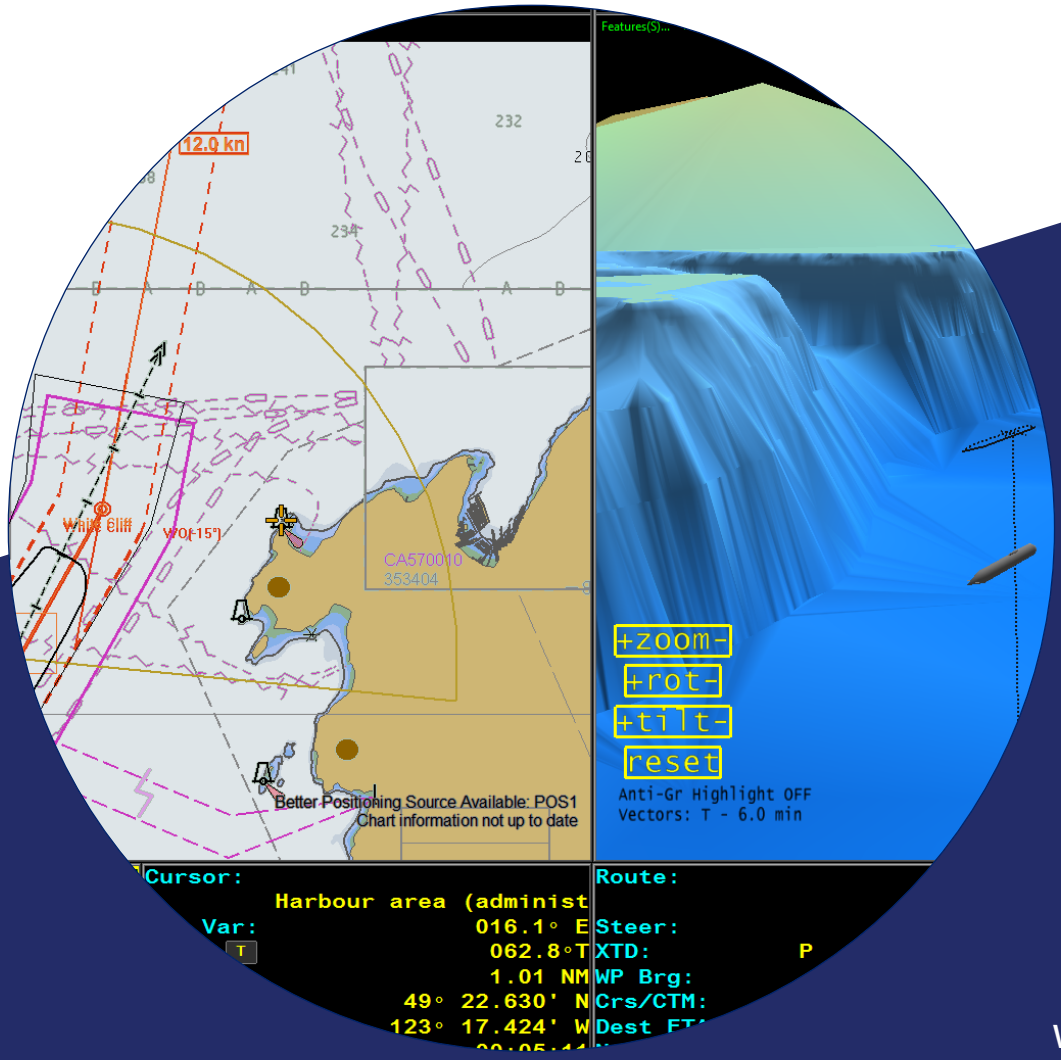
ECPINS

Electronic Chart Precise Integrated Navigation System



www.osimaritime.com

ECPINS®, military-grade navigation software designed for warships and submarines, optimized for the naval customer to maintain a safe and sustainable operational battle rhythm in a diverse range of challenging tactical scenarios.

