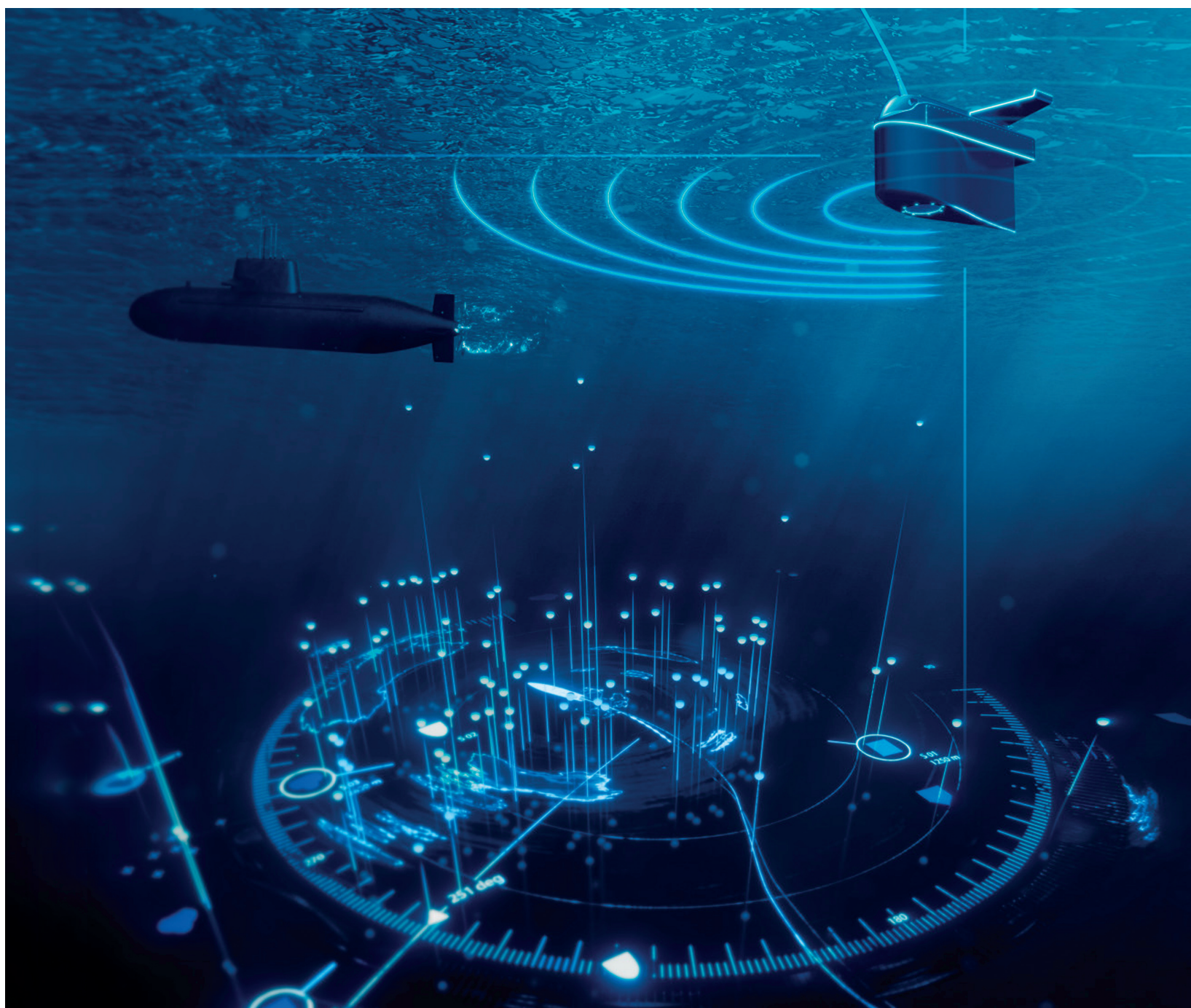


# Patria

## Sonac DTS

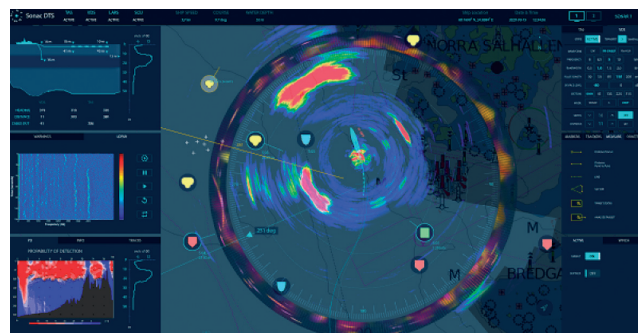
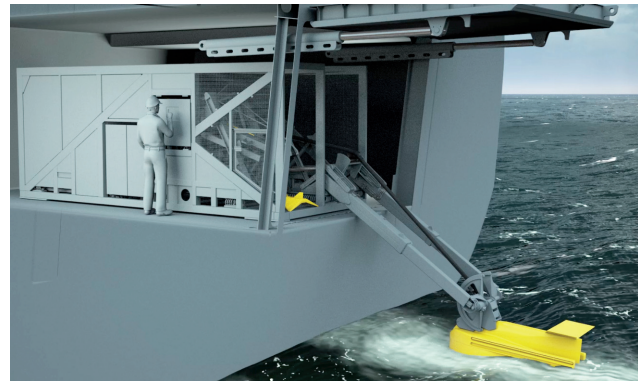
### Dual Towed Sonar System



Sonac DTS is a modern high performance sonar system for Anti-Submarine Warfare (ASW) operations in littoral waters. The system is packed in removable 20-foot container that launches the two towed sonar systems: Variable Depth Sonar (VDS) and Towed Array Sonar (TAS).

The sonars can be operated both separately and simultaneously enabling passive, monostatic and bi-static operation modes. The depth of the sonars as well as the transmission parameters can be adjusted optimally based on the Probability of Detection (PD). The system also includes a homing torpedo warning system.

Sonac DTS has modern interfaces for Sonar operator, Combat Systems and Navigation System of Ship. Human Machine Interface (HMI) contains a comprehensive set of graphical analysis tools both in signal and in geographical domain for the sonar operator. Also, the launch and recovery of the sonars can be operated either from Sonar Operator Console or from the container. Both the state of the sonars and their positions can be also monitored on the deck.



### Key features

- Designed for littoral waters and open sea conditions
