



Smart Inland Waterways Management

CASE STUDY

Salzennes lock upgraded with the latest Surveillance and Communication technology

In late 2018, Tein Technology was awarded the tender to upgrade the different communication and surveillance systems (voice, video, data) of the Salzennes lock on the river Sambre in Namur - Wallonia. This site is permanently controlled by one or more operators who are in charge of the operations and safety of the lock and the adjacent dam.

The site's technology and infrastructure required urgent upgrades. Tein Technology overhauled the communication and surveillance systems on site, as a pilot for the upgrade planned for the entire lock network in the Walloon region.

A new solution was put in place with the integration of an access control platform, an intrusion detection system, a fire alarm system, a public address system into a brand-new video management system.

Innovation, hand-in-hand with the Perex Centre

This project goes hand-in-hand with the Perex 4.0 Centre project for the inland waterways control room. Tein Technology was responsible for the first installation of a remote-control operator desk of a lock. This landmark in the regional infrastructure was inaugurated at the end of April 2019 by Walloon Minister of Mobility and Transport Carlo Di Antonio, the SOFICO and the Public Service of

Wallonia (SPW). From the Perex Centre, the Salzennes lock and dam can be easily controlled remotely.

Comprehensive, innovative, intuitive

Tein Technology was entrusted with connecting all the surveillance and communication technologies used at the lock and enabling remote management, through a single comprehensive interface, from an operator desk in the Perex control room. Tein Technology leveraged its IT expertise to make the different software applications involved communicate with each other via a single integrated interface, which can thus be used to manage different processes at the same time. Six key systems can now be managed from a single workstation: the CCTV

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network, the intercom, the public address system, the access control and intrusion detection system, the fire alarm system and the VHF radio for communication with the boats.

A single environment for all applications using off-the-shelf software combined with special tailored programs for swift communication between the different systems.

Complex software development

The Tein Technology team created an interface where all subsystems can be managed and monitored using for this an off-the-shelf software package adapted with special tailored programs for swift communication between the different systems. For instance, our engineers developed several components to integrate access control, intrusion detection and fire alarm systems into a well-known Security Management Platform.

“With the recently renovated Centre Perex, Tein Technology has proven that it can efficiently combine video, security and intercom into one fluid operator platform. The impressive results of the colleagues who executed this project confirm Tein Technology’s reputation as the preferred tech partner for ambitious governments.”

Gert De Meyer – General Manager

An extensive scope

Pooling their expertise, our teams upgraded all components of the lock communications and surveillance network. These included:

- A new IP network for the lock and the adjacent dam;
- A CCTV solution with a redundant video management system, 15 high-resolution IP cameras;
- An intercom with 9 IP door phones and 1 IP videophone, and a Public Address system with 8 IP speakers installed across the entire site, for effective communication with seafarers and sending pre-registered security messages;

- A radio-over-IP system connecting the Salzannes marine VHF radio to the IP network for enabling radiocommunication from Perex;
- A platform combining the access control and intrusion detection systems, to fully secure the technical buildings (lock and dam technical rooms).
- A Fire Alarm system with 12 fire detectors, sirens and alarm buttons.

Showing the way for future lock projects

The entire project needed to be delivered in time for the opening of the new Perex Centre. This required extensive planning by our experts, who worked at full capacity. The result was a success, and the client was able to present the system at the Perex Centre opening.

Finally, our team added seven public lights along the lock, to enhance users’ sense of safety and further boost security.



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.

CLIENT & SOLUTIONS

Client: Service Public de Wallonie
Project date: 2018-2019

Solutions: Maritime (Inland)
 Inland Waterways is a demanding environment. Year after year, freight transport increase on the 450km Walloon inland waterways. Waterways and locks require secure, reliable communications.

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

- IP Network (wired and wireless)
- IP radio communication (Radio over IP)
- CCTV IP Solution
- Public Address system and Intercom
- Building Safety systems (Fire, Access Control & Intrusion Detection)



SMART CITIES



INTELLIGENT TRAFFIC SOLUTIONS



INNOVATIVE MARITIME TECHNOLOGIES



INDUSTRY