WEAPONS AND EQUIPMENT

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RNZN opts for ECPINS W software for Project Protectors

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Key Points

- Replacement software complies with NATO standardised agreements
- OSI Geospatial software is intended to upgrade the monitoring, navigation and mapping systems of New Zealand's new vessels

The Royal New Zealand Navy (RNZN) will upgrade its seven Project Protector vessels with **ECPINS** W (Electronic Chart Precise Integrated Navigation System) software from OSI Geospatial.

The new software, which will replace the current **ECPINS** M package, has the functionality of a WECDIS (Warship Electronic Display and Information System) compliant with NATO standardisation agreements.

A spokesperson from Canada-based OSI Geospatial told *Jane's* that the RNZN already has the licences for the software upgrade and "will be rolling it out over the next few months".

ECPINS W will upgrade the monitoring, navigation and mapping systems to provide increased situational awareness, aid forward-planning processes and remove communications discrepancies between the ship and outside operators.

The WECDIS MIL STD 2525 marine information object sets use NATO symbology to simplify the on-screen picture of contacts and further identify their intent; using colours and symbols without the need to resort to further queries for each target.

WECDIS also uses advanced fixing techniques in littoral areas. When a ship is close to land the system uses two objects in-line for plotting its location in an environment where GPS can be unreliable or subject to local jamming devices.

ECPINS W has an operator contact distance alarm to predict the possible location of targets.

Jim Davison, sales manager at OSI Geospatial, told *Jane's* that an example of its application could be when intelligence reports from ashore have provided details of an enemy vessel's movement from port. **ECPINS** W uses the data to calculate the approximate location of the contact and can give a warning if the target comes within a specified distance.

Other applications include a position discrepancy monitor that uses data from a number of navigational systems, such as a ship's inertial navigation system or GPS, and displays it all on one chart. "It is useful for checking the ship's location during periods when there could be outside

jamming interference," Davison said. "If one positioning system is jammed you can also view the others to confirm where you are."

ECPINS W can display local military grid-referencing systems - the Australian Map Grid and New Zealand Map Grid - which are more accurate than using just longitude and latitude.

"In local areas sometimes there are map conditions that fit the earth better, and these can be used by **ECPINS** W," said Davison. "This is important because, for example, a spotter on land directing shore bombardment will be using local military grid referencing and does not have time to convert to the ship's system."

Using **ECPINS** W the ship is able to use the same grid referencing as its land contact and by "talking the same language" it can aid in the identification of disembarkation points for amphibious forces and improve gunnery accuracy.

The system also provides assistance to the navigator when in harbour, giving information for the application of the rudder when travelling at various speeds in a confined environment. It uses advanced geometric drawing tools.

The Project Protector fleet recapitalisation project comprises seven vessels, made up of an 8,870-ton multirole vessel, two 1,600-ton offshore patrol vessels and four 340-ton inshore patrol vessels, which should all be delivered by the end of 2008. All seven are to be fitted with **ECPINS** W.

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