- Comprehensive analysis tools, views and controls for Sonar operator
- Integrated Probability of Detection functionality of all operation modes
- Automatic detections without side ambiguity
- Automatic tracking for all operation modes in WGS84 coordinate system
- Automatic classification for all operation modes
- Interfaces to combat system and ship navigation system
- Complete playback from recordings
- Simulated targets can be added into the real-time acoustic data for training purposes

### Main components

- Launch and Recovery System (LARS) for VDS and TAS
- Variable Depth Sonar
- Towed Array Sonar
- Sonar Cabinet Unit with computing servers

### Technical details for LARS

- Twenty-feet ISO 668 1C container footprint
- Approx. 10 000 kg with TAS and VDS
- Removable and installable in 1 hour

### Technical details for TAS

- Bi-static mode frequency band: 7 - 11kHz
- Passive frequency bands: 10 - 2400 Hz and 7 - 11kHz
- Homing torpedo detection system
- High sensitivity and low noise hydrophone arrays

### Technical details for VDS

- Active mode frequency band: 7 - 11kHz
- Transmission power over 200 dB (re 1µPa at 1m)
- Pulse length over 1s
- Pulse types: CW, LFM and combo pulses
- Omni or sector-based transmission
- Transmission beam vertically tiltable
- Two planar hydrophone arrays with high sensitivity