



CASE STUDY

Ports of Ghent and Zeebrugge upgrade to an open architecture video surveillance platform from Tein Technology

The ports of Ghent and Zeebrugge are benefiting from a new joint web-based video surveillance platform deployed by main contractor Cofely Fabricom and Tein Technology. The innovative platform provides robust efficiency and integrates the distribution of live video streaming to third parties.

Sustainability for future-proof logistics

Two of the three European corridors in Flemish harbours are entry ports to Europe. By 2020 Flanders aims to be the best region in Europe for smart and sustainable logistics. The regional government is investing 70 million euros a year to improve the basic infrastructure of the ports.

The Port of Ghent, handling 48.2 million tonnes of waterborne cargo a year, is Belgium's largest dry bulk facility. It is one of the investors in a major new lock at Terneuzen, needed for development of the port.

Zeebrugge has grown from a transit port to a crucial logistics platform. Total cargo is 49.6 million tonnes a year on 7,800 incoming vessels. The port's location on the coast, its unlimited maritime access and modern equipment are major assets. Zeebrugge attracts the newest generation of Ultra Large Container Carriers (ULCCs) and is the world leading logistics port for new cars, as well as a leading hub for liquefied natural gas and paper pulp.

Long-term infrastructure planning

"The government is committed to a long-term vision regarding infrastructure development at the ports," says Nick Goethals, project engineer at the Flemish Community's Agency for Maritime and Coastal Services.

"In addition to locks, dams and quay walls we are placing strong emphasis on redundant and high-quality communications and technology. These are the backbone of port information systems and essential for ensuring maritime safety and efficiency."

"The platform deployed by Tein Technology achieves the highest efficiency, redundancy and sustainability with a lower operating cost."

Nick Goethals,
Agency for Maritime and Coastal Services

Tein Technology leadership in efficiency

Integrator and market leader Tein Technology delivers surveillance platforms for all Belgian sea ports. Tein Technology is well known for its innovative integration of audio and video with maritime communication and navigation systems. More than 100 video cameras have been installed at Ghent and Zeebrugge to

control shipping. Both ports are working closely together. In order to drastically simplify network management, Tein Technology has installed a new shared video surveillance platform. The system allows for additional applications in service provision by the ports.

Nick Goethals explains: "Tein Technology delivered leading-edge technology based on open architecture to the ports of Ghent and Zeebrugge. The aim is to boost efficiency, improve the redundancy and robustness of the systems, guarantee sustainability and reduce costs."

An integrated web-based platform

Ghent and Zeebrugge have both been equipped with the best-available identical technology: new video cameras linked by glass fibre with a joint high-performing server park and universal recorder. The web-based video management system is by world leader Milestone.

Each of the ports has its own control room where camera commands are given and where an overview of all images can be viewed through SightVision™ Maritime. This application suite has been specially developed by Tein Technology to enable expert management of critical video surveillance systems."

Open architecture IP-based video

Tein Technology is a leading-edge integrator of open platform control rooms and surveillance systems.

“Tein Technology has delivered exceptional insight in distributed video streaming and developed solutions that ensure success for our clients.”

Nick Goethals,
Agency for Maritime and Coastal Services

Vital port environments require a robust video platform. Operation of this needs to be completely secure but also user-friendly – servers and recorders must remain scalable while video recordings must be secure and structured.

The powerful joint platform in place at the two ports achieves even more – the convergence of video surveillance including seamless integration of various camera, server and recorder types, and web-based services.

Nick Goethals confirms: “We are contributing to the enhancement of port captain services. Our aim is to improve organizational processes and increase overall security through the management and distribution of digital video data.”

New service offering – Going mobile

The server park for the joint Ghent and Zeebrugge video surveillance platform also includes a web server. Live image streaming is available wireless in real-time on smartphones or tablets.

“We have kept this to a limited-distribution, intra-organizational context,” Nick Goethals emphasizes. “For instance, between port services and the marine police.”

Police are therefore able to request imaging in order to track a particular vessel they are interested in, for example. Secure internet and intranet links are in place.

The total package is already operational at Zeebrugge and is now being introduced at Ghent.

Unified Communications

At Ghent, control-room operators are in contact with vessels via VHF maritime telephony.

Tein Technology is migrating this system to Digital Maritime Radio (DMR), the open digital standard for professional mobile radio.

Cost-efficient distributed surveillance

Nick Goethals: “Tein Technology has delivered exceptional insight in distributed video streaming and developed solutions that ensure success for our clients.”

“This unrivaled expertise has resulted in a powerful joint open platform for video surveillance with endless possibilities at the ports of Ghent and Zeebrugge.”



CLIENT & SOLUTIONS

Client: Zeebrugge Port Authority

Project date: March 2014

Solutions: Maritime

International shipping is a demanding environment.

Harbour control, the monitoring of sea-lanes, waterways and locks, and multi-band radio and video systems require secure, reliable communications.

We provide state-of-the-art onshore IP-based monitoring networks that integrate radio, radar, video and data communications.

- Automatic Identification System (AIS)
- River Information Services (RIS)
- Video-assisted radar applications
- Enhanced radio communication networks (Marine telephony and Radio over IP)

To find out how your organisation can benefit from Tein Technology’s expertise in traffic management, contact:

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About Tein Technology

Tein Technology is a leading-edge provider in the integration of voice and video platforms for mission critical environments such as financial trading rooms, traffic control for road, rail and waterways, port monitoring, city surveillance and public transport. Tein Technology runs a team of 60 highly qualified specialists and is based in Brussels and Amsterdam.



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INTELLIGENT TRAFFIC SOLUTIONS



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