ERICSSON

Secure, reliable connectivity when every second counts

Connecting fire and rescue services to critical data, real-time applications, and secure communication whether in the field, on the road, or at command centers

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5,000+ vehicles across UK emergency services use Ericsson's wireless solutions to help keep communities safe

Built for the heat, the pressure, and the mission


Images courtesy of iStock

Firefighters operate in extreme environments where rugged, reliable wireless is essential. Ericsson solutions keep fire vehicles, stations, gear, and sensors online and connected. With public safety-certified routers and advanced GPS, teams stay coordinated and protected in the heat of the moment..

What fire and rescue services look for in a wireless solution

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 utilize continues to increase, so does risk. They need solutions where security is built into all levels, ensuring networks remain always connected and protected.

Ruggedized hardware

Emergency services depend on ruggedized 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.

Putting advanced technologies to work

Ruggedized hardware, real-time data access and cloud connectivity enhance safety and decision-making during fast-moving emergencies. Here are some real-world examples of how that technology is helping fire and rescue services to save lives.

Cellular solutions to bolster connectivity at stations

Unfailing and continuous connectivity across 21 stations at Avon Fire and Rescue Services

Challenge

Avon Fire and Rescue Service provides prevention, protection, and response services across the former Avon area, which spans 512 square miles, including an international airport, five motorways, four universities, and 450,000 homes. As a result, Avon FRS requires the best connectivity to ensure unfailing communications, allowing its firefighters to undertake their duties and protect the lives of Avon's 1.1 million population. Avon FRS received notice from its previous provider that its secondary connectivity bearer would be withdrawn at the end of March 2022.

Solution

Avon FRS quickly deployed Ericsson's NetCloud Service and wireless edge routers to its 21 stations to provide a futureproofed, resilient solution. The deployment of the Ericsson Cradlepoint technology, formed part of a larger project delivered by Avon FRS and Telent, Ericsson's channel partner, to provide a complete technology refresh to Avon FRS' station end mobilization system.

Benefits

Through the deployment, Avon FRS gained further insight into its network, leveraging Ericsson's cloud-based NetCloud platform, affording them the ability to monitor data accurately. Unlike the previous system, NetCloud proactively flagged when connectivity failed, and allowed engineers to address any network issue remotely, significantly reducing downtime. This increases the day-to-day ability of each firefighter to carry out their duties effectively, not having to worry about losing contact with their home station. Since the delivery of the solution, Avon FRS has benefitted from more reliable and secure networks through improved failover connections.

Image courtesy of iStock

"We cover an incredibly high-risk and expansive environment. Failures in communication can put the lives of our teams and the public at risk. Ericsson has helped us significantly reduce that threat."

John Craig
Station Manager, Avon Fire & Rescue

In-vehicle Emergency Services Networking

A flagship ESN solution for Durham and Darlington Fire and Rescue

Challenge

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

"Ericsson 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 these solutions will meet our connectivity objectives."

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

Solution

County Durham and Darlington Fire and Rescue Service implemented Ericsson's Cradlepoint purpose-built ruggedized LTE mobile router solution, which has been designed for the most demanding requirements faced by emergency services organizations. 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 WI-FI to support core business applications and cloud-based services and require exceptional security from the network. Ericsson 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.

Image courtesy of Durham and Darlington Fire & Rescue

Frontline workers stay connected during critical situations

Norfolk Fire & Rescue Service boosts communication reliability in rural areas

Challenge

Technologies and applications are helping frontline workers from emergency service agencies such as Norfolk Fire & Rescue Service (Norfolk F&RS) respond faster and communicate more effectively throughout the UK. However, when working across a large geographical footprint and serving many communities in remote, rural areas, fire vehicles often travel into signal "not spots." Access to the Home Office's forthcoming Emergency Services Network (ESN) is therefore a priority.

Solution

Norfolk F&RS deployed a joint solution including Ericsson's Cradlepoint dualmodem, ruggedized Gigabit-Class LTE routers and Panasonic's TOUGHBOOK 33 tablets in the front cabs of its fire appliances as Mobile Data Terminals (MDTs).

Benefits

With out-of-the-box ESN accreditation, Norfolk F&RS is fully prepared to reap the benefits of this critical new communications system. In addition, using Ericsson's NetCloud Manager (NCM), the IT team can monitor signal strength and performance across a wide geographical area and benefit from automatic network failover between multiple mobile operators. This results in a more consistent level of connectivity for frontline workers in and around fire vehicles, helping them respond faster and more efficiently to emergency call-outs.

Image courtesy of Norfolk Fire & Rescue Service

"The solutions provided by Ericsson and Panasonic are rock solid. We're now able to see exactly how providers are performing in different areas and have a clear path forward to start realizing the benefits of ESN connectivity."

Anthony Fearn
ICT Technical Manager,
Norfolk Fire & Rescue Service

Seamless response efforts in challenging environments

Advanced connectivity solution improves survival outcomes at Surrey Search and Rescue

Image courtesy of Surrey Search and Rescue

"We've seen the impact of advanced connectivity in defense, where rapid decision-making and real-time intelligence are critical. Applying this same technology to search and rescue means we can locate missing people faster, improve coordination with emergency services, and ultimately save lives."

PJ Farr
CEO of UK Connect and Search & Rescue team member

Challenge

Surrey SAR is a voluntary blue light team tasked with search and rescue operations for high-risk missing persons across Surrey and the UK. With more than 2,000 people going missing in Surrey alone each year and deploying on average once per week, the team needed a robust connectivity solution to support their work in any weather conditions and anywhere in the county.

Solution

Ericsson's ruggedized R2100 in-vehicle router provides this reliable, instant, always-on connectivity even in the most challenging environments and across differing terrain. Its dual-SIM modem design means it can seamlessly switch between cellular providers or fall back to satellite networks if needed when teams operate in difficult or remote locations, ensuring search teams remain connected at all times.

Benefits

In-vehicle router solutions allow rescue teams to respond faster, communicate more effectively with other emergency responders, and take advantage of new technology like drones in life-critical situations, leading to a better outcome for missing people.

Harnessing the power of 5G for officers, vehicles and sites

Fire and rescue services require uninterrupted access to critical data, real-time applications, and secure communication, whether in the field, on the road, or at command centers. All emergency services face the unique challenge of balancing speed, security, and simplicity across highly mobile and mission-critical environments. The solutions provided by Ericsson unlock the power of 5G so that teams stay coordinated and protected in the heat of the moment.

Learn more about enterprise wireless solutions

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