

# Port of Barcelona

Enhanced efficiency, security and intelligence



## Name

Port of Barcelona

## Industries

Transportation, Ports

## Location

Barcelona, Spain

## Products

Genetec Security Center, Omnicast, Sipelia, Genetec Mission Control, AutoVu



Port de Barcelona

**The port utilises Genetec Security Center to seamlessly integrate video surveillance, access control, intrusion, and other technologies into a single interface.**

The Port of Barcelona has experienced continuous growth to consolidate its position as the leading logistics center in the Mediterranean, the first peninsular port for international traffic, and a key driver of international trade. It currently handles over 70 million tons of goods and welcomes more than five million passengers through its facilities.

The Port of Barcelona is undergoing an innovation process to transform into a smart port. The Port Authority has adopted a long-term vision focused on increasing efficiency, safety, and sustainability. To achieve this, it has been working for some time on different technological initiatives that will enable it to create added value and move towards a more efficient, sustainable port with the capacity to provide a continuous service.

## The challenge: growing operational needs

One of the most important projects being carried out by the Port Authority is the modernisation of the Port of Barcelona's video surveillance and security system. Until now, they had an effective solution, but with certain technical limitations. "The previous infrastructure was closed to new technologies and depended exclusively on a single supplier, which prevented us from integrating systems from multiple manufacturers and adapting to our growing operational needs," explains Dídac Höflich, ICT Infrastructure Project Manager at Port de Barcelona. In addition,

cameras and device management required upgrades to the latest technologies.

This drawback affected the port's ability to innovate and limited the effectiveness of the Port Authority's oversight. This generated significant risks to the port's safety and operability, making it difficult to make decisions in real-time.

## The solution: a single interface for video, access control, intrusion detection, and IIoT

To implement the most advanced solutions in this field, the Port Authority of Barcelona held a public tender prescribing very demanding technical characteristics. Genetec™ Security Center solution came out on top as an open platform that unifies video surveillance, access control, intrusion detection, and other technologies in a single interface. "Its ability to integrate devices from various manufacturers and its modular design ensure unprecedented flexibility that evolves as needed," says Höflich.

The implementation began with a pilot migration, using virtual servers to test the integration of cameras and software. In a short time, the port was able to fully migrate its CCTV infrastructure, expanding its network from an initial 180 cameras to 530 active devices, aiming to exceed 800 in the coming months, as a result having better control port operations and improving site security.

In addition, technologies such as access control systems, intercom, advanced video analytics, inspection and forensic search, intrusion and fire systems, real-time occupancy, and gauging analysis have also been integrated.

## Results: simplified operations and improved efficiency

The benefits of the collaboration with Genetec have been immediate and tangible. Operators now manage all systems from a single tool, simplifying their work and improving operational efficiency. Incident response times have been reduced, and infrastructure maintenance has been optimised. In addition, data recording and monitoring system redundancies have been implemented to ensure continuous control. “The centralisation of systems has drastically reduced incident response times, while proactive monitoring has improved security throughout the port site. We now have full control of the system, with minimal margin for error,” says Höflich.

This project has not only improved overall port security but has also benefited other departments, such as Corporate Security and Industrial Security, which uses traffic, and people flow data to optimise space and resources.

The system has also generated significant savings in operational and maintenance costs. For example, during high-traffic events, such as the America’s Cup or Nadal al Port, the platform enables efficient management of people and vehicle flows, ensuring a safe and organised experience. “Having real-time data gives us a competitive advantage. We can now plan accurately, anticipate problems and make informed decisions in seconds,” highlights Höflich.

## A project for the future

Following the successful implementation of Genetec Security Center, the Port Authority has ambitious plans for the future with new use cases. These include the integration of an advanced license plate reading system to optimise internal traffic and the expansion



of dashboards that analyse usage patterns in public areas such as parking lots. They are also exploring the use of aerial drones for emergency management, aquatic drones for water surface inspections, and the implementation of IoT sensor technologies for even more detailed monitoring.

The collaboration with Genetec has been a crucial component in achieving the Port Authority’s goals to make the Port of Barcelona a smart port. “Genetec has not only provided us with robust technology but has offered us peace of mind knowing that we are prepared for any challenge. This project propels us towards a safer, more efficient and sustainable future,” concludes Höflich.

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