Warship Navigation and Situational Awareness

- Military system units, sensors, and features
- NATO WECDIS 4564 ed2 compliant
- IMO ECDIS compliant

GNSS-Denied Navigation

- Advanced dead reckoning
- Pool of Errors
- Advanced position fixing
- Blind pilotage tool

Advanced Chart Display Engine

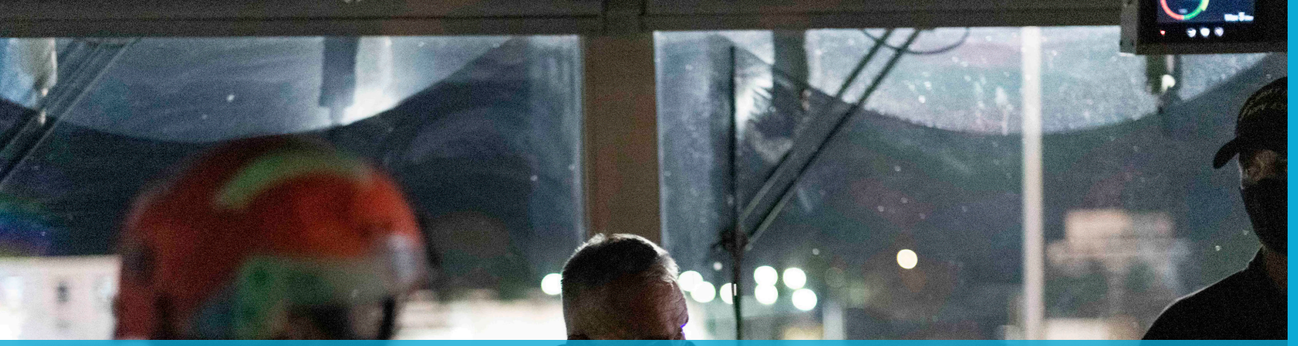
- Supporting 50+ chart types, including all AML
- Multi-fuel and seamless presentation

Radar Integration

- Radar image overlay
- Digital radar control
- Fusion of 2 radars into 1 picture

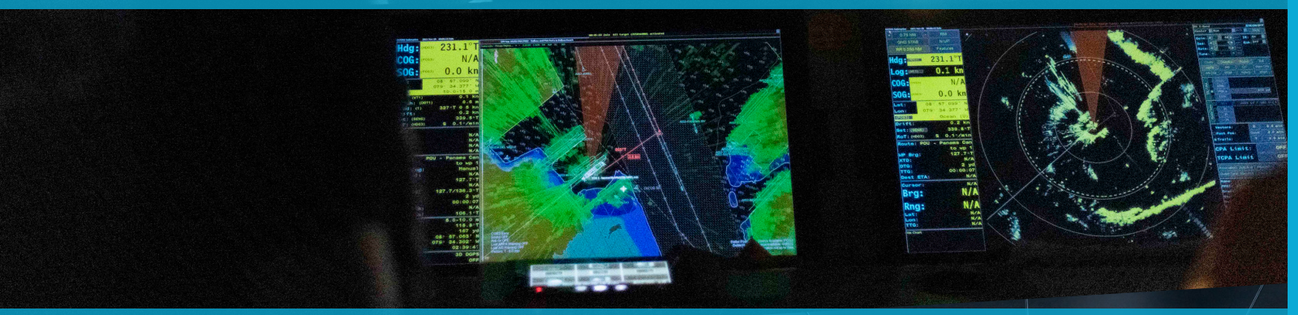
Modules

- Optional modules to extend the core ECPINS application
- Supports highly specialized capabilities
- Enables the customer to match ECPINS capabilities to specific platforms/classes/fleets



Precision & Safety

ECPINS enables the navigator, watch officer, and bridge crew to navigate a warship with precision and safety using all the vessel's sensors to plot its position on a powerful electronic chart display.



