

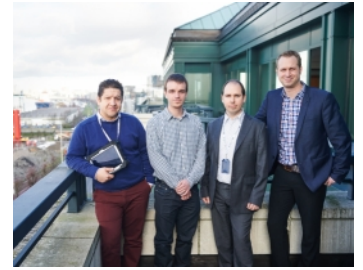


EXMAR SHIP MANAGEMENT CONVERTS TO A FULLY DIGITAL AUTO-ID INVENTORY SYSTEM WITH TOUGHPAD FZ-G1

Simplifying a complex inventory process

Inventory can be a demanding and time-consuming activity, especially on board a vessel on the high seas with thousands of items to inventarise in multiple locations. In cooperation with Mobile Access and Panasonic Computer Product Solutions, EXMAR Ship Management has made a shift in their fleet's inventory system towards a full digital solution for their LPG and LNG shipowning customers.





EXMAR Ship Management: Simplifying a complex inventory process

The Exmar Ship Management onboard inventory process has been converted from a manual to digital system by deploying bar codes and tablets equipped with scanners which register all spare parts and upload them to a central server on board each vessel. Their new system and process will eliminate paperwork, reduce errors, speed-up administration and increase crew productivity.

All-round user-friendliness

EXMAR Ship Management already had an online inventory system in place onboard their ships. However, the existing system - was complex in terms of process. **Ivan Renette, Application Portfolio Manager at EXMAR Ship Management explains:** "The previous process was too complicated. Too many steps had to be taken in order to fully inventory an item, which made the entire inventory process a demanding process for our crew members. It was time consuming and decreased onboard productivity."

To improve this inventory process, EXMAR Ship Management contacted the mobile IT solutions provider Mobile Access to develop a new, more user-friendly system based upon the remodeled business process. "We wanted an inventory application which could be user-friendly and which our crew would find easy to work with. Our wish was to make it so easy to use that our crew would be keen to use it," Ivan Renette said. "In addition, the hardware needed to be state-of-the-art in order to create an intrinsically safe, all-in-one solution that would be able to deal with the tough conditions onboard."

EXMAR Ship Management's good relationship with the company Shipping Software Services Limited were an asset to the project, ESAM needed the new solution to be fully integrated with the existing software. Bernie Maginn, Director SSS Ltd., explains: "Clearly, it was not enough to have a stand-alone inventory management tool. It needed to integrate seamlessly with the existing requisitioning, purchasing and maintenance system. This was achieved for the crew by synchronising it with the existing requisitioning and PMS application with a single click."

A native application

The application that Mobile Access needed to develop for EXMAR Ship Management had to fulfill high standards according to Kwinten Volckaert, Software Solutions Manager at Mobile Access: "Apart from the application having to be user friendly, we had to make sure that it was a native one which could work in batch without an internet connection. In addition, although it had to be a mobile system, ESAM preferred to have the ability to connect the app to their fixed computers as well, so it could not be connected just to one single operating system."

Reliable hardware for rough conditions

Apart from the specific software requirements for the application, EXMAR Ship Management also had specific demands regarding the hardware. "Electronic hardware onboard a ship has to fulfill specific legal and safety requirements," Kjell Wouters, Technical Superintendent at EXMAR Ship Management explains. "We needed a tablet that was intrinsically safe. As we are working on a ship that is filled with highly volatile materials, there can be no electrostatic charges of any sort."

Tom Van Gaever, Business Computing Sales Specialist at Mobile Access, gave them several choices of hardware. EXMAR Ship Management chose the Panasonic Toughpad FZ-G1 10" fully-rugged tablet with Atex certification. "With this tablet, we could assure our client that the units are intrinsically safe and can be used in all areas of the ship without any risk. In addition, the FZ-G1 is fit for any rough conditions onboard as it is fully ruggedised and is resistant to water and oil. It will also survive 1,8 meter drops. The screen remains readable in all conditions, even in very bright light and can be used whilst wearing gloves. In addition, a downward compatibility to Windows 7 is possible for older systems."

Easy implementation and training

The implementation of the new inventory system has been straightforward without any bugs worth mentioning. Guan Cerrens, PMS administrator at EXMAR's IT department explains: "We started the implementation of the application and the tablet in November 2013 with a pilot project on the LNG carrier Experience. Two tablets were issued for the ship, one for the Chief Officer on deck and one for the Chief Engineer in the engine room. During the entire pilot project we only received positive reviews from the crew. Afterwards, the implementation will start for the rest of our fleet in 2015. Whenever the opportunity arises, we will visit each ship we deliver the devices to in order to conduct training. Due to the simplicity of the application, a 15-minute training is enough. In addition, the user-friendliness of the tablet, combined with the familiar Windows environment, also assists implementation. It actually gives the crew a tool that they are already accustomed to using."

Looking at the future

With this system, EXMAR Ship Management is also already looking at the future. Using the camera of the FZ-G1, the device can be used as a digital photo camera in areas where Atex devices are required, and could eliminate the need for a separate Atex camera. This opens up more possibilities for maintenance reporting. "The system is continually proving its worth to our crew," Ivan Renette reveals. "We would eventually like this system to become fully autonomous, so no synchronisation is needed and with a direct upload to the central datacenter. The main advantage is that now we are closing a technical gap. Often the maritime sector is lagging behind other industries concerning technology used. However, with this system, we are confident that, step-by-step, we are closing this technological gap."

