



Integrated Operations Center
Powering next generation public safety control rooms

NOKIA

To look after people's wealth, security and well-being, public safety agencies depend on data. Transforming this data into actionable intelligence enables next generation command and control rooms to instantly take the right decisions and respond to emergencies.

Saving lives when every second counts.

Data is the fuel of modern public safety

Rich media is the key to address increasingly complex emergency situations

Powerful data capabilities delivered by mobile broadband are an essential complement to traditional voice-based emergency response, enabling public safety agencies across the globe to be more effective every day.

Public safety control rooms are being called on to respond to increasingly complex situations and handle large volumes of data. Video from the field, combined with data from environmental sensors, acoustic sensors and other sources can help to substantially improve incident response.

Such data centric capabilities require advanced control systems and integration and are central to digital transformation initiatives like National Emergency Number Association (NENA) NG911 and European Emergency Number Association (EENA) NG112.

A fully coordinated approach

In parallel, there is a growing trend of control room consolidation to meet tightening budgetary constraints. Regional control rooms and sharing of resources help to improve responses through closer cooperation and increased situational awareness for police, fire and ambulance services. This also reduces personnel and system costs.

The possibilities of data are limitless. Imagine a healthcare emergency in which someone suffers a severe allergic reaction to a snack they've eaten. The person can't talk, but they make a video emergency call for help. They show the operator the food's packaging and ingredient list. The first responder recognizes the likely cause of the problem and provides instructions while calling for the most appropriate help. A life is saved.





The control center for any situation, wherever it occurs

Enabling next generation emergency response

Nokia Integrated Operations Center helps public safety agencies to cooperate more effectively, sharing data and situational awareness more easily.

The solution is a step towards Next Generation 911 and 112, enabling rich media call-taking, 360-degree situational awareness through video and Internet of Things (IoT), and enhanced multi-agency cooperation through virtual emergency response centers.

All centers have the same view with the help of virtual control rooms and can access the same data.

Virtual emergency response: always available no matter the location

Integrated Operations Center for Public Safety offers a unique, virtual emergency response center capability. This enables emergency notifications to be handled by the local control room in normal situations, but in times of congestion, other centers can automatically provide extra support.

All centers are provided with a unified view of the situation and can access the same data to improve cooperation and efficiency, locally and regionally. This reduces hardware and personnel costs while making it easier to attract skilled staff wherever they are. It also means the best expert can be made available for any situation, no matter where it occurs.

The building blocks of the Integrated Operations Center

Today's public safety agencies use a variety of communication, control, operational dispatch and monitoring systems. Each system typically functions independently, creating complexity and barriers that can only grow as more systems are introduced, such as CCTV, real-time video and video analytics.

Physical Security Information Management System

The Physical Security Information Management System, PSIM provides integrated application modules that include video wall, video surveillance and analytics, tracking, dispatch, SOS and social media integration. Integrating multiple application and system data sources supports advanced management and analytics to enhance situational awareness and decision making.

The video wall application module provides public safety agencies with a consolidated view across different areas of an entire city, with data feeds and alerts from various public safety systems and applications. Nokia has developed one of the world's largest operations center video walls (335 m²) for a major Indian operator.

Incident and Resource Management System

The Incident and Resource Management System, IRMS meets the critical needs of command centers operating 24/7. IRMS serves emergency response centers in rich media call-taking, incident positioning on the geographic information system, incident assessment, response determination, dispatching, task monitoring and field operations support.

Rapid integration of legacy and new systems with Nokia Integration Platform

PSIM and IRMS are tightly integrated by the Nokia Integration Platform, NIP. This platform is vendor agnostic with custom integration layer for simplified application onboarding of legacy or new systems. The custom integration layer contains application adaptors for rapid onboarding platforms, analytics engines, sensors and systems.

Emergency alerting, video analytics and data from IoT sensors

Additionally, Integrated Operations Center can connect other multiple subsystems to create new capabilities. These include video surveillance combined with Nokia Scene Analytics to help detect anomalies in real time video, and Nokia Sensing as a Service which

embeds sensors in a smart city to analyze changes in the environment. Nokia Crowd Analytics uses network data to provide vital insights on crowd patterns of movement, which is used by the IOC to enable smart dispatching of first responders.

Meanwhile, the Emergency Alert Solution helps government agencies and operators to provide a life-saving service during major events. In a natural disaster or other national level emergency, Integrated Operations Center can issue public warnings to the targeted area.

Build a future-proof, fully-capable control center

Automation and analytics create new efficiencies

As public safety agencies adopt data-centric emergency response technologies, the control center will need new capabilities to make full use of the wealth of data generated by video communications, IoT and other systems. Nokia Integrated Operations Center answers that need by using analytics and automation to enable rapid, coordinated and fact-based emergency response.

With Nokia Integrated Operations Center, agencies are no longer restricted by siloed decision making. Multiple command and control rooms can be networked by the virtual control room capability to automatically balance workloads and increase situational awareness across various centers, wherever they are.

Being scalable, from local to regional, and easily integrated into legacy and future systems, Nokia

Integrated Operations Center for Public Safety is fully future-proof.

Expertise and resources for any-sized project

Nokia supports operators and public safety organizations with in-depth knowledge of broadband, platforms, systems and applications, as well as leading mission-critical and commercial LTE expertise.

Nokia also offers the industry's most complete, end-to-end portfolio of products, services and licensing, together with the resources to support large nationwide public safety communications projects.

The result is reliable, high performance, rich media communications for public safety environments. To find out more, please visit <https://www.nokia.com/networks/services/integrated-operations-center-for-public-safety/>



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About Nokia

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From the enabling infrastructure for 5G and the Internet of Things, to emerging applications in digital health, we are shaping the future of technology to transform the human experience. **networks.nokia.com**

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