



BRINGING SAFETY AND SECURITY TO A WHOLE NEW LEVEL

LEADING GLOBAL LOGISTICS COMPANY DEPLOYS MOTOROLA SOLUTIONS SAFETY REIMAGINED TECHNOLOGY ECOSYSTEM AT ITS BELGIAN PORT



WALLENIUS WILHELMSSEN ZEEBRUGGE

Wallenius Wilhelmsen is a leading provider of logistics solutions to manufacturers of cars, trucks and heavy equipment. The company delivers a wide range of specialised processing services, world-class supply chain services, inland distribution and terminal handling. Last year, the company moved 3.65 million cars, rolling equipment and breakbulk units and handled about 5.1 million units at processing centres around the world.

Its Zeebrugge terminal in Belgium is located at the largest RoRo (roll-on, roll-off) port in the world; it has two berths and covers 50 hectares. From here, Wallenius Wilhelmsen offers customers both deep and short-sea services to ports around the world and rail and road connections to the rest of Europe.

CUSTOMER PROFILE

Organisations:

Wallenius Wilhelmsen
Zeebrugge N.V.

Partners:

- PS: Radiocom (Radio installation)
- GDW Security nv (Video installation)
- Lobeco Fire + Security BVBA (Video distributor)

Industry:

Logistics, Ports

Location:

Zeebrugge, Belgium

“Worker safety is – and always has been – our number one priority. Combining our radio systems and our video security systems, we have an innovative solution that enables us to increase safety, security and operational efficiency at our terminal. And we don’t want to stop there. Our goal is to further develop our internal know-how to fully maximise the potential of both systems and the combined ecosystem. Together with our partners, we will also continue to look at new features, updates and functionalities, and this wide range of possibilities and potential synergies should ensure we remain a forerunner in smart, safe ports of the future.”

Sam De Spiegelaere, Senior Manager Business Services EMEA, Wallenius Wilhelmsen Zeebrugge



CHALLENGE

Wallenius Wilhelmsen has been working with PS: Radiocom for over six years. Teams at its Zeebrugge port, both those working on board the ships and those working on the docks, had previously been communicating on a general network utilising Motorola Solutions TETRA radios. However, the network was not affording full, reliable coverage across all decks of the ships (some have up to 12 levels and extra insulation), especially below the waterline; and a review of safety practices triggered the urgent requirement for more robust communications, to ensure worker safety. PS: Radiocom proposed a move to a dedicated MOTOTRBO™ network and, following a series of successful tests, it was decided to deploy a MOTOTRBO Capacity Plus Multi-Site system.

During the tender process, it became apparent that Wallenius Wilhelmsen was simultaneously looking to upgrade its video security system; PS: Radiocom highlighted the possible synergies and benefits of the Safety Reimagined Ecosystem and following a further procurement process GDW Security was appointed to deploy an Avigilon™ video security system; Wallenius Wilhelmsen was convinced, not only by the high performance and advanced analytics of the Avigilon technology but also by the huge potential of an integrated radio and video system.

Motorola Solutions Products: MOTOTRBO Capacity Plus Multi-Site system comprising:

- 4 x SLR 5500 Two-Way Repeaters
- 115 x DP4801e Portable Two-Way Radios
- 1 x DM4400e Mobile Radio for Talk Box
- Accessories including carry cases, chargers and spare batteries

SOLUTION

Two SLR 5500 repeaters were installed at the main Wallenius Wilhelmsen site and two further repeaters at another nearby site (approximately 2km away), which Wallenius Wilhelmsen utilises for extra capacity. PS: Radiocom also strategically positioned a series of antennas to point directly in through the vessels' doors, at points where vehicles and freight are being loaded or offloaded. The solution is delivering robust, reliable coverage across the two sites, both in the port and in all areas on board ships. Workers, such as the operations teams managing loading, offloading and storage, and office staff have been equipped with DP4801e radios, which they predominantly use for communications between shore and vessel. The Man Down feature and emergency call buttons enhance operator safety and the GPS positioning functionality will also be utilised, once the port deploys the SmartPTT dispatch software. The system is used 24/7, with most calls being individual calls. However, the port does have various talk groups set up on the system, including cranes, breakbulk, cars, high and heavy (H&H), security and an all-call group for selected handsets for emergency or cross-site communications, as well as a Talk Box group. The talk box, which houses a MOTOTRBO DM4400e Mobile Radio, was designed by PS: Radiocom specifically for Wallenius Wilhelmsen and is used by the shunter drivers to call for a lift back to the vessel. The on-site security teams also use the system for communications and to manage alarms.

