



Norfolk Fire & Rescue Service Deploys ESN-Ready Mobile Communications Solution

Cradlepoint and Panasonic solution in 66 fleet vehicles enables Norfolk Fire & Rescue to send and receive critical information, to stay agile, via 4G LTE

Client - Norfolk Fire & Rescue Service

Location - Norfolk

Products Supplied - TOUGHBOOK 33 Tablet MK2

Challenge

Norfolk Fire and Rescue Service were looking to be an early adopter of the new Emergency Services Network (ESN) by deploying Mobile Data Terminals (MDT) across its fleet of 66 vehicles.

Solution

The fire service deployed Panasonic TOUGHBOOK 33 tablets in the front cabs of its fire appliances as MDTs & Cradlepoint NetCloud and routers for 4G LTE connectivity.

“Cradlepoint and Panasonic solution in 66 fleet vehicles enables Norfolk Fire & Rescue to send and receive critical information, to stay agile, via 4G LTE”

Anthony Fearn, ICT
Technical Manager



Norfolk Fire and Rescue Service is set to be an early adopter of the new Emergency Services Network (ESN) with the deployment of a Mobile Data Terminal (MDT) solution across its fleet of 66 vehicles using Panasonic TOUGHBOOK devices and Gigabit-class ruggedised LTE routers provided by Cradlepoint.

Working closely with Panasonic and Cradlepoint, the fire service has deployed Panasonic TOUGHBOOK 33 tablets in the front cabs of its fire appliances as Mobile Data Terminals (MDTs) and Cradlepoint NetCloud and IBR1700 Series routers for 4G LTE connectivity via EE, Vodafone and the forthcoming Emergency Services Network. Panorama Antennas are fitted to the vehicle roofs to optimise connectivity. These solution components were supplied by Westbase.io, a long-term Panasonic partner and leading Cradlepoint distributor in Europe.

The MDTs are used for receiving and providing vital information on the way to an incident, such as sending status updates, risk assessment requirements, details on the occupancy of the premises and nearby hydrant locations. The solution also creates a 100m, wireless local area network (WLAN) around the vehicles, providing firefighters with the ability to remove the MDT from the cab and take it with them during incidents. The device can then be used for continued communication with the command centre at the scene of an incident or to assist fire crews with detailed schematics of buildings or vehicles to help rescue trapped people. Once outside of the "Wi-Fi Bubble", the TOUGHBOOK 33 has the capability to move to its own ESN Connect capable modem to continue communication if required.

NetCloud Manager, part of the Cradlepoint NetCloud Service, is now being used to manage the mobile broadband network, local Wi-Fi network and router devices, providing the visibility to monitor location, network uptime, security, and cellular reception and usage through at-a-glance dashboards. The Service also enables routers to intelligently handle traffic flows across multiple cellular connections to ensure optimal performance, including over nationwide public safety networks like the ESN.

The solution components are all certified for use with the new Emergency Services Network, set to replace the current Tetra Network used by the emergency services in Great Britain. ESN will transform emergency services' mobile working, especially in remote areas and at times of network congestion, with a single platform for sharing data and imagery and by enabling faster adoption of new mobile applications.

"The Panasonic device itself is great and we are yet to have a single hardware failure,"

"The Cradlepoint routers have also been rock solid. We can observe the connectivity to each vehicle and see the physical location on a map. We can see exactly how the EE and Vodafone networks are performing and we have seen a significant improvement in connectivity. A lot of the uptimes are now 100% and we have a solution ready for the switch to ESN."

-Anthony Fearn, ICT Technical Manager at Norfolk Fire and Rescue Service.

