TAIT UNIFIED FIRE SOLUTION
REDEFINING INCIDENT GROUND COMMUNICATIONS

"Our goal is to provide firefighters with consistent and high-quality communications across the incident ground to enhance the safety and security of all firefighters anywhere, anytime."

Richard Russell, Incident Ground Solution Architect, Tait Communications

WHY TAIT?

Tait has more than 50 years of experience in designing, manufacturing, and delivering critical communications solutions to organisations that need to have complete confidence in the systems and people they work with. Our clients protect communities, save lives, move citizens and power cities all over the world. We provide them with solutions proven to operate in the most demanding situations and environments with absolute reliability and connectivity.

FIREGROUND COMMUNICATIONS EXPERIENCE

Fire and Rescue services around the world rely on Tait solutions to keep safe and connected. They work in high-risk environments and face challenges from fires in densely populated cities, bush fires in the outback, floods, accidents and environmental hazards. Instant access to mission critical information can be the difference between life and death and with Tait, you can trust that your people can communicate whenever and wherever they need to.

Scan this QR code to visit **www.taitradio.com/fire-customers** to hear from some of our Fire & Emergency clients.

A HOLISTIC SOLUTION DESIGNED FOR FIREGROUND CONDITIONS

The extreme conditions of a fireground combined with the necessary PPE (Personal Protective Equipment) firefighters wear makes effective communications highly challenging. To address these challenges, Tait worked with fire rescue services around the world to develop a deep understanding of their needs.

This collaboration enabled the fire rescue experts at Tait to design a holistic solution which truly reflects the individual needs of the different roles on the fireground. The Tait Unified Fire Solution brings together radios, audio accessories, configuration options, and Breathing Apparatuses for optimal safety and efficiency.

We also provide user-training and after-sales support to ensure hassle-free adoption of new technology and long-term customer satisfaction.

What sets the Tait Unified Fire Solution apart is that it's not just a package of products: every element has been carefully selected with consultation from experts to enhance situational awareness, operational safety and ease of use for firefighters.

TAIT UNIFIED FIRE SOLUTION FEATURES

- ▸ Configurations for each user group
- ▸ Maximized range, high transmit power and ultra-sensitive receivers
- ▸ Minimised acoustic feedback
- ▸ Reduced background noise levels
- ▸ Discreet listening options
- ▸ Ease of use for gloved hands
- ▸ Enhanced safety features
- ▸ Integrated Breathing Apparatus
- ▸ Digital & Analogue modes
- ▸ Tait User Training
- ▸ Tait After Sales Service support
- ▸ Standard Compliant*

* The solution is compliant to the Radio Equipment Directive 2014/53/EU as well as to the ATEX directive 2014/34/EU and meets IP67 and MIL-STD-810 (C, D, E, F, G) to ensure quality and safety.

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SOLUTION OVERVIEW

To keep firefighters safe and connected, the Tait Unified Fire Solution combines optimized equipment with Tait Unified Vehicle, a mobile communications platform providing connectivity via multiple networks, ensuring that urgent calls always get through.

This enables everyone involved in a fire emergency response to stay connected to each other, from the control room to Entry Control Officers, Incident Command Offers and

firefighters on the incident ground. Users can connect through their radios or other devices like smartphones, tablets or laptops to access critical information over the strongest available connection.

