



ERICSSON

# Ericsson's Wireless WAN solutions

Building reliable and secure  
in-vehicle networks for fire departments

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Modern fire trucks are equipped with technologies critical for ensuring safety, enabling seamless communication, and providing better efficiency in emergency situations. These technologies include digital radios, thermal imaging applications, GPS systems, connectivity for MDTs, vehicle sensors, wearables and even drones for aerial visibility equipment for better situational awareness.

Previous generation solutions relied on hotspots or a laptop or MDT with a SIM card for connectivity. With first responders now relying on connectivity for all this technology, they require a secure, reliable, and scalable in-vehicle networking solution.

**Ericsson enterprise wireless solutions are tailored to first responders.** This includes:

**Reliable and secure LAN/WAN connectivity** for fire trucks and other vehicle, with the ability to extend connectivity to fire stations, drones, and computer vision applications (and other IoT device deployments).

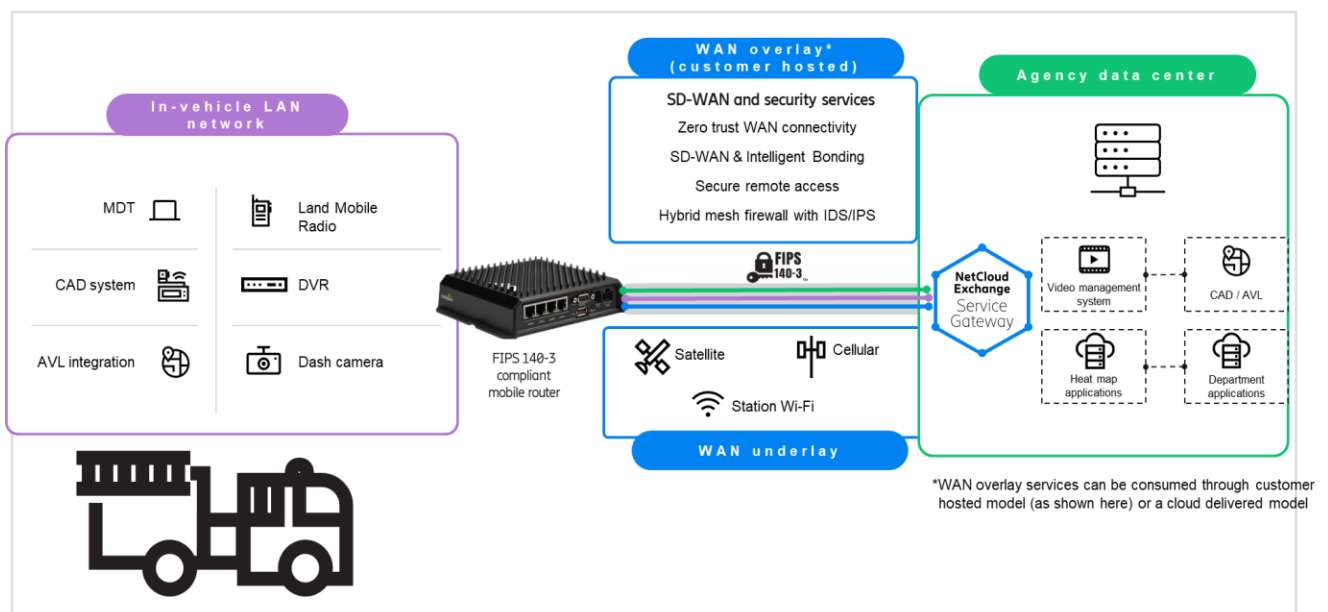
**Resilient connectivity** based on network slicing support, options for multi-WAN supporting multiple carriers and networks with LEO (Low Earth Orbit) satellite support, and SD-WAN / intelligent link bonding to ensure persistent connections in any condition.

**Centralized visibility and management** with coverage mapping, location services, advanced cellular insights, and more.

**Compliance with end-to-end FIPS 140-3 encryption.**

**Fast resolution to issues** with tenured, best-in-class support.

## Ericsson solution overview





## Key benefits

<p><b>High availability for critical communications with dispatch and other first responders</b></p>	<ul style="list-style-type: none"> <li>• <b>Persistent LTE/5G connectivity</b> with software-defined modems which allow for devices to connect to the cellular network faster and hold the connections longer.</li> <li>• <b>5G SA (Stand Alone) compatibility*</b> to connect to public safety slicing services from the carriers.</li> <li>• <b>Optional multi-WAN support</b> including the ability to integrate LEO satellite or a secondary cellular modem for network and/or service provider redundancy.</li> <li>• <b>Ability to duplicate CAD system or LMR communications across multiple WANs</b> simultaneously through Intelligent Bonding flow duplication to ensure always-on availability - even in the event of congestion or a WAN failure.</li> </ul>
<p><b>Seamless and secure connectivity of MDTs, CAD systems and other on-board technology</b></p>	<ul style="list-style-type: none"> <li>• <b>Embedded Wi-Fi 6 access points</b> enable robust LAN connectivity for in-vehicle communication with resilient cellular and/or satellite WAN connectivity.</li> <li>• <b>Secure client-based remote access</b> for first responders who need access to agency applications from MDTs when outside their vehicles with NetCloud ZTNA</li> <li>• <b>Zero-trust connectivity</b> from vehicles back to private data centers removing the need for complex VPN and private APN solutions.</li> <li>• <b>SD-WAN with Intelligent Bonding</b> provides faster failover times, improved network resilience, better application quality of experience, and faster uploads when multiple WAN connections are leveraged.</li> </ul>
<p><b>Track and locate fire department vehicles</b></p>	<ul style="list-style-type: none"> <li>• <b>Real-time and historical</b> vehicle route tracking.</li> <li>• <b>Map signal quality and coverage in a region</b> to understand zones with potential performance gaps.</li> <li>• <b>Integrations with leading AVL vendors</b> such as Forward Thinking and Fleet Complete.</li> <li>• <b>Extensibility</b> with APIs as well as Docker container / SDK support on select devices.</li> </ul>
<p><b>Meet compliance requirements</b></p>	<ul style="list-style-type: none"> <li>• <b>FIPS 140-3 level 1 certified routers</b> combined with FIPS 140-3 compliant service gateway, to enable an end-to-end secure WAN solution.</li> <li>• <b>Flexible router based and zero-trust overlay based security models</b> to suite different architectures.</li> </ul>
<p><b>Centrally manage and troubleshoot in-vehicle networks</b></p>	<ul style="list-style-type: none"> <li>• <b>Low touch deployments with embedded eSIM*</b> with the ability to connect, configure, and dynamically select the best carrier without on-site resources.</li> <li>• <b>Streamline ongoing maintenance</b> with bulk configuration and over-the-air software updates and patches.</li> <li>• <b>Enhance visibility with dashboards</b> that deliver comprehensive insights into network traffic, application quality, cellular health, security events, and more.</li> <li>• <b>Speed up troubleshooting</b> with a live view of cellular, wired and Wi-Fi health, integrated speed tests and AI based tools and insights.</li> <li>• <b>Integrate and extend capabilities</b> with APIs, an SDK tool kit and support for Docker containers.</li> <li>• <b>Leverage AI</b> as part of ANA (AI-based NetCloud Assistant) and the AIOps dashboard (available with Ericsson's zero-trust security and SD-WAN portfolio).</li> </ul>

*\*select Ericsson/Cradlepoint devices only*

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