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EMEA Emergency Services eBook

Network Technologies Transforming Public Safety

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Cradlepoint has become a key technology partner as we design, trial and implement our in-vehicle Emergency Services Network strategy

Keith Lazzari, Head of Corporate Resources
County Durham and Darlington Fire and Rescue Service

Connecting & Serving Emergency Services Teams Across the UK

Cradlepoint is proud to connect and serve emergency services with technology designed to work in the toughest conditions and when agencies, officers and the community need it the most.

— **Cloud Management**

With advancements in cloud management, IT departments in public safety agencies can save valuable hours and costs by performing critical management functions remotely from a cloud-based management service, keeping emergency services operational and available out in the community.

— **Security**

As the number of connected devices that emergency services utilise continues to increase, so does risk. They need solutions where security is built into all levels, ensuring networks remain always connected and protected.

— **Ruggedised Hardware**

Emergency services depend on ruggedised hardware for a resilient network that will hold up in the harsh environments they face daily.

— **Simple Scaling to Advanced Technologies**

New and innovative connected technologies are helping emergency services be more efficient in the performance of their duties, stay safer, collaborate better, and access crucial information faster. The following are some examples of real-world use cases where Cradlepoint technology is helping to solve the challenges emergency services IT organisations have encountered in the field.

5,000+ vehicles

across the UK emergency services use Cradlepoint solutions to help keep communities safe.

Connected Cars for Hertfordshire Constabulary

Enabling officers to access real-time information for faster and more informed decisions.

— Agency Needs

Hertfordshire Police serves an area of 632 square miles, with a population of well over a million and a wide range of demands on the force. To help the constabulary better serve its community, the force wanted to create a connected vehicle network that would enable police officers to access real-time information at the point of need for faster and more informed decision-making.

— Solution

Hertfordshire Constabulary had identified a Panasonic Toughbook device for Officers to use in the field, but wanted to ensure a reliable connectivity experience. Cradlepoint's ruggedised LTE router solution was selected, thanks to its ease of integration, class leading WiFi and persistent 4G connectivity. The solution has enabled the creation of a 'mobile police station', allowing officers to securely access command & control systems, carry out database checks and access desktop applications.

— Benefits

Following an impressive trial that caught the attention of the Prime Minister, the solution has been rolled out to 180 vehicles, providing the connectivity required and creating a WiFi hotspot in and around the vehicle. The solution combines the Cradlepoint and Panasonic devices and is used by traffic and community police, as well as specialist teams such as armed response.

> " There is no doubt we are seeing the business and community benefits of these devices. They improve our access to information, which improves our crime intelligence and arrest rates. They also make our officers more visible by enabling them to be in the community more of the time.

Detective Chief Inspector Damien Kennedy
Project Manager for Mobile Data*

*Comments originally from Westbase's Panasonic case study

A Flagship ESN Solution for Durham and Darlington Fire & Rescue

In-vehicle Emergency Services Networking.

— Agency Needs

Development of the first in-vehicle Emergency Service Network (ESN) Solution, providing access to vital real-time information.

— Solution

County Durham and Darlington Fire and Rescue Service is implementing Cradlepoint's purpose-built ruggedised LTE mobile router solution, which has been designed for the most demanding requirements faced by emergency services organisations. Combining a Gigabit-Class LTE modem, higher processing power, and broader extensibility options, the ESN Certified and fully approved solution provides advanced reliable communications both inside and outside of the vehicle.

With the vehicles now connecting to the ESN Essential bearer, they provide secure WiFi to support core business applications and cloud-based services and require exceptional security from the network. Cradlepoint mitigates security risks for mobile networks and users by offering multi-zone firewalls, IDS/IPS, Internet security, and FIPS 140-2 certification.

— Benefits

As the first ESN-approved solution in the UK, it has significantly increased the efficiency of fire fighters by providing an 'always on' network that replaces both paper-based processes and those requiring users to manually sync tablet-based data. This capability has also improved the integration and efficiency of front-line and back-end systems.

Fire fighters can complete key incident and hydrant reports on site, which are now instantly shared with HQ. In addition, they are provided with on-demand access to building plans, helping them to enhance incident management capabilities.

> " Cradlepoint has become a key technology partner as we design, trial and implement our in-vehicle Emergency Services Network strategy. We are a flagship service in the delivery of these vital support systems and we're confident that Cradlepoint's solutions will meet our connectivity objectives

Head of Corporate Resources
County Durham and Darlington Fire and Rescue Service

Critical Connectivity for Major UK City Fire Brigade

Keeping fire and rescue crews in constant contact with headquarters.

— Agency Needs

The Fire Brigade needed a reliable and high performance in-vehicle connectivity solution to improve communication and coordination between headquarters and personnel attending incidents in the field. In particular, the technology had to provide connectivity for key devices, even in areas of limited network coverage.

— Solution

The solution integrates Panasonic Toughbook laptops with ruggedised Cradlepoint LTE router solutions in 250 vehicles to provide wireless 4G connectivity in and around each vehicle.

— Benefits

The Fire Brigade emergency services teams now have access to reliable connectivity in remote locations, facilitating better co-ordination between emergency services teams in the community and HQ. This includes the ability to send incident photos from remote sites back to HQ, improving coordination and on the ground communication.

Comprehensive Coverage for Regional Fire & Rescue Service

Reliable remote connectivity for over 100 vehicles.