The result is a critical communications solution that keeps the entire fireground connected, regardless of the different roles, locations or devices that are used.
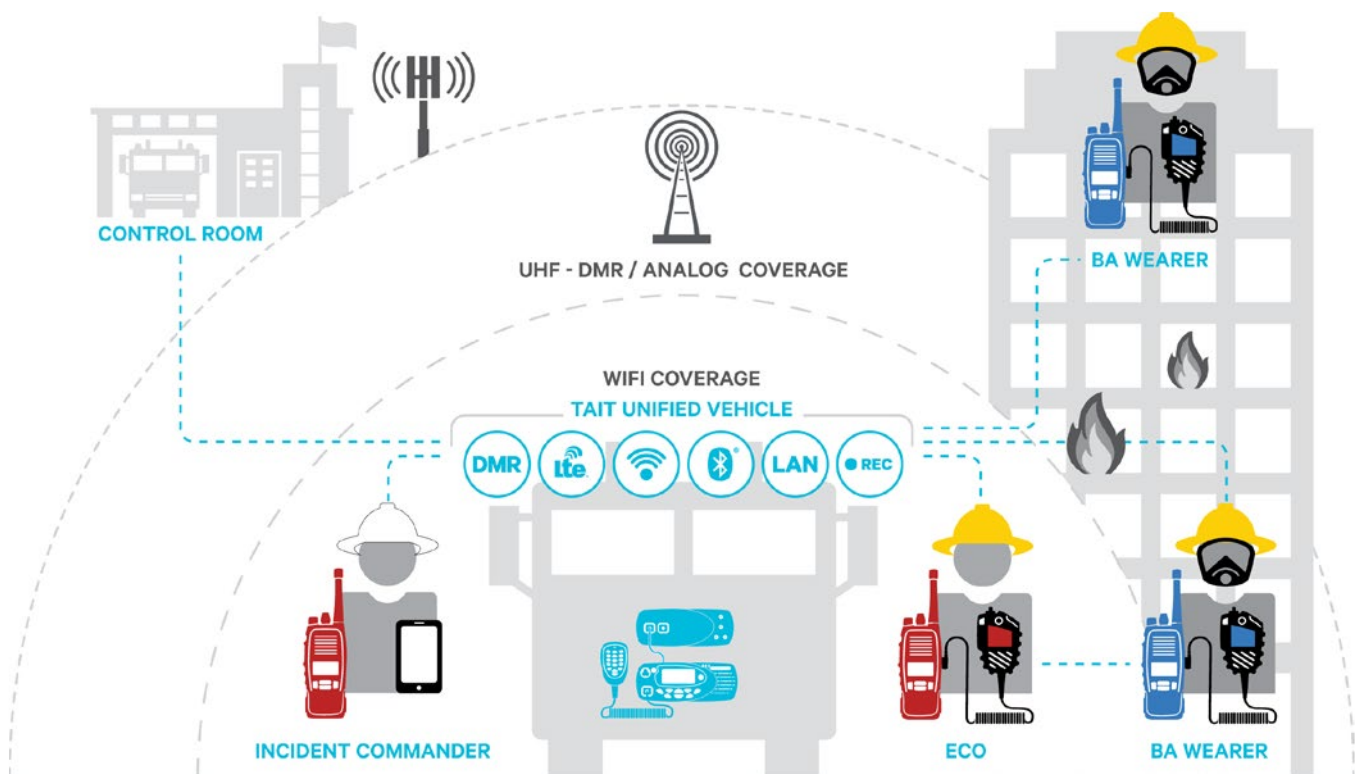

Figure 1: Holistic view of the Incident Ground

> **"This is the Unified Fireground where everybody is connected to everybody using the extended connectivity of Tait Unified Vehicle."**
> **Richard Russell**, Incident Ground Solution Architect, Tait Communications

SOLUTION COMPONENTS

TAIT RADIOS & REMOTE SPEAKER MICS: THE RIGHT EQUIPMENT FOR EVERY FIREFIGHTER

For firefighters on the incident ground, the Tait Unified Fire Solution consists of two key elements; a radio and a Remote Speaker Microphone (RSM) tailored to the unique requirements of different roles. These are complemented and optimized by role-specific devices and audio accessories, and Breathing Apparatuses.

For optimal functionality and performance, it is crucial that the Self Contained Breathing Apparatus (SCBA) devices and radios match.

Tait works with four SCBA manufacturers to ensure the breathing apparatuses and radios work seamlessly together, our exacting standards for quality and reliability are met, and compliance to regulatory standards is achieved.