A range of Avigilon cameras has been installed on the site to afford complete video visibility across the 50 hectares, so increasing port security. Wallenius Wilhelmsen is also using or planning to use a wide

range of the Avigilon AI Video Analytics features to identify potential issues; and, to maximise the potential of the integration of the radio and video systems, PS: Radiocom has also deployed the Radio Alert automated messaging system. This enables security teams and the workforce to receive and respond to Avigilon Control Center (ACC) alarms via their radios; for example, if the cameras capture a perimeter breach or any other suspicious behaviour, security will immediately receive an alarm on their radios and can go to investigate. Similarly, users will receive an alert on their radios if they are in a prohibited area, such as within a fumigation zone. Users can also raise alarms and the security teams can then immediately focus in on the relevant camera footage. This integration enables the teams to make informed decisions, respond to incidents faster and more effectively, and efficiently mobilise the workforce, in case of an emergency. Ultimately, the integration further enhances the safety and security of the terminal.

BENEFIT

Sam De Spiegelaere summarises: "This new, integrated deployment has brought a change in mindset and a positive vibe to our site. Levels of security and safety have definitely improved and we can work more smartly. Yes, it took a little bit of getting used to; yes, we had a few teething problems and needed to tweak a few things here and there; but now we are all very happy with our new systems. And it's time to think forward about how we can independently optimise all the functionality the integrated systems offer and keep abreast of any updates and new technology."

Fixed Video Security solution comprising:

- Avigilon Network Video Recorders
- Avigilon Control Center 7 (ACC™) video management software
- A range of Avigilon cameras including 14 x H4 Thermal Cameras, 28 x H4 Multisensor Cameras and 28 x H4A IR PTZ Cameras
- Avigilon AI Video Analytics including Unusual Motion Detection (UMD), Unusual Activity Detection (UAD), Classified Object Detection (UAD) and Licence Plate Recognition (LPR)
- Radio Alert automated alert messaging



FUTURE PLANS

Wallenius Wilhelmsen's Zeebrugge operations are due to double in size over the next few years, with a 49-hectare expansion at Orcelle. The first 10 hectares of this new site have already been developed and the Motorola Solutions Safety Reimagined system will be extended to cover this area, with PS: Radiocom continuing to configure and programme the system to the port's requirements. Wallenius Wilhelmsen is also looking at deploying SmartPTT dispatch software, so security teams can see the position of cameras on the maps and quickly locate any Man Down alarms, as well as considering further radio handsets, such as the MOTOTRBO Ion Portable Smart Radio with Scandit software, so the radios can be used as barcode scanners too. The business automation tool Orchestrator could also come into play, to help the security teams, in particular, manage and optimise alarm response workflows. Sylvie Debaere, CEO PS: Radiocom, concludes: "There is always a solution, when you search hard enough, and we are very happy to have delivered this innovative, flexible, scalable solution that ensures the optimal safety of the workers, as well as the security of the port. This is a stunning, impressive site and Wallenius Wilhelmsen is such a progressive company; it's great to work with a global company like them and hopefully some of their other terminals may look at deploying similar Safety Reimagined systems in the future."



Benefits:

- This is an integrated flexible, scalable, high-performance safety ecosystem from a sole supplier, installed by knowledgeable, supportive local partners
- The MOTOTRBO Capacity Plus system delivers excellent radio coverage and clear audio across the site, including in all areas of the ships when they are loading or offloading in port. This is paramount for worker safety and a key project driver
- The Avigilon cameras provide full video coverage of the entire site and Wallenius Wilhelmsen is already utilising some analytics capabilities
- The integration of the two systems via the Radio Alert software is helping the port to streamline operations, further connect its workforce and enhance security and worker safety
- The system will grow, in line with the port's expansion, and Wallenius Wilhelmsen is keen to utilise all the potential capabilities and functionality of the integrated ecosystem and new technologies



"Communication with our partners, PS: Radiocom for the radio side and GDW Security and Lobeco Fire + Security for the video side, has been excellent. This is an ongoing, complex deployment and they have been really supportive in delivering a comprehensive optimal solution. PS: Radiocom is managing the further integration of the systems and the expansion, and we look forward to continuing our successful collaboration."

Sam De Spiegelaere, Senior Manager Business Services EMEA, Wallenius Wilhelmsen Zeebrugge