Ports of Jersey optimises movement of vessels by transforming communications

Ports of Jersey faces a unique responsibility ensuring the performance of maritime and aviation operations in Jersey.

“"The island of Jersey depends on us," says James Letto, Deputy Coastguard & VTS Manager at the Ports of Jersey. "To protect shipping, and to keep citizens and visitors safe and supplied with goods such as food and fuel, our employees need to be able to communicate quickly, effectively and reliably. We looked to Frequentis to help us bring our surveillance and communications systems into the future, and they delivered." By co-locating its Coastguard and VTS operations within a single, newly built control centre kitted out with Frequentis VTS, communications, event logging and search and rescue information systems, Ports of Jersey can deliver exceptional levels of service.

Client profile
Ports of Jersey is the organisation responsible for aviation and maritime activity for the island of Jersey region. It provides the region with modern commercial services to guarantee the continued viability of the region.

Business situation
The island of Jersey has one of the most variable tidal ranges in the world, and is often affected by adverse weather conditions. Against this challenging backdrop, Ports of Jersey operates a 24/7 coastguard and vessel traffic service (VTS). The organisation was looking to replace its obsolete, labor-intensive equipment, which was beyond economic repair. The aim was also to co-locate the VTS and the coastguard service into one operations centre.

Solution
Ports of Jersey deployed the first Frequentis VTS system in the UK, alongside the MCS 3020 IP Voice Communication System, digital selective calling (DSC), DIVOS recording, event logging and integrated it with Search and Rescue Information System (SARIS), all underpinned by a ten-year maintenance contract.

Impact
∞ Helps operators work more effectively, raising safety levels and ensuring Jersey receives essential supplies
∞ Ensures service continuity, with added resilience in the event of an equipment failure
∞ Enables faster, more coordinated responses, through easier access to and sharing of information
∞ Optimises use of resources, by facilitating easy collaboration internally and with neighbouring services

“"With Frequentis, we have taken our communication capabilities to the next level, giving our operators everything they need to guide vessels safely."” James Letto, Deputy Coastguard & VTS Manager at Ports of Jersey
Always ready for swift, decisive and effective action – Lifeline to the island

Ports of Jersey manages the arrival of 98 percent of all goods that arrive at the island, hosts 25,000 leisure crafts each year, and carries out 180 documented coastguard rescues annually.

Jersey boasts one of the widest tidal ranges across the globe, and can experience sudden changes in weather. As a result, reliable communication between Ports of Jersey, leisure and commercial vessels, and search and rescue teams is essential to ensure the safe passage of people and cargo.

Previously, Ports of Jersey’s VTS and Coastguard operators worked from two different locations, and relied on six separate systems for communications and equipment that ranged from new to obsolescent. “We wanted to create a single control centre to support VTS and Coastguard operations, and roll out modernised communication that would integrate well with our most recently-purchased equipment,” comments Letto.

Building a unique solution

Ports of Jersey worked with Frequentis to build a new communications and surveillance platform. “Frequentis were able to help us complete the project within very tight timescales and with technology that complies with the relevant government standards. Crucially, they helped us achieve an implementation with no interruptions to our services throughout,” recalls Letto.

With help from Frequentis, Ports of Jersey rolled out a new Vessel Traffic Management System, alongside integrated telephony, VHF radio and TETRA digital radio communications systems, and a digital selective calling (DSC) system. The organisation gained an event logging system and – by integrating the SARIS system into its solution – Frequentis also provided Ports of Jersey operators with improved management capabilities for Search and Rescue incidents.

“Frequentis ensured that the new technology integrates seamlessly with components that we wanted to retain and all elements are backed by a ten-year support contract,” says Letto.

Responding quickly and accurately

Today, Ports of Jersey’s VTS and Coastguard operators can communicate better, helping to raise safety levels. “If a distress call came in, it used to be difficult for the operator to gather and share the necessary information, and we would need to manually work out where it was coming from. Now, the vessel’s longitude and latitude automatically pop up on the screen and information about the incident is instantly visible to other parties, so we can coordinate an effective response much faster. It is also much simpler for us to work with neighbouring coastguards,” comments Letto.

The optimisation of search and rescue team deployments is now possible. “With SARIS, we can calculate the impact of currents and weather patterns on the velocity of drifting objects, and use this data to determine the search area for rescue teams,” explains Letto.

By building greater resilience into Ports of Jersey’s communications and surveillance system, the new solution helps the organisation deliver consistent services and lower risk. Letto concludes, “Working with Frequentis, we now have an island-wide system that allows us to work more efficiently within the control centre, while maintaining exceptional levels of service to citizens and visitors.”

“In five years’ time, we will work with Frequentis again to refresh our equipment, and we are very excited about what new innovations that is likely to bring.” James Letto, Deputy Coastguard and VTS Manager at Ports of Jersey