjacent Fire & Rescue Services, which includes airports with their own challenging environments.





Crown Commercial Service Supplier

As a pre-qualified supplier to the Crown Commercial Services, Affini was chosen to deliver WSFRS' fireground solution deploying Tait Communication's devices and equipment. Working in partnership with the fire service, Affini took a holistic view of the entire fireground and carefully considered every operational task including, BA Wearers, Entry Control, Officers, and Incident Command Unit vehicles. The solution, jointly developed by Affini and Tait, addressed specific issues identified during this evaluation. One key requirement was to simplify and standardise the radios, batteries, and user experience across all operations.

In addition, Affini included an innovative 'Communication Bubble' that enabled seamless, unified communication of DMR, Analogue Radio, LTE, Wi-Fi and Bluetooth between the firefighters, incident command, entry control and the remote stations.

The solution was supplied and implemented to a very high standard by Affini, consisting of over 400 portables with a 50/50 mix of standard and Intrinsically Safe (IS) ATEX rated radios and accessories, effectively addressing both safety and operational requirements. The digital radios, which comply with UK FRS National Operational Guidance configuration, can operate in analogue mode to be compatible with analogue radios still used by neighbouring Fire & Rescue Services to ensure continued interoperability.

SOLUTION





RESULTS

Entry Control received an upgrade consisting of high powered Red non-ATEX radios and large glove friendly Red RSMs and light weight noise cancelling headset, which significantly improves communication with Breathing Apparatus wearers.

Officers were also provided with red non-ATEX radio with Bluetooth RSMs and earpieces providing discreet communications. Both BA Wearers and Officers use a common ATEX IIA battery, simplifying the battery choice on the fireground, which is a huge benefit to firefighters. Specialised Ballistic Headsets have also been provided for Marauding Terror Attack officers.

The Incident Command Unit vehicles were equipped with "system grade" fixed repeaters to extend range and coverage while the Unified Vehicle's Linux operating system enables embedded applications to enhance efficiency and provides WSFRS with a platform for future digitised operations. Affini has delivered clearer communications, enhanced firefighter safety and greater integration of service to WSFRS, including a range of industry-leading radios and accessories. The solution is also designed to prevent communications downtime through implementing enhanced safety features and careful consideration to minimising acoustic feedback.

BA Wearers were provided with high powered ATEX IIA radios for advanced levels of protection for use in hazardous environments, which included enhanced Range & Speech quality and reduced background noise. This, combined with a glove friendly Blue ATEX Remote Speaker Microphone (RSM), provides WSFRS with a future proofed method of integrating an upgraded BA Mask. Several ATEX IIC, 1-Watt radios also formed part of the solution for working in environments containing volatile gases.





An innovative 'Communication Bubble' enables seamless, unified communication of DMR, Analogue Radio, LTE, Wi-Fi and Bluetooth between the firefighters, incident command, entry control and the remote locations.

High powered ATEX IIA radios delivered enhanced range, speech quality and reduced background noise, providing WSFRS with a future proofed method of integrating upgraded BA Masks.





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