Keeping in constant contact and ensuring the safety of security officers through a GPS real time tracking system is a top priority for the Port Atlantique La Rochelle, the leading international commercial port in the harbour city of La Rochelle, the capital of Charente-Maritime in western France.

Port Atlantique La Rochelle (PALR) is the sixth largest French port and the leading port for wood and paper pulp imports in France. As the only deep water facility on the country’s Atlantic seaboard able to accommodate over-Panamax vessels – such as super tankers and large container ships - PALR handles more than eight million tons of cargo each year and is also a key port of call for numerous cruise ships. This mammoth undertaking places huge demands on the port’s security teams who have to patrol a vast area around the clock.

To improve team communications and track personnel movements from a central location, the port authority has upgraded its existing two-way radio network to a MOTOTRBO digital solution with DMRalert® personnel tracking software application from EIFFAGE ÉNERGIE COMMUNICATIONS, RÉSEAUX & SÉCURITÉ. The solution was implemented by local Motorola Solutions’ partner, Mettam Radiocommunication.

CUSTOMER PROFILE
Company: Port Atlantique La Rochelle
Industry Name: Ports & Harbours
Motorola Solutions Partners: Professional Radio Application Partner: EIFFAGE ÉNERGIE COMMUNICATIONS, RÉSEAUX & SÉCURITÉ (ex Alsatel) Reseller Partner: Mettam Radiocommunication
Product Name: • MOTOTRBO DP 3601 portable and DM 3601 & DM 3400 mobile radios • MOTOTRBO DR 3000 repeater • DMRAlert® with GPS and Guard Tour patrol management
Key Benefits: • Simple, reliable implementation • Cost-effective, easy to use and manage • Enhanced communications incorporating data applications • Low total cost of ownership

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**THE CHALLENGE**

In addition to shipping berths, the PALR is home to a large commercial fleet, generating 730 million euros annually with a workforce of 16,300 employees.

Historically, the port authority had relied on a basic leased two-way radio network which provided adequate voice communications at the time. However, with an increased demand for port facilities, a decision was made to improve security operations by implementing a more sophisticated and secure communications system.

It would include a tracking application to monitor and manage the movements of security teams in real time to help ensure their safety as they went about their daily tasks. To achieve this, the PALR port authority investigated new digital two-way radio technology to cater for both their voice and data communications requirements and following a successful live demonstration by local partner, Mettam, they chose a MOTOTRBO system with the DMRalert® tracking application.

Some of the main reasons for choosing the system include:

- Twice the calling capacity with two encrypted digital radio channels for both voice and data while delivering spectrum efficiency and enhanced voice communications.
- The ability to provide advanced tracking functionality such as real time patrol information, alerts, voice logging and alarm forwarding and notification.

**THE SOLUTION**

PALR’s MOTOTRBO system comprises 15 DP 3601 portable and DM 3601 mobile radios and a DR 3000 repeater with support for an additional 20 radios which can be incorporated into the network as and when the need arises. Also, two DM 3400 mobile radios are connected to a PC hosting the DMRalert® Guard Tour and tracking system in the control room, where personnel monitor the field data.

When security officers start their patrols they are automatically tracked in real-time via the MOTOTRBO radios’ GPS function. While working indoors and in locations where there is no GPS coverage, the security officers are tracked using RFID technology. As they pass demarcated sites where RFID tags have been installed, they manually swipe the radio’s remote speaker microphone (fitted with an RFID reader) across the tag. Radio and location ID information is then sent over the radio network back to the server where it is plotted on a map and entered into an events logger. This allows the port authority to accurately track patrol routes and know exactly where personnel are at any point in time.

Personnel security is also bolstered through a DMRalert® option board fitted in each radio which together with tracking and Guard Tour allows for complete Man Down, Lone Worker and Emergency Button functionality to be integrated into the system.

Plans are afoot to implement ‘passive’ tracking using wireless beacon checkpoints where an officer simply moves into the area of the beacon and the location data is then automatically transmitted.

**THE BENEFIT**

The decision to implement MOTOTRBO provides PALR with a robust and easily expandable platform that offers increased capacity, improved voice communications due to clearer audio (particularly useful in noisy areas such as harbours), the ability to integrate third-party data applications and deliver up to 40% longer battery life for extended work shifts.

With the inclusion of the DMRalert® tracking application, personnel safety has improved through the ability to pinpoint security personnel in real time throughout dedicated areas indoors and outdoors, using the centralised system. It has also helped speed-up response times to incidents, assist with safety equipment checks, identify hot spots and allow available resources to be allocated more effectively.

In addition, the port authority will be able to incorporate other smaller MOTOTRBO networks that are currently being used at the port by maintenance teams. This will bolster the functionality of the tracking application to allow for improved management of the port’s workforce.