

Intel 5GIC  
Swedome Public Safety

## Taking life saving actions sooner with AI-enhanced cross-agency collaboration

The SWEDOME platform uses fast 5G networks, AI, and mixed reality to unite remote response teams with the critical insights they need.



Cross-agency collaboration and coordination (C3) among public authorities is vital to ensuring public safety, especially when dealing with major incidents such as traffic accidents and natural disasters. Agencies including law enforcement and emergency services must share information and coordinate a fast response if they are to minimize impacts and save lives. However, there are a number of obstacles to effective collaboration.

**Limited information sharing** – Traditional collaboration channels, such as radio for speech, can limit situational awareness.

**Geographic factors** – Staff from different agencies must travel to meet, which can be slow and costly.

**Data sensitivity** – Agencies must follow complex rules about which information they can share and where they can store data.

The SWEDOME platform is a mission-critical-grade, AI-enhanced, and LTE/5G-ready use case endorsed by leading telecom integrators that utilizes mixed reality to virtualize collaboration. The SWEDOME platform helps C3 teams to:

- Solve mission-critical situations together more easily.
- Save time in critical situations.
- Empower decision-making in all kinds of complex situations.
- Coordinate teams and establish trusting collaborations.
- Run operations from anywhere, centrally or locally, at any time.

### Preventing information overload with AI

SWEDOME aggregates and analyzes large amounts of data for use by C3 teams. AI smart filtering ensures only the most useful insights are presented.

- 5G networks provide high bandwidth and low latency to aggregate huge amounts of video, audio, and other data from many sources. Teams can specify devices to allocate more bandwidth to, for example to send a useful video stream at higher resolution.
- The built-in accelerators in 4th Gen Intel® Xeon® Scalable processors, including Intel® Advanced Matrix Extensions (Intel® AMX), enable AI inferencing with large models trained to filter out unnecessary information.
- The OpenVINO™ toolkit enables real-time video analytics to identify people, animals, and vehicles in a range of environments.
- Server infrastructure powered by Intel® Xeon® Scalable processors and Intel® Optane™ Persistent Memory delivers the performance and low-latency data access required in mission-critical situations.



The solution leverages the high bandwidth of 5G networks to allow sharing of video, images, location data, and more in order to quickly create situational awareness and support faster, more effective actions. And with server infrastructure powered by 4th Gen Intel® Xeon® Scalable processors, which feature the most built-in accelerators of any CPU in the world, C3 teams can leverage real-time video analytics and AI filtering to see the life saving information they need, sooner.

## One platform, accessible everywhere

SWEDOME provides a centralized platform that is accessible via a range of portable devices. This approach untethers C3 from the control room to involve entire teams across wide geographical areas. Data can be gathered from devices including drones, dashcams, and third-party sources. Collaboration is enhanced with:

- **Optimized data presentation** – Users have a rich dashboard with access to live insights, video feeds, and communications tools.
- **Greater flexibility** – With the highly powerful Intel® NUC, users can take an in-field command center wherever 5G networks are available.
- **Protection of data** – SWEDOME automatically redacts information where users do not have access rights. Intel® Trust Domain Extensions (Intel® TDX) isolates the entire virtual machine that the SWEDOME application runs inside, even on cloud servers, to protect against a broad range of threats.



Performance varies by use, configuration, and other factors. Learn more at [www.Intel.com/PerformanceIndex](http://www.Intel.com/PerformanceIndex). Intel technologies may require enabled hardware, software, or service activation.

No product or component can be absolutely secure.

Your costs and results may vary.

Customer is responsible for safety of the overall system, including compliance with applicable safety-related requirements or standards.

Intel disclaims all express and implied warranties, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, as well as any warranty arising from course of performance, course of dealing, or usage in trade. Intel makes no warranty relating to the third party products and services described herein.

© 2023 Intel Corporation. Intel, the Intel logo, Xeon, Intel Optane, OpenVINO, and the OpenVINO logo are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

## Reducing response time from hours to minutes

In Stockholm, Sweden, organized collaboration between around 40 public agencies, including the police, traffic control, and emergency services, is facilitated on a daily basis. Operators from the region's largest agencies work together in a physical control room to share information and coordinate incident response. SWEDOME is built to help joint organizations like this to virtualize and expand information sharing capabilities. Teams are enabled to:

- **Increase situational awareness** – Teams that traditionally use narrow band technologies, such as Land Mobile Radio Systems (LMRS) and Digital Mobile Radio (DMR), are now offered broadband-powered technologies. They can share and process video and large amounts of data, instead of just voice and limited data.
- **Reduce travel requirements** – Collaborators can communicate via cellular mobile devices and in extended reality (XR) environments.
- **Reduce time to action** – SWEDOME provides agility in coordination and decision support.

## Virtual Intel 5G Innovation Center

SWEDOME is one of many innovative solutions that Intel and our partners are testing and optimizing at the Intel® 5G Innovation Center (5GIC) in Stockholm, Sweden. You can tour the virtual 5GIC showcase in your browser now, to discover the opportunities Intel® partner solutions are creating in your industry.

[Visit the 5GIC](#)

## Next steps

The SWEDOME platform makes mission-critical situations easier to solve, together. It leverages Intel® technologies and high-speed 5G networks to enable richer data gathering and communication and improved situational awareness.

- Take a virtual tour of this solution at the virtual Intel® 5G Innovation Center at [5gic.intel.com](http://5gic.intel.com).
- Learn more about how to transform C3 and improve public safety at [www.swedome.com](http://www.swedome.com)