



Core Enterprise Solution
for public safety

Uninterrupted. Secure. Reliable.

NOKIA



The complex landscape of public safety communications

Public safety agencies grapple daily with challenges that can mean the difference between life and death. As the world becomes more connected, the demands on these organizations increase, emphasizing the need for modern, reliable communication systems.

Private wireless networks using LTE and 5G present the opportunity to address the pressing challenges that public safety organizations face today.



Technology challenges facing public safety

Fragmented communications

With multiple agencies often operating in isolation, there's a risk of fragmented and delayed responses during critical incidents. This lack of unified communication can hinder timely decision-making and coordinated action. Worst of all, it can cost lives.

As we transition into the 5G era, innovative applications such as UHD video, AR/VR/MR, drones, and robotics are on the horizon. These tools promise to redefine public safety operations but also underscore the need for steadfast connectivity solutions.

Overwhelming data streams

The modern public safety environment is inundated with data. From in-vehicle ALPR systems to mobile telemedicine tools, the need to process high-volume, data-intensive applications in real-time is paramount. This data deluge demands networks that can handle the load without faltering.

Infrastructure gaps

Particularly in developing regions, the absence of comprehensive wireline and fiber infrastructure creates significant communication bottlenecks. These gaps can delay responses and impede effective coordination during emergencies.

LTE and 5G promise high-speed, low-latency networks that can handle the data demands of modern public safety applications. More importantly, they offer a unified platform that can bridge communication gaps, enhance inter-agency collaboration, and ensure that first responders have the tools they need, when they need them.

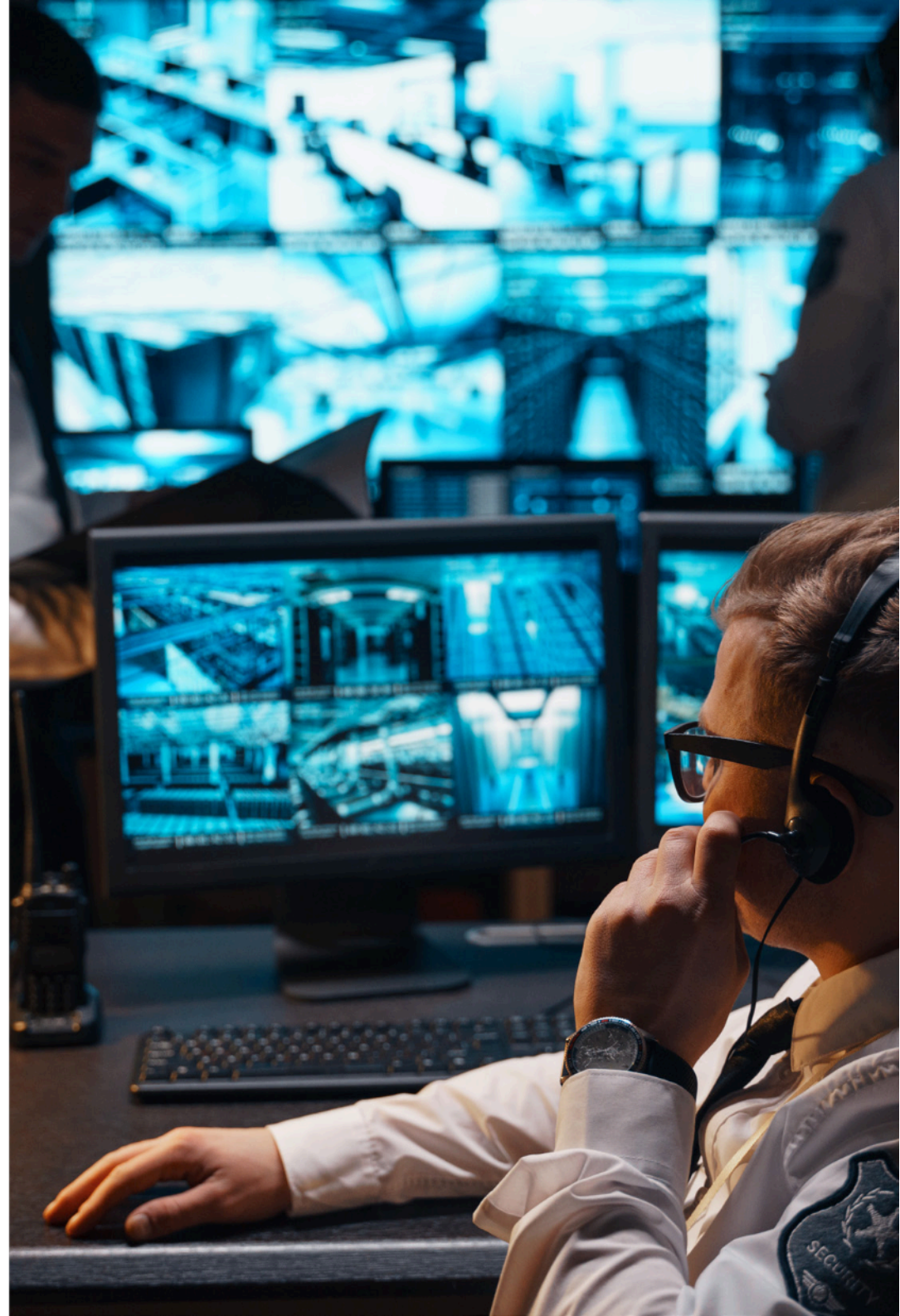
Emerging threats and technologies

The advent of the Internet of Life Saving Things (IoLST), coupled with the integration of AI and machine learning, presents both novel opportunities and challenges. While these technologies can revolutionize threat detection and response, they also necessitate a robust backend infrastructure to support them.

