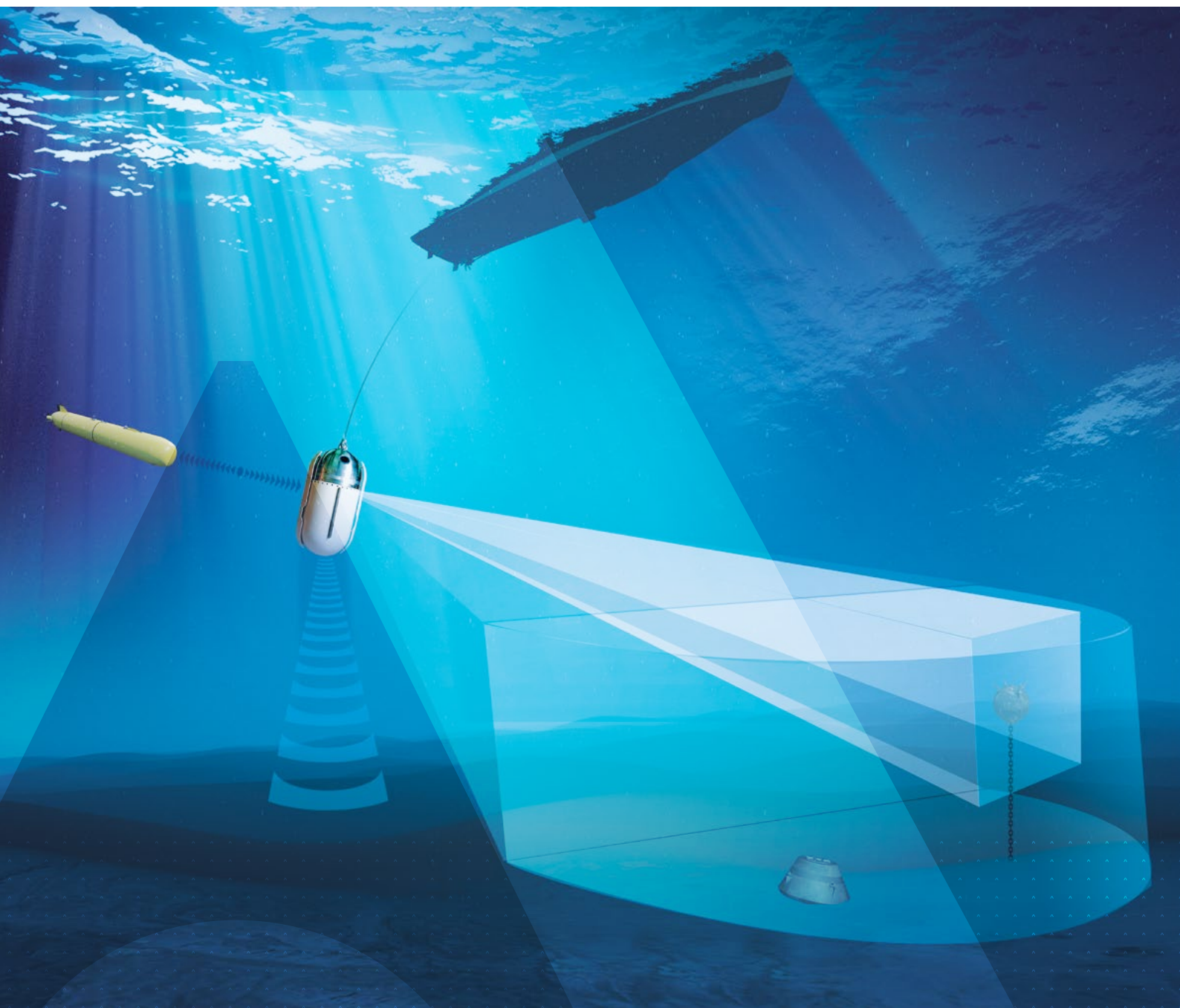THALES

SONAR 2093 WIDEBAND
A step change in Minehunting Variable Depth Sonar capability

SONAR 2093 WIDEBAND

Improved capability from the world's most successful variable depth, minehunting sonar

Presentation

The Sonar 2093 wideband system is required to counter the threat from the latest generation of low target strength mines.

The introduction of wideband technology builds on the existing world-leading Sonar 2093 narrowband Variable Depth Sonar (VDS) product designed for deep-water operation. This is available as:

• A new build system

• An upgrade to existing narrowband system

This is in service with the Royal Navy, has been designed to meet the increasing modern mine threat in deep water.

The introduction of wideband technology to this minehunting system represents a step change in performance enhancement from the existing Sonar 2093 system in service with many world class Navies.

General characteristics

This new design provides a flexible system configuration that allows several operating modes to be used concurrently.

Wideband pulse compression technology allows long range detection and classification of new generation low target strength mines.

Moored mines tethered within the water column are classified by a separate height finding sonar. Even mines tethered close to the bottom can be classified at up to three times the range of that achieved by conventional classification sonars.

Based on the existing narrowband Sonar 2093 system with extensive user base including the Royal Navy (Sandown Class), Saudi Arabia, Australia, Japan, Turkey, Italy, Estonia and the Republic of Korea.

MAIN FEATURES

• **Wide fields of view and multiple search and classification frequencies** ensure that the critical minehunting parameters of 'coverage rate' and 'speed of advance' are maximised under all operational conditions.

• **Improved operability** through the combination of advanced operationally proven HCI with extremely high-resolution displays in all modes and operator aids including:

 - Advanced, fully developed CAD and CAC algorithms, crucial to system operational effectiveness, provide the basis for high probabilities of detection and correct classification with a low false alarm rate.

 - Multi-ping integration produces remarkable improvements to both search and classification display image quality.

 - Non-linear image compression provides a clear tactical picture in a multiple contact, real world environment.

Environment

• **Low magnetic signature**
• **Low acoustic signature**
• **High operational shock and vibration capability**