Military grade

ECPINS is the pre-eminent tool for the military navigator. The operator has access to advanced navigation, planning, and watchkeeping tools developed through many decades of collaboration with military professionals and intensive use at sea on a variety of surface and subsurface naval vessels.

Standards

ECPINS is independently certified to meet the standards of IMO ECDIS Edition 4, NATO WECDIS Edition 2, IHO S-52 Presentation Library, and IMO INS (Integrated Navigation System) performance standard.

Interfaces

ECPINS presents the operator with navigational information, sensor input, and electronic charts on 3 main screen layouts, with a selection of alternatives for specialized purposes such as planning. A central feature of each layout is a chart window, which the operator can pan, scroll, or zoom as needed. Operator control is by 3-button trackball keyboard, which is enhanced by standard and user-defined shortcut keys.

Watchkeeping

In ECPINS, the watchkeeper has good tools for monitoring position and progress on the electronic chart display. To confirm the own ship's position, the operator can simultaneously display one or more of other position sources, such as an INS, EP, or alternative GNSS. Further confirmation is available by overlaying the radar image or by generating a position fix. The operate can lay down fixes (visual, running, or time-specific) with speed and accuracy. Lines of position include bearing (visual, EO/IR device, etc.), range (radar, EO/IR device, etc.), transit, HSA, VSA, and more.

Planning

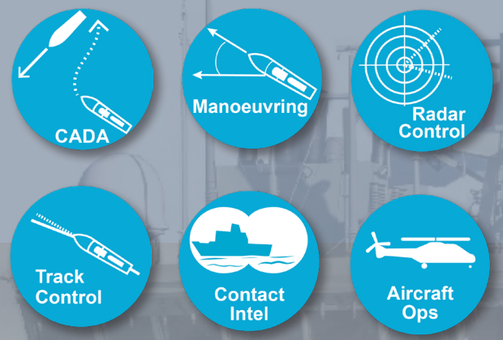
ECPINS offers the navigator all the essential planning features required by ECDIS and WECDIS plus advanced tools for demanding military operations. The navigator can plot, save, and scan for hazards any number of routes. Configurable route characteristics include planned speeds, wheel-over points, cross-track warning and alarm distances, action points, set & drift predictions, height of tide predictions, waypoint naming, and turn curves.

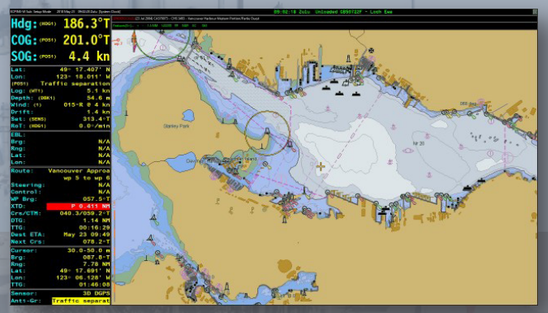
Chart Display

ECPINS's chart display engine is powerful and versatile, capable of displaying a vast range of chart formats including all common electronic nautical chart types, NATO AMLs, encrypted charts, land contour maps, and satellite photos. Since this engine is entirely proprietary, developed by OSI engineers over decades, OSI can adjust and improve it in a timely and effective manner.

Situational Awareness

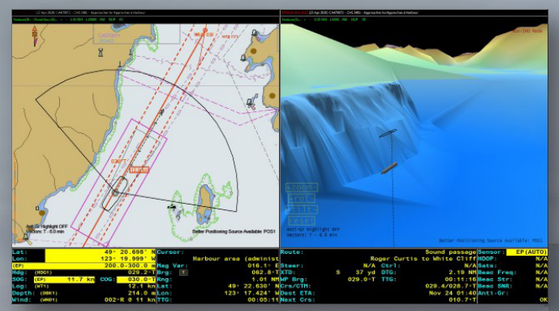
In the demanding military environment, ECPINS offers the operator enhanced situation awareness afforded by the display, management, and monitoring of contacts. In addition to a radar image overlay from either radar, the operator can control the display of contacts as AIS (from a connected receiver), ARPA (received from 1 or 2 connected radars), combat system (near real-time updating) or similar source. ECPINS applies MIL-STD-2525C symbology to these contacts, displays their movement, logs their tracks, and offers the operator detailed information upon interrogation.