The solution is colour-coded so users can be confident they have the right device for their role:

▸ Blue ATEX radios and blue ATEX RSM for BA wearers.
▸ Red non-ATEX radios for Entry Control Officers (ECO) and Incident Command Officers.

The red non-ATEX configurations can be customised to provide discreet communications when combined with a red non-ATEX RSM and a choice of earpieces, eliminating the possibility of bystanders overhearing sensitive information.

HARDWARE FOR EVERY ROLE

▸ **Entry Control** (Red TP9355/TP9555 portable radio and non-ATEX RSM)
▸ **Incident Command Unit** (Red TP9355/TP9555 portable radio and TM9355 mobile radio)
▸ **Officers** (Red TP9355/TP9555 portable radio and non-ATEX RSM)
▸ **BA Wearers** Blue TP9361 ATEX IIA portable radio (4 watts) with ATEX C-C550 RSM
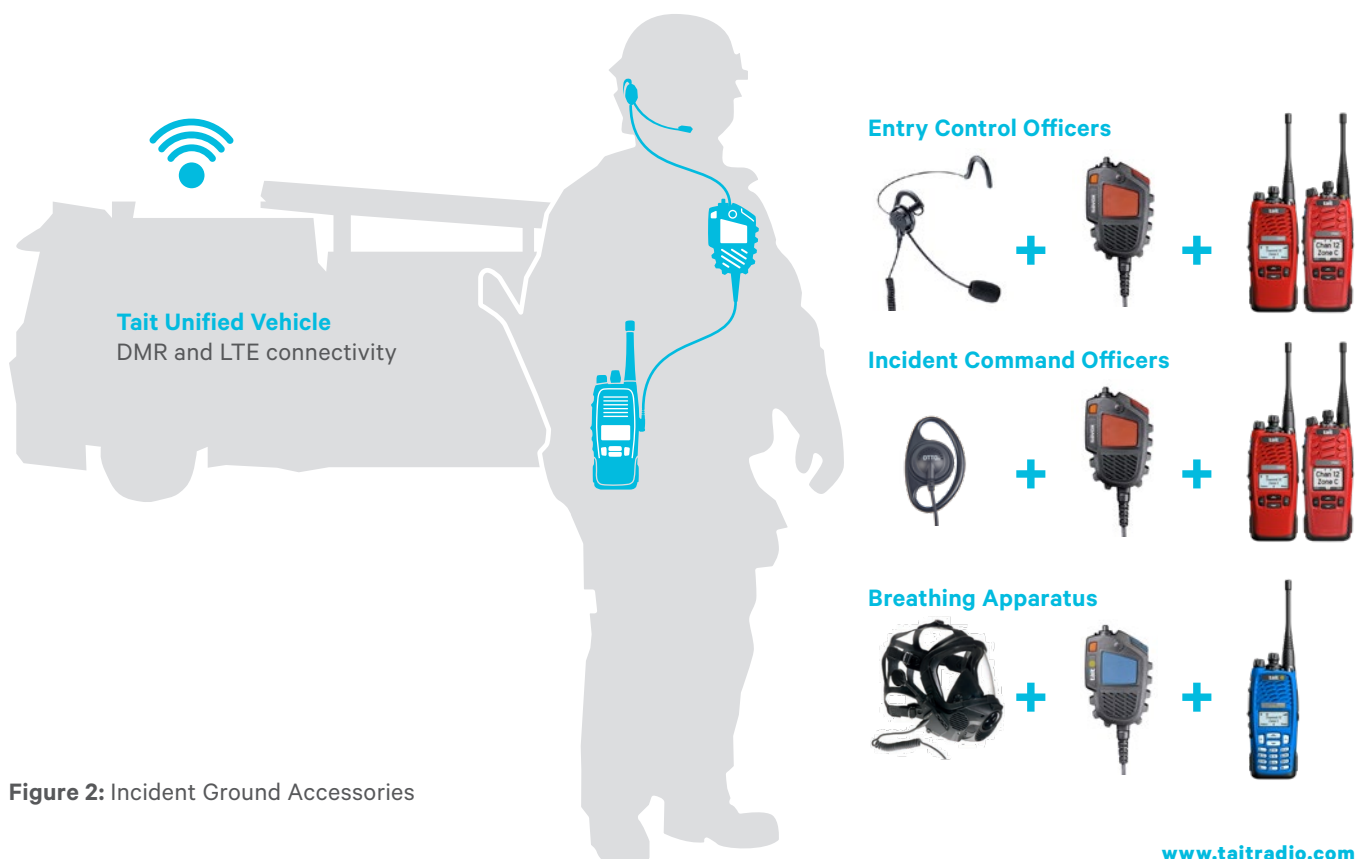▸ **HazMat** (Blue TP9361 ATEX IIC portable radio (1 watt) with ATEX C-C550 RSM)

