

Harland & Wolff deploys 21st century IP surveillance system

'With a site as large as ours, located on difficult terrain, upgrading our surveillance system presented a real challenge. However, employing the DVTel technology, Telindus rose to this challenge and provided us with a solution that has given us a competitive edge'

Robert McIlwaine,
Group IT Executive, Harland and Wolff

The customer

With a celebrated 140-year history of shipbuilding, Belfast-based Harland and Wolff Heavy Industries operates one of the largest dry docks in the world and specialises in Ship and Offshore Unit design, construction, repair, conversion and decommissioning. Since 1861, the company has secured an enviable reputation and built some of the world's best-known ships, but none more so than the RMS Titanic.

Faced, however, with increasing competition and the steady decline of the Western shipbuilding industry, Harland and Wolff has diversified its portfolio and now focuses on design and structural engineering in the marine, offshore and civil engineering sectors. Recent projects include renewable energy developments such as offshore wind farms and tidal power constructions, as well as oil rigs and bridges.

Robust site security and surveillance are integral to Harland and Wolff's business operations. With a 90 acre site, accommodating a building dock, ship repair dock, ship repair and major yard access, round-the-clock site monitoring and the ability for project managers and clients to view the progress being made on their projects is essential for maintaining customer satisfaction, and enforcing site security and health and safety measures.

The situation

With such a vast area to monitor and the need to comply with the latest port security legislations, Harland and Wolff's traditional CCTV deployment, consisting of approximately 55 cameras, was no longer fit for purpose. The legacy CCTV network proved extremely limiting as it was made up of two separate systems - one in Ship Repair and one in the Main Heavy Industries Site - that were unable to interact. Consequently, only security staff at each site were able to view transmitted images.



Rather than working in silos, the surveillance systems had to work together and image access had to be extended, so that staff on the network could view ongoing projects anywhere, at any time. For security reasons, customers also wished to ensure that a state-of-the-art CCTV system was in operation before bringing their vessels to the dry dock.

Known globally for its technical expertise, Harland and Wolff wished to maintain its reputation for using cutting-edge technology and decided that a 21st Century surveillance system was required. However, in order to provide the necessary flexibility and resilience, sufficient bandwidth was essential and the company faced the challenge of being located in an open environment on reclaimed land that had been reinforced with 10-12 feet of concrete to support crane rails and operations. Digging up the ground to run fibre optic cabling to the required sites would be both time consuming and costly.

The solution

To harness the potential of IP technology and ensure that its site was adequately monitored, Harland and Wolff turned to Telindus to design and implement a new CCTV infrastructure and surveillance system for the site perimeter. Working with Alvarion, Cisco and DVTEL, Telindus connected 39 cameras across the two dry docks, as well as the main yard and internal and perimeter floodlighting towers, using fibre, wireless and xDSL connections. By linking Harland and Wolff's existing and new cameras in areas that were difficult to access, Telindus saved the company the cost of digging up the concrete to install fibre cables.

The overall solution was comprised of the DVTEL Intelligent Security Operations Centre (iSOC) IP video surveillance solution, enabling staff to monitor the organisation's 90 acres from anywhere on

the network, at anytime; Cisco enterprise LAN switching to enable IPCCTV, IP telephony and wireless applications; Alvarion outdoor wireless (Alvarion BreezeNET B and BreezeACCESS VL) a robust wireless backhaul and access capability to enable network connectivity to all remote locations across the Harland and Wolff site; and Telindus SHDSL, connecting IP cameras with symmetric full-duplex transmission up to 4.6Mhps.

With staff able to access images from anywhere, the new IP system enables surveillance cameras to be utilised for business as well as security purposes. Video feeds can be shared across the health and safety, sales and marketing and HR departments, and project managers and customers can monitor the progress being made on their ships whether they are on or off site. Static cameras have been positioned for clocking in and out purposes and the dry dock gates can be monitored for leaks. Equipped with PDAs and laptops, Harland and Wolff's sales and marketing team can also show potential clients worldwide the facilities available in real-time by logging onto the network rather than simply handing them a brochure.

Robert McIlwaine, Group IT Executive, Harland and Wolff, said: "With a site as large as ours, located on difficult terrain, upgrading our surveillance system presented a real challenge. However, employing the DVTEL technology, Telindus rose to this challenge and provided us with a solution that has given us a competitive edge. It proves to customers that we take health and safety and security very seriously, and we are willing to use innovative technology to ensure that our business is more effective. We also have complete flexibility. If increased security is required, additional cameras can be quickly installed on the network as and when they are needed.

A business of our size has to ensure that its IT is future-proof and that it is making the best use of the network it has, so with this in mind, we're currently working on running voice, CCTV and data all over one network."

"Telindus has delivered a unique, powerful installation," commented DVTEL's EMEA MD, David Petrook. "The requirement to have real mobility of the video recording system depending on the type of construction being undertaken was a driving reason for Telindus to select the DVTEL solution. Unification is the real winner on this site proving that IT and CCTV are now aligned."

Looking ahead, Harland and Wolff wants to extend the surveillance system to include its manufacturing shops and linking it to a new access control system. The company is also examining the use of RFID tagging on lifting rigs to increase site safety and better track assets throughout the entire estate.

Telindus (Belfast)

Unit 5
Bridgewood House
Newforge Lane
Belfast
Northern Ireland
BT9 5NW
t +44 (0) 289 0381252
www.telindus.ie

Telindus LTD (HEAD OFFICE)

Hatchwood Place
Farnham Road Odiham
UK-Hampshire
RG29 1AB
t +44 1256 709 200
f +44 1256 709 210
www.telindus.co.uk