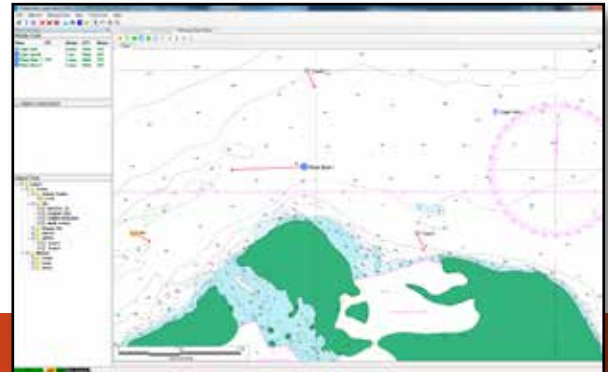


- Real-time situational awareness
- Integration and coordination of sea, air and coastal assets
- Management of maritime jurisdictions
- Search and Rescue (SAR) coordination
- Safe and effective boarding operations.



THALES AUSTRALIA

## ORION

### Integrated Maritime Coordination and Surveillance System (IMARCS)



# ORION

## Integrated Maritime Coordination and Surveillance System (IMARCS)

ORION is a command and control system, designed for maritime surveillance and interdiction operations, which integrates surveillance data including AIS, GPS, Radar, and EOS to compile a complete operational picture of the immediate environment and beyond. This situational awareness picture contributes to a broader, shared, operational picture through multiple networked patrol vessels, RHIBs and shore stations.

### MAIN FEATURES

- Secure and reliable line of site and beyond line of sight (BLOS) communications
- Flexible and intuitive user interface
- Upgradable and expandable to meet future needs through use of COTS hardware and open data standards
- Evidence quality event logs.

### SENSOR INTERFACES

- Radar tracks from commercial radar
- AIS tracks from local and remote receivers
- Video from electro-optic system (EOS) and digital cameras.

### COMMUNICATIONS

- Ability to form local networks of multiple units to share a common operating picture
- Over the horizon (OTH) and broadband communications via satellite
- Line of sight (LOS) and beyond line of sight (BLOS) through self healing VHF/UHF network and satcom
- Encrypted data.

### PARENT VESSEL/SHORE SYSTEM

- Displays all other ORION units in the network
- Displays formatted charts
- Create and display area boundaries, lines and point markers
- Displays tracks received from the Parent Vessel/

- Shore System & RHIB radar and AIS sensors
- Provides tools to create and display manually created tracks
- Provides tools to add intelligence information to tracks
- Displays course to intercept information
- Provides free text, preprogramed text, and status messages between ORION units
- Generates and delivers reports and track data to shore based headquarters.

### RHIB/BOAT SYSTEM

- Rugged day and night viewable touch screen
- Displays all other ORION units in the network
- Displays charts
- Displays a decluttered subset of the Parent Vessel/Shore System picture
- Create and display manually created tracks, points and lines
- Displays local AIS and radar tracks received from the RHIB sensors
- Displays tracks assigned by the Parent Vessel/Shore System Operator (AIS tracks, Radar tracks, or manually created tracks)
- Provides tools to add intelligence information to tracks (images via WIFI camera)
- Displays Area boundaries, lines or point markers assigned by the Parent Vessel Operator
- Displays course to intercept information for selected tracks and other participants in the network
- Provides free text, preprogramed text, and status messages between ORION units.

### REFERENCE

- ORION has been selected by the Australian Customs and Border Protection Service for deployment as the C2 system on the Cape Class Patrol Boats.