— **Agency Needs**

This regional Fire and Rescue service serves a population of more than two million people, covering an area of over 800 square miles. To ensure it could deliver a service which has seen them ranked as one of the leading fire & rescue authorities in the country, it needed to implement a high performance in-vehicle connectivity solution, providing real-time connectivity between crews and headquarters.

— **Solution**

The service chose a solution which integrates Panasonic Toughbook devices with Cradlepoint's ruggedised LTE router solution in over 100 vehicles, providing the robust connectivity it needs and combining high performance with reliability.

— **Benefits**

The Fire Services' HQ can now communicate with remote crews in real-time, exchanging vital operational information and enabling the service to more effectively meet the needs of the community it serves.

Assured Connectivity for Metropolitan Police Service

Boosting the performance of in-vehicle applications with assured connectivity and seamless roaming.

— Agency Needs

Metropolitan Police Service needed to enhance the performance of its in-vehicle mobile applications to optimise user experience, providing assured connectivity to applications and resources from field and vehicles. It also required seamless roaming across any available network from WiFi to 4G, with always-on security for data and applications.

— Solution

Powered by NetMotion Mobility technology and ruggedised Cradlepoint routers, officers have real-time in-vehicle access to vital information, such as images of missing children, photographs of offenders, Police National Computer information and dispatching/routing details. 1,250 vehicles are now equipped with the solution. Cradlepoint's purpose-built LTE router solutions provide the high-performance connectivity and roaming that are a vital part of the wider in-vehicle solution.

— Benefits

The in-vehicle technology provides vital information seamlessly and at the right time for officers to act upon it. The project meets their objectives of investing in technology that has a positive impact on communities and makes officers more efficient. Officers can spend more time in the field, have access to relevant information, make critical decisions and provide a better service to the people of London.

> " **Technology plays an important role in bringing offenders to justice, and the information we give them at point-of-need is absolutely key. The solution is a game-changer for how we fight crime**
>
> **Superintendent**
> Mobile Technology, Metropolitan Police Service

The Best Solution for Always-on Networks to Protect Communities

Emergency services depend on digital and connected technologies to help quickly provide life-saving assistance, deal with emergencies, and bring order to chaotic situations.

Fully ESN Certified

The ESN is a next-generation voice and data network for UK emergency services personnel built on top of existing 4G networks. Cradlepoint offers the first ESN-approved cellular router at the critical service level – solidifying our status as a premier networking equipment provider to UK emergency services.

Centralised Cloud Management

Cradlepoint NetCloud Service cuts the time and cost to deploy and manage networks. Cloud management enables IT administrators to deploy branch, mobile, and IoT networks quickly and manage more endpoints with fewer people.

LTE Solutions with Mobile SD-WAN

Cradlepoint's mobile SD-WAN solutions featuring dual modems provide emergency services applications with the highest levels of network resiliency and elasticity, with benefits such as control of data plan costs, automatic wireless-to-wireless failover, and intelligent path selection based on LTE signal characteristics.

Dual-SIM Functionality

Cloud-managed Cradlepoint routers with dual-SIM functionality allow organisations to switch carriers remotely whenever the need arises, based on which carrier is providing the best network experience at that time. With Auto Carrier Selection, adding a new SIM card is simple. The modem detects which SIM card is installed, loads the correct carrier firmware and configuration settings automatically, and connects to the carrier . No Internet access is required.

Advanced Analytics

Cradlepoint offers agencies the ability to see how their network is being used, pinpoint all applications per network, monitor and analyse traffic patterns and usage, and then optimise network performance based on these finer detail management capabilities.

Software-Defined Perimeter

With Cradlepoint NetCloud Perimeter, agencies can spin up perimeter-secured overlay networks with a private IP address space, completely invisible to outside networks, that can be deployed in just a few minutes via the cloud.

Comprehensive Edge Security

More connected devices mean a higher risk of a dangerous security breach. Cradlepoint solutions provide Unified Threat Management (UTM) abilities with a comprehensive intrusion protection system (IPS) and intrusion detection system (IDS), which protects sensitive data. Also, secure web filtering and cloud-based threat intelligence protects emergency services whether at headquarters or in their vehicles.

With field-proven LTE solutions, Cradlepoint is a trusted provider for the emergency services — whether in-vehicle or at the station. All Cradlepoint solutions offer a dedicated 24x7 support line.

Next Steps

Discover more about Cradlepoint's all-inclusive NetCloud Solution Packages for branch, mobile, and IoT networks with 24x7 support for the emergency services.

Trial Cradlepoint NetCloud Service & NetCloud Perimeter

Steps for starting a trial with Cradlepoint:

— Step 1

Do you have a Cradlepoint router? If not, you will need one to experience the full value of NetCloud (cloud management) and NetCloud Perimeter (SD-Perimeter). Contact us to learn which router (branch, mobile, or IoT) will meet your network solution needs.

— Step 2

While you are waiting to receive your router (or if you already have one), create a NetCloud trial account and get started by creating a virtual network in just a few minutes.

— Step 3

Let us know if you would like a solution specialist to walk you through your trial account. Our solutions team is here to make sure you have a successful experience.

**Want to view a demo or speak to a Solutions Specialist?
Call Mark Page, Public Safety Account Director on
 07309 661732**

(DEMO >)

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Learn more at uk.cradlepoint.com/network-solutions-emergency-services