

Brandenburg frigates reclaim ASW upper hand

BY JON ROSAMOND

KEY POINTS:

- The Brandenburg-class frigates will receive the LFTAS towed sonar system in two to four years
- LFTAS detection ranges are "far beyond" the range of a torpedo, according to BWB

The German Navy intends to purchase four Low-Frequency Towed Active Sonar (LFTAS) systems in a further effort to enhance the anti-submarine warfare (ASW) capabilities of its Brandenburg-class (Type 123) frigates.

The four vessels – which entered service in the mid-1990s – are already due to receive the Eurotorp MU 90 lightweight torpedo in place of the increasingly obsolescent Mk 46 Mod 2 weapon.



Atlas Elektronik: 133501

LFTAS completed at-sea trials with FGS Bayern in 2008.

It has now emerged that they will also be equipped with LFTAS, which was developed by Atlas Elektronik in conjunction with Germany's Federal Office of Defence Technology and Procurement (BWB), following trials of the system with third-of-class FGS Bayern.

The Type 123 ships currently rely on hull-mounted sonar (HMS) for ASW tasks. Atlas Elektronik's legacy DSQS-23BZ active medium-frequency HMS has been replaced by the higher-performance DSQS-21B Mod 2 version in two of the class, and the remaining pair are due to receive this upgrade by the end of 2009.

The decision to procure LFTAS was outlined at the Undersea Defence Technology (UDT) Europe conference in Cannes, France, on 11 June. Dieter Brecht, the BWB's LFTAS programme manager, said: "It's planned to prepare these frigates so they can host it".

A representative of the German Ministry of Defence confirmed that funding has been allocated for a procurement of four ship-sets over two to four years. He added: "The 123 frigates were originally put in service as ASW frigates but the hull-mounted sonars couldn't do their job so [the ships] never lived up to expectations. Therefore, rather late in their lifetime, [they] will finally be able to fulfil their mission".

The trials involving Bayern began in 2006 and final at-sea testing was completed in 2008. Brecht told UDT delegates that LFTAS had demonstrated an ability to "overcome boundary layers and shadow zones where hull-mounted sonars are completely blind".

German Navy takes IDAS into production

The German Navy has earmarked funding to take the IDAS (Interactive Defence and Attack System for Submarines) submerged-launched precision weapon into production for retrofit in its Type 212A submarines, according to industry and navy officials speaking at the UDT conference, writes Richard Scott.

Talks are meanwhile continuing with Norway regarding its participation in the IDAS full-scale development programme. A number of other nations have also expressed interest in acquiring the system.

Developed by the ARGE IDAS consortium (made up of ThyssenKrupp Marine Systems' HDW division, Diehl BGT Defence and Kongsberg Defence & Aerospace), IDAS has been designed to provide a precision attack capability against surface and coastal targets, and offer a 'last-ditch' self-defence capability against anti-submarine warfare (ASW) helicopters.

Effective to a range of approximately 20 km, it uses a lightweight (120 kg) missile - featuring an imaging infrared seeker, fibre-optic guidance link and 20 kg warhead - that draws on guidance and inertial navigation technologies proven in the IRIS-T short range air-to-air missile.

The IDAS missile is fired from a four-round launch container sized to fit in a standard 533 mm diameter torpedo tube.

Two successful test firings of unguided IDAS rounds - comprising discharge, underwater travel, broach and transition to cruise flight - were performed at an underwater test range in late 2006. A first firing from a submerged submarine was undertaken by U 33 in the Baltic in May 2008, again meeting all trials objectives.

LFTAS detection ranges were "far beyond" the range of a submarine-launched torpedo, he said, handing the tactical advantage to the ASW platform. A single system was able to monitor the entire Skagerrak strait and the towed array had been safely deployed in conditions up to Sea State 5, he added.

Jens Krüger, Atlas Elektronik's communications director, told Jane's on 16 June that the first LFTAS shipset would

be installed in 2011, probably in first-of-class FGS Brandenburg. The navy intends to lengthen each hull before fitting the system.

Responding to the claim that the HMS was effectively obsolete, Krüger added: "The DSQS-23BZ fulfilled the technical requirements of the German Navy [in the 1990s], but it's clear these hull-mounted sonar are not up to date any more, so will be replaced by a modern HMS."

NATO selects Gavia UUVs for Portugal

BY RICHARD SCOTT

The Portuguese Navy has acquired two Gavia unmanned underwater vehicles (UUVs) via a procurement activity led by the NATO Maintenance and Supply Agency (NAMSA) in Luxembourg.

Manufactured by Iceland's Hafmynd, Gavia is a modular, man-portable UUV available in depth ratings exceeding 1,000 m. The system can be configured with sensors for research, survey or monitoring tasks.

The NAMSA contract covers the delivery of the Gavia vehicles, plus spares and support, to the Portuguese Navy. According to Hafmynd, the two systems

"will primarily be used for mine counter-measures applications".

It is understood that Gavia was selected ahead of Hydroid's REMUS 100 vehicle, which is in service with or selected by more than half a dozen NATO navies.

Hafmynd has also developed a Gavia Sonar Training Target for anti-submarine warfare training. Accepted into service by the Royal Danish Navy in late 2008, it combines a Gavia vehicle with a Doppler Velocity Log-aided inertial navigation system and a sonar transponder module.

Sonardyne sells underwater detection system to China

BY JON ROSAMOND

A customer in China has ordered a Sentinel Intruder Detection Sonar system from UK-based underwater systems specialist Sonardyne.

The company told Jane's on 12 June that it will initially provide three sonar heads networked together, plus engineering services, under a contract worth more than USD1.5 million.

Although it would not identify the customer, Sonardyne said the procurement was intended to provide "wide-area underwater security" for an infra-

structure project in China. Delivery of the system is planned for mid-2009.

Sentinel is designed to protect vessels, ports and waterside installations from intrusion by divers, swimmers or surface vehicles. In a press release, the company stated: "The system has shown a 100 per cent success rate in detecting targets at long ranges and in differentiating between divers, surface swimmers and non-threats such as pleasure craft, large fish and cetaceans".