

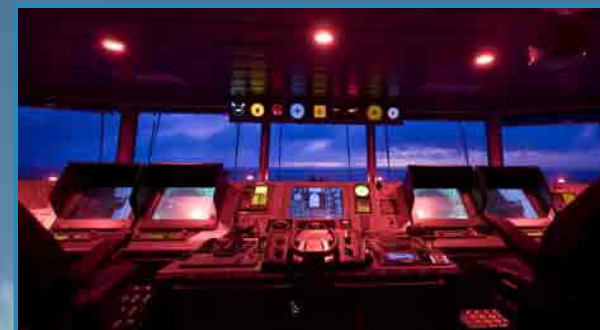
DDS
03

Intruder Detection System for Surveillance and UNDERWATER
Protection of Critical Infrastructures and Ships



DDSS 03

INTRUDER DETECTION SONAR



Can be integrated into
Surveillance Networks



Easy manual 'over-the-side' deployment or davit-crane deployment.



INTRUDER DETECTION
For Maritime Security

SAES

SCENARIOS

DDS-03 is a modular and upgradable system capable of protecting any area, infrastructure or ship.



DDS-03 Intruder Detection Sonar

DDS-03 is a high-frequency active sonar specifically designed to protect harbours, anchored vessels and critical infrastructures against underwater threats. DDS-03 can be integrated with any surveillance system.



The System can be installed either in a ship, harbour piers or on the seabed.

A responsive
solution for all
scenarios



BENEFITS

OPERATION. Reduced Operator Workload.

When DDS-03 tracks a threat, it automatically generates an alert indicating the threat's position, distance, trajectory and type of contact, allowing the operator to cast a deterrent message to the diver or send a patrol to the area. The automatic detection, classification and tracking functions provide reliable alerts of multiple underwater targets with minimal false alarms.

COMPACT SYSTEM. Long range detection in a system which is easy to handle, deploy and use.

The DDS-03 system is composed of a sonar which detects threats and a surface unit responsible for the graphic display and system control. Each sonar unit provides a full 360 degrees of coverage, and is capable of detecting and tracking underwater threats. Multiple underwater units can be integrated into a common control unit increasing the detection range. Mobile device with supervision & interception functions is available to complement the system.

Easy integration and minimal maintenance.

DDS-03 can be operated stand-alone or integrated into any Security Control Centre.

This technology, which we originally designed for military purposes, is currently being used for surveillance and protection of critical infrastructures and high-value ships.

DES

Underwater Deterrent System

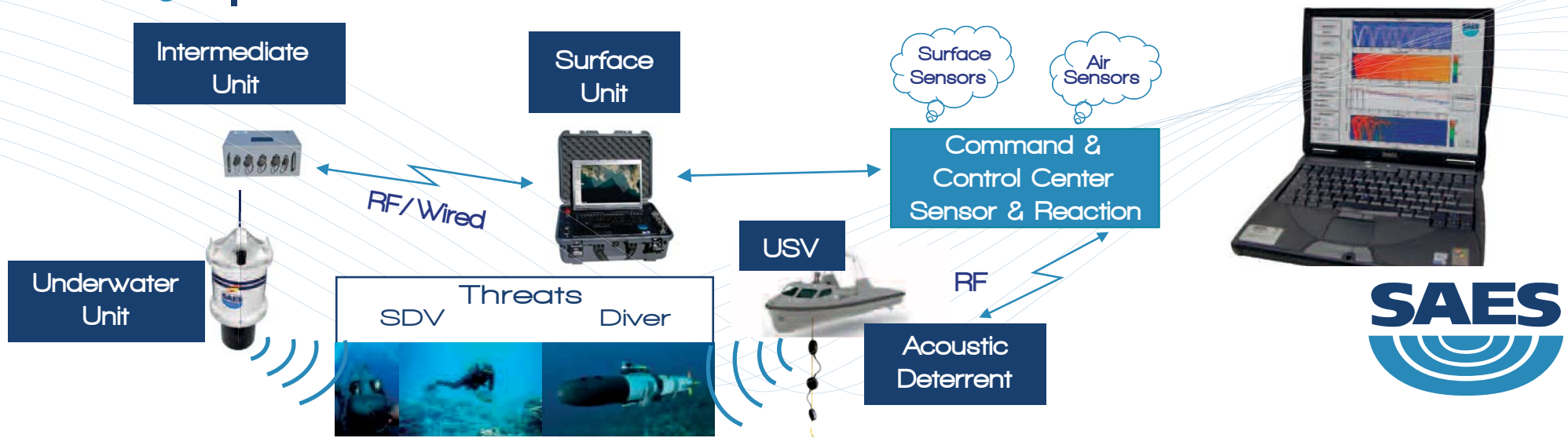
The objective of the Underwater Deterrent System is to 'warn off' unauthorized divers that they are in a protected area and, if needed, to emit dissuasive acoustic signals.



"High-performance even in difficult scenarios with unfavourable propagation conditions such as warm waters."

KEY FEATURES

Coverage	<p>DDS-03 covers 360° surveillance. To extend protection coverage extra sonar units can be added.</p> <p>Beam steering transmissions ensure detections at any deployed depth.</p>
Alarms, Tracking & Classification	<p>DDS-03 works 24 hours a day providing automatic alarms, tracking and classification.</p> <p>Reduced false alarm algorithms are based on Weight Of Evidence (WOE) levels.</p>
HMI & Displays	<p>DDS-03 HMI provides sonar displays and nautical charts. Simple and intuitive software. No specialist operator required.</p>
Dimensions & Design	<p>Lightweight units with compact dimensions and WIFI communication for easy installation on-board ships.</p> <p>DDS-03 complies with EMI, Environmental, Chocks and Vibration standards.</p>
Installation	<p>Different forms of deployment depending on the operational use and zones to be protected.</p>
Deterrent System	<p>A soft-kill reaction against any underwater intrusion. DES allows the operator to send underwater warnings. The deterrent system can be installed in a patrol boat.</p>
Mobile devices	<p>App for easy guiding the security forces to the threat position.</p>
Cost-Effective	<p>COTS-based architecture and modularity offer a cost-effective solution for underwater surveillance and the protection of large areas.</p>
Performance Analysis	<p>Software to calculate the probability of detection related to range, and the best depth to deploy the sonar.</p>



Expert engineers
In-house technical knowledge
Specialists in Acoustics and Underwater Electronics



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