Tait Unified Vehicle
DMR and LTE connectivity

Entry Control Officers

Incident Command Officers

Breathing Apparatus

Figure 2: Incident Ground Accessories

SOLUTION COMPONENTS continued

TAIT UNIFIED VEHICLE: YOUR MOBILE COMMUNICATIONS HUB

Incident ground communications are greatly enhanced through Tait Unified Vehicle, a mobile communications platform that integrates multiple networks, application processing, and voice recording.

Connectivity

This single, integrated device transforms the firefighter vehicle to a network of networks, including:

▸ Analogue Radio

▸ Digital Radio (Tier 2 and Tier 3)

▸ LTE

▸ WiFi

▸ Bluetooth®

▸ Wired Ethernet

Access to analogue and digital radio networks provides connectivity to control room, while LTE offers broadband data, and connectivity in areas beyond radio networks. The Tait PTToX Service can automatically switch to the best radio or LTE bearer available at the scene.

WiFi and Bluetooth® connectivity offer device connectivity in and around the vehicle.

Tait Unified Vehicle becomes the mission critical communications device to ensure vital data and voice calls always get through.
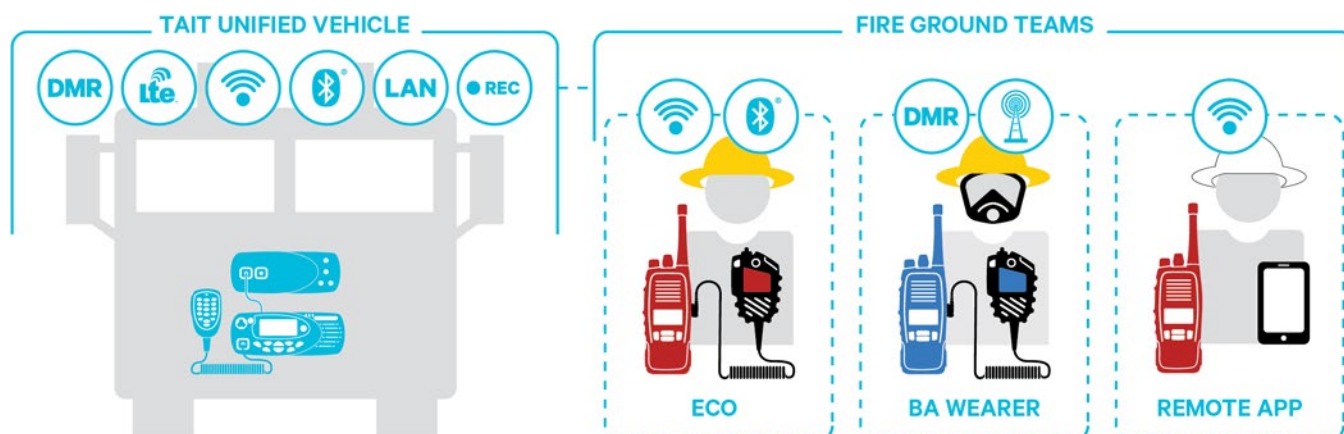

Figure 3: Tait Unified Vehicle

SOLUTION COMPONENTS continued

OPTIONS AND SERVICES: MAKING THE SOLUTIONS YOURS

Button programming

The radios have programmable keys to allow instant access to the functions you need at the push of a button.

