



Portugal Fire Department Paves Way to Next-gen Communications with Inrico PTTToC Solution

Mar.28/2024



Effective communication is essential to the safety and operational efficiency of fire brigades during firefighting and rescue operations. A Fire Services Communication Centre in Portugal has taken a major step towards modernizing its communication infrastructure by adopting a mission-critical system designed to meet the evolving needs of emergency response teams.

Challenge

“

Traditional Push-to-Talk (PTT) systems have proven inadequate in meeting the modern demands of fire and rescue operations. The need for a more robust communication system that can handle large-scale operations, offer seamless interoperability, and provide enhanced situational awareness has become critical. The Fire Services Communication Centre identified key challenges, including the need for clear voice communication in noisy, chaotic environments, reliable coverage across diverse areas, and real-time data management and dispatch capabilities.

”

Solution

To address these challenges, the Fire Services Communication Centre partnered with Inrico, leveraging their advanced Push-to-Talk over Cellular (PTToC) solution to enhance communication capabilities. The new system included Inrico's T320 smart PoC radios, the DR10 gateway, and dispatch platforms developed by Inrico's global partner, iConvNet. These integrated solutions provided a reliable, scalable, and versatile communication network that significantly improved incident response and safety measures.

Key features of the solution include:

Clear Communication in High-Noise Environments

The Inrico T320 smart PoC radio, equipped with dual-mic noise cancellation technology, ensures clear and reliable voice communication in the most challenging firefighting scenarios. Its 2W speaker guarantees loud audio, ensuring fire service personnel can hear vital instructions even in high-noise environments.

Rugged and Reliable Equipment

The T320 is engineered to meet IP65 standards, ensuring it can withstand harsh environments such as heat, smoke, and water, minimizing maintenance costs and ensuring long-term reliability. This durability is crucial for fire services, where equipment reliability is vital to operational success.

Multimedia and GPS Capabilities

The T320 radio is equipped with dual cameras and high-definition video capture, allowing for enhanced visibility in smoke-filled or dark environments. The device also integrates broadband LTE and Wi-Fi networks, providing real-time situational awareness for firefighting commanders, improving decision-making, and ensuring better coordination.

Nationwide Coverage and Seamless Interoperability

The solution leverages nationwide cellular coverage provided by mobile network operators, eliminating the limitations of traditional two-way radios or Professional Mobile Radio (PMR) networks. The DR10 gateway bridges the gap between PTToC and PMR systems, enabling seamless interconnection across different communication platforms and providing centralized management.

Advanced Safety and Monitoring Features

iConvNet's platform further enhances safety measures by utilizing AI detection technology to monitor firefighting equipment status, track personnel movements, and trigger alerts in case of emergencies. This advanced monitoring capability ensures that fire brigades can act swiftly and efficiently in critical situations.



With the advent of new-generation communication technologies like 4G and advancements in AI, IoT, and big data, the trend towards broadband and intelligence in PMR communication is inevitable. Inrico's PMR&PoC convergent solution revolutionizes firefighting communication and coordination, contributing significantly to public safety efforts.