Nokia Core Enterprise Solution for public safety

Nokia Core Enterprise Solution is a groundbreaking platform designed for the demands of public safety. Anchored in advanced LTE and 5G technologies, it offers a tailored approach to communication challenges. By seamlessly bridging communication gaps between agencies, it ensures that data-intensive applications are managed with unmatched efficiency, making real-time collaboration and rapid response a reality.

Widely adopted by operators across the globe, Nokia's solution is more than just a network connector. It's a visionary tool that not only links networks to endpoints but also sets the stage for a future where technology and safety merge, ensuring public safety agencies are always a step ahead in their mission to protect and serve.



Nokia Core Enterprise Solutions

Pioneering public safety communications

In the ever-evolving landscape of public safety, Nokia Core Enterprise Solution for Public Safety emerges as a beacon, grounded in 3GPP standards and inspired by the industry's leading-edge developments.

Here's what sets it apart:

Optimized and scalable

Precisely tailored to the unique demands of public safety, ensuring efficiency and adaptability to varying traffic loads.

Automated and cloud-native

Minimizing operational overhead with agile, easily upgradable software, ensuring operational cost-efficiency.

Interoperability

A bridge between legacy and modern systems, fostering a unified communication ecosystem.

LTE and 5G Integration

Harnessing the power of modern communication technologies for rapid and reliable connectivity.

Robust and future-proof

Designed for ultra-high system availability while being primed for innovations like IoLST and AI-driven solutions.

Regulatory compliance

Meeting and exceeding regulatory requirements, ensuring peace of mind in every operation.



The full power of the Nokia core

Nokia Core Enterprise Solutions use the same software trusted by our 139 LTE and 83 5G carrier deployments. We've also seamlessly integrated Nokia Group Communications for mission-critical Push-To-X.

This combination delivers the robustness and features carriers rely on, along with the essential mission-critical capabilities public safety organizations demand, all within an easy-to-operate framework. Our solution offers

unparalleled interoperability, seamlessly connecting legacy and contemporary systems. This distinctive fusion of carrier-grade attributes, tailored to a streamlined footprint, ensures cost-effective operations and a future-ready, regulatory-compliant infrastructure.

With Nokia, public safety organizations gain a powerful tool, ready for today and the challenges of tomorrow.

“Nokia’s pre-integrated, sector-optimized mission-critical core network solutions can reduce risk and help speed challenging wide-area private network deployments.”

– Ken Rehbehn, Principal Analyst at CritComm Insights





Use case: Integration of critical IoT assets

Solving the data dilemma

Today's public safety agencies face the challenge of assimilating data from many different sources. From sensors detecting critical events to high bandwidth applications like video surveillance, integrating these diverse IoT inputs into command-and-control systems is crucial. However, many existing solutions struggle to seamlessly manage these data streams, resulting in fragmented insights and delayed actions.

The solution

Nokia Core Enterprise Solution for Public Safety is crafted to address this challenge. Drawing from the strength of carrier-grade software, our solution effortlessly connects IoT sensors and applications. With advanced quality-of-service capabilities, it ensures real-time responsiveness to crucial data, be it from fire alarms, gunshot incidents, or surveillance feeds. This prioritization ensures that vital information is readily available to decision-makers.

Benefits for public safety

This seamless integration amplifies situational awareness, enabling public safety organizations to make swifter, informed decisions. The ability to unify diverse data sources, from critical event detectors to surveillance systems, enhances inter-agency collaboration and swift resource allocation. Coupled with carrier-grade features in a compact design, our solution delivers cost-effective operations, future adaptability, and regulatory adherence. With Nokia, public safety agencies unlock the immense potential of IoT, championing a safer, more agile community.



Use case: Remote control of unmanned systems

Seamless control from a distance

In the rapidly evolving landscape for first responders, the ability to remotely control and communicate with drones, robots, and other unmanned assets over long distances has become valuable. These assets can provide important real-time insights, especially in potentially hazardous situations. Reliable real-time transmission of control commands, telemetry, HD video, and related data can be enabled with both LTE and 5G private wireless technology.

The solution

Nokia Core Enterprise Solution for Public Safety is at the forefront of this technological revolution. Drawing from the strengths in providing LTE and 5G networks, our solution enables the seamless remote control of drones, robots, and other unmanned systems. Whether it's video streams from drones to proactively identify threats at special events or live streams from robots for both surveillance and remote-control applications, our system guarantees uninterrupted, high-quality data transmission, connecting the public safety staff and applications to the unmanned systems.

Benefits for public safety

Remote control of unmanned systems adds to situational awareness and operational efficiency. First responders can safely view and assess scenes from a distance, reducing risks and ensuring timely interventions. The ability to deploy drones or robots in critical situations, with the confidence of seamless control and real-time data feeds, fosters more effective responses and rapid resource allocation. With Nokia, public safety agencies are not just equipped for today's challenges but are also future-ready, harnessing the full potential of unmanned systems.

Elevate your public safety operations with Nokia

Don't let communication challenges hinder your mission. Embrace Nokia's cutting-edge solution and ensure seamless, reliable connectivity for your teams and a safer future.



Why Nokia?

Over 675 large enterprise customers depend on Nokia's industry leading private wireless solutions today for resilient high performance industry connectivity. Our Core Enterprise Solution for Public Safety extends the same mission critical resilience, high performance and security hardening for wide-area, multi-agency public safety organizations. Delivered as fully cloud-native software in a low-footprint format, the solution optimizes your cost of ownership while simplifying operations.

Founded in technology created for carriers, the solution is optimized for public safety applications. Further, our professional services experts can help you customize the deployment to exactly fit your use cases.



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About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

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