Large Ships

Modules of special interest

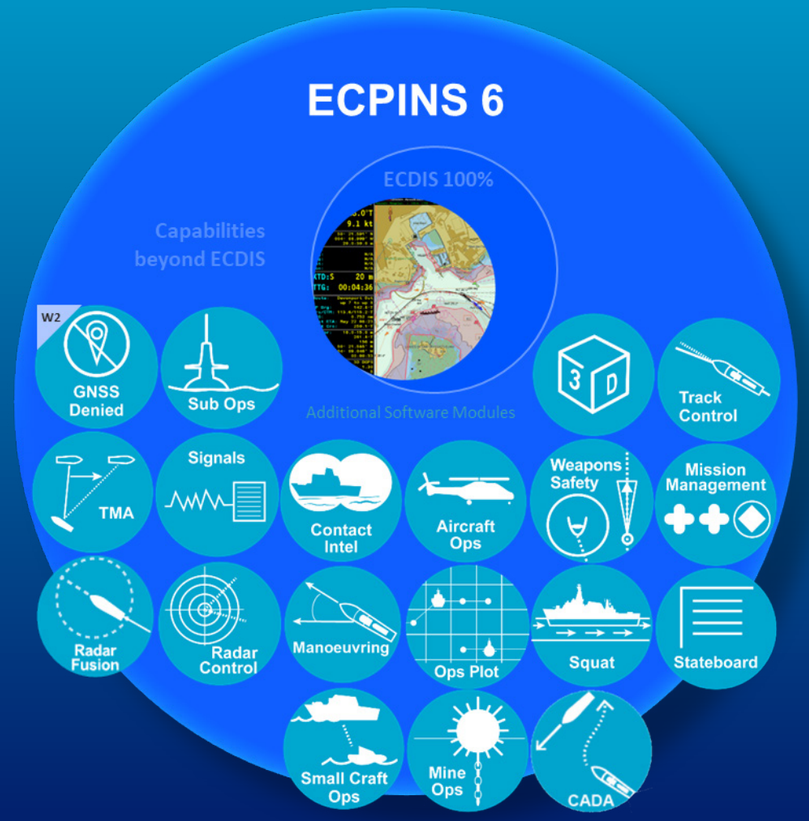


Submarines

Modules of special interest

Small Craft

Modules of special interest



W2 = Needed for WECDIS 2 compliance

ECPINS Future

ECPINS Generation 7: NATO WECDIS Edition 3 Compliance

- State-of-the-art military electronic nav
- 100% compliance
- Adds new capabilities such as:
  - Waterspace management preview
  - Sector screens
  - Dynamic chart objects
- Enhances existing capabilities such as:
  - Positioning tools
  - Submerged route planning
  - Cross-track limit flexibility

ECPINS Generation 8: Enhanced UX and More

OSI is developing the next ECPINS Generation 8, which will introduce an enhanced and more efficient user experience along with several new capabilities. OSI projects that this generation will reduce cognitive load on the navigator, speed navigation freeing time and attention for other tasks including looking out the window, improve access to the software's formidable array of capabilities, reduce training time effort, and increase the speed and scope of adoption of ECPINS across fleets.

OSI Maritime Systems

www.osimaritime.com
info@osimaritime.com

400 - 4585 Canada Way
Burnaby, BC, V5G 4L6
Canada

Telephone:+1 778-373-4600
Fax:+1 778-373-0027

9 - 10B Dragoon House
Hussar Court, Waterlooville
Hampshire PO7 7SF
United Kingdom

Telephone: +44 (0) 2392 256 316