Speaker mic

A key part of the solution is the **Tait C-C550 Remote Speaker Microphone (*non-ATEX and ATEX)**, featuring:

▸ an omni-directional microphone

▸ Two large PTT buttons specifically designed for use with gloves in zero visibility

▸ Nexus socket for noise cancelling headset or BA mask connection

▸ *3.5 mm socket for earpiece connection

Antenna

To maximise the transmission and reception range of radio communications, all radios are equipped with a powerful 16cm whip antenna.

Accessories range

High-quality headsets and earpieces allow hands-free operation and enhance audio quality, speech intelligibility, and discreet communications.

SCBA mask

Tait Communications works closely with BA manufacturers to ensure optimized audio performance and compliance to regulatory standards.

Battery performance

The Tait 2300mAh ATEX battery has the highest capacity available and is designed to maximize use throughout an extended shift, while minimizing self-discharge when stowed in vehicles for weeks at a time. Combined with the energy-efficient digital mode, batteries could last significantly longer between charges.

Fleet Management

Tait EnableFleet and Tait EnableProtect combine to offer your radio configuration experts secure and centralized management of your fleet of radios. The software displays the current status of the fleet and handles radio programming, firmware files and software licenses, making it easier to migrate to new features or to upgrade radio software.
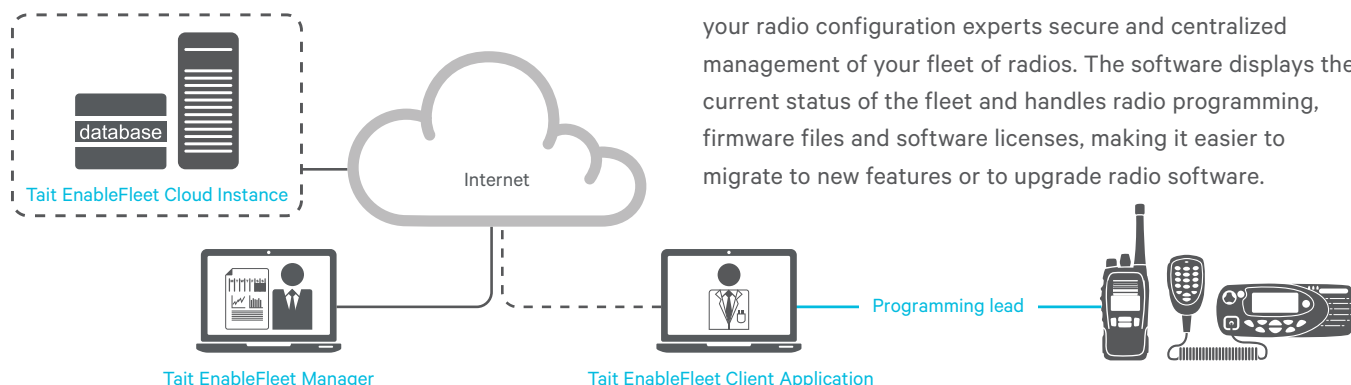

Figure 4: Tait EnableFleet – Radio Config Management

"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. 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."

Richard Fowler, Assistant Director, Operational Support and Resilience, at ESFRS

CHOOSE TAIT
FOR YOUR FIREGROUND COMMUNICATIONS

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▸ A holistic solution for the Fireground with

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- Enhanced safety features
- Integrated Breathing Apparatus
- Reduced background noise levels
- Standards Compliant

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