

NOKIA



Saving lives with drones

Use case

Public safety agencies are increasingly tasked with responding to emergencies in complex, hard-to-reach environments. Rapid situation assessment, search and rescue operations, and the need for real-time monitoring of critical infrastructure place significant demands on their communication systems. Current solutions often struggle to provide the speed, coverage, and data-sharing capabilities needed to ensure fast and effective response, leaving agencies with gaps in their ability to manage emergencies efficiently.

Challenges

Public safety agencies face immense pressure to act swiftly during critical incidents, where every minute counts. One of the primary challenges is assessing situations quickly in environments that are either inaccessible or hazardous for human responders. Whether it's locating missing individuals in rugged terrain, navigating disaster zones, or inspecting infrastructure in remote areas, traditional methods are often slow and put lives at risk.

Another challenge is achieving real-time situational awareness. Without the ability to instantly gather and share data from multiple locations, agencies struggle to make informed decisions, potentially delaying crucial actions. Moreover, relying on outdated communication networks further complicates coordination, limiting the ability to deploy advanced tools such as drones and reducing the overall efficiency of rescue efforts.

Finally, as agencies expand their operations, they must manage increasing costs, from staffing to equipment maintenance, while also maintaining high levels of safety for their personnel. Addressing these challenges requires a modern, scalable approach that supports fast, data-driven decision-making without increasing operational overhead.

Solution

Nokia provides a combination of two key solutions from its portfolio to meet the needs of public safety agencies: Nokia Core Enterprise Solutions and Nokia Drone Networks. The core solution delivers a private 4G or 5G wireless network, ensuring secure and reliable connectivity for critical communications. This private network allows for real-time data exchange between command centers, field teams, and autonomous systems, even in remote or hard-to-reach locations.

Nokia Drone Networks offers drones that can be configured with a range of capabilities, such as high-resolution cameras and thermal imaging, as well as autonomous flight path navigation. These drones can be deployed from Nokia's drone docking stations, strategically positioned in the field for rapid access during emergencies. Together, these solutions provide the foundation for improved situational awareness, enabling faster and safer decision-making by public safety teams.

Nokia's Core Enterprise Solution for Public Safety and Nokia Drone Networks make emergency responses safer, faster, and more efficient.



Benefits

Deploying Nokia Core Enterprise Solutions alongside Nokia Drone Networks provides several key benefits for public safety agencies. First, it enables faster emergency response times by allowing drones to quickly assess situations and transmit real-time data to command centers. This reduces delays in decision-making and enhances the overall efficiency of rescue and recovery efforts.

The solution also improves safety for first responders by minimizing their exposure to hazardous environments. Drones can be deployed in situations that would otherwise require personnel to enter dangerous areas, allowing agencies to maintain operational continuity while protecting their teams.

Additionally, public safety agencies gain better situational awareness, as drones equipped with advanced sensors provide a comprehensive view of incident scenes, enabling more informed and coordinated responses. Finally, by automating key tasks such as infrastructure inspections and surveillance, the solution helps lower operational costs, allowing agencies to optimize resource allocation and focus personnel where they are needed most.

Results

With our approach, public safety agencies can transform their operations, achieving new levels of responsiveness and efficiency. The ability to deploy drones quickly, gather real-time intelligence, and make data-driven decisions enables agencies to save lives and protect communities with greater precision. First responders can be better equipped to handle emergencies, working in safer conditions while relying on the enhanced situational awareness provided by cutting-edge drone technology.

This future of connected, autonomous tools working seamlessly within a dedicated, high-performance private network opens the door to a more proactive approach to public safety. Agencies will be able to anticipate challenges, respond faster, and optimize resources, all while reducing operational overhead.

Discover more about how Nokia's solutions can help your organization build a smarter, safer tomorrow.

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.

With truly open architectures that seamlessly integrate into any ecosystem, our high-performance networks create new opportunities for monetization and scale. 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.

Nokia is a registered trademark of Nokia Corporation. Other product and company names mentioned herein may be trademarks or trade names of their respective owners.

© 2025 Nokia

Nokia OYJ
Karakaari 7
02610 Espoo
Finland
Tel. +358 (0) 10 44 88 000

Document code: CID214379 (January)