Rapidly Deployable Surveillance Array (RDSA) is a low diameter and lightweight fibre laser based surveillance array deployed on the sea floor.

Proven performance, with ease of deployment and single person operation.

hgjjhg
THE TECHNOLOGY

Fibre Laser Sensor technology has been pioneered in Australia by the Defence Science and Technology Organisation (DSTO). Thales has collaborated with DSTO in the development of this technology for sonar applications, including the RDSA. The RDSA system benefits from more than 30 years’ of Thales experience in the design, manufacture and installation of underwater surveillance systems. The in-water component is of a much smaller diameter and weight than conventional fixed surveillance arrays, and features unique and patented Thales fibre laser technology requiring no external source of power. The array is modular and scaleable allowing the system to be tailored to meet specific operator requirements.

The array is connected to shore based signal and data processing via a very small diameter fibre optic lead-in cable that can be many kilometres in length if required. Alternatively, the lead-in cable can be connected to a buoy or shore based transmitter for remote locations. The RDSA operator station consists of a simple and inexpensive workstation housing the display and all signal and data processing electronics, allowing single person operation.

The RDSA SPED processing permits the detection and tracking of multiple surface and underwater targets in high traffic environments. It can detect powered vessels ranging in size from small craft to large ships. It provides outstanding capabilities in roles ranging from wide area littoral and coastal surveillance to harbour defence in enclosed waters.

DEPLOYMENT

The RDSA deployment system is compact and lightweight. It permits single person deployment from vessels ranging in size from small inflatables to much larger craft. The array can be configured for simple and rapid recovery.

Shore connection is by direct fibre optic link or via satellite transmission.