

## SURFACE-TO-AIR

## Germany opts for surface-launched IRIS-T to complement army's MEADS

Germany's Federal Office for Military Technology and Procurement (BWB) has signed a contract with Diehl BGT Defence for the development of the surface-launched variant of the IRIS-T infrared-guided air-to-air missile (IRIS-T SL), writes **Robin Hughes**.

It will be used as a secondary missile for the German Army's future Medium Extended Air Defence System (MEADS) capability.

Signed on 11 May, the EUR123 million (USD166 million) contract will pave the way for the German Army and the German Air Force to integrate the IRIS-T SL/IRIS-T SLS (Surface Launched Standard) into the MEADS programme for the army's future SysFla project.

The army is also considering adding the vertically launched, hit-to-kill LFK NG missile, currently in development by Diehl BGT Defence and EADS LFK, to the MEADS system. Both missiles will complement the main Lockheed Martin Patriot Advanced Capability-3 (PAC-3) terminal air-defence missile in the German MEADS programme.

According to Diehl, the weapons mix "considerably relieves the burden on the defence budget as compared to equipping exclusively with PAC-3 missiles".

IRIS-T SL is based on the same concept as the IRIS-T short-range air-to-air missile, although IRIS-T SL will be equipped with a larger solid-propellant rocket motor, an integrated datalink and GPS system, and a low-drag nose cone. IRIS-T SL is being developed within the TLVS/MEADS programme and is planned to be in service from 2012.

While IRIS-T SL is a medium-range air-defence system, IRIS-T SLS is a short-range air-defence system using the IRIS-T air-to-air missile without any changes. This is fired by means of an LAU-7 standard aircraft launcher, four of which are mounted onto an all-terrain launch vehicle.

MEADS is a tri-nation mobile air and missile defence programme designed to replace Patriot systems in the US and Germany, and Nike Hercules systems in Italy.

## SURFACE-TO-AIR

## Indian Air Force criticises Akash SAM

The development of the Akash surface-to-air missile (SAM) by India's Defence Research and Development Organisation (DRDO) has come under renewed criticism within the Indian Air Force (IAF), according to Indian press reports, writes **David C Isby**.

The DRDO, in response, has characterised the Akash as a success and pointed out the advantages inherent in indigenous missile production.

The defence ministry informed the Indian parliament on 11 May that the IAF is scheduled to begin user testing of Akash "shortly", but noted that "some trials at the development stage have not been fully successful". This contrasted with DRDO head M Natarajan's recent statement when he said: "The Akash missile defence system has been successful."

Akash flight testing started in 1990 and the system had been due to enter IAF service in 2006. Although the IAF had participated in a series of development tests that was completed in 2006 (testing had previously been controlled by DRDO), at a high-level meeting held at Western Air Command headquarters in 2006, a number of senior IAF officers are reported to have urged that the programme be cancelled.

IAF sources quoted in local press reports have claimed that Akash has failed to meet required performance standards. Shortcomings identified by the IAF are reported to be a range of 16–18 km, rather than the specified 25–27 km, a long reload time (25 minutes per missile in daylight), lack of capability against low-altitude targets (especially over water) and matters related to warhead design and fuzing.

## SURFACE-TO-AIR

## Chechnya resistance claims helicopter kill

A message claiming that the Saif Allah group of the Chechnya resistance had shot down a Russian helicopter with a man-portable air-defence missile system has been posted on a jihadist website, but no dates were given for the claimed engagement.

"At least 15 Russian paratroopers were killed after the Saif Allah group fired a Russian-made SA-7 [Strela-2M 'Grail'] missile at a Russian helicopter over Shatoy, in western Chechnya, scoring a direct hit," the website reported. It claimed that the attack was "part of the new strategy of the mujahideen".

## SURFACE-TO-AIR

## Tetraedr extends Osa-AK missile life

Belarus company Tetraedr has won a contract from an undisclosed country for the repair, modernisation and life-extension of Osa-AK (SA-8 'Gecko') hardware, writes **Miroslav Gyürösi**.

Tetraedr had previously only offered modernisation of the vehicles that make up the Osa-AK system, but the newly announced contract covers work on the vehicles and the 9M33M2 missiles.

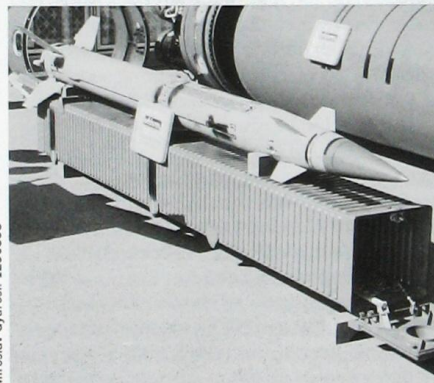
The company will repair and modernise the customer's 9V242-1 automated mobile test station, 9V914 adjusting vehicles and 9V210M3 technical service vehicles.

The contract does not involve work on the launcher vehicle or the other support vehicles – it must be assumed that those selected for renovation were in most need of an overhaul.

An important part of the missile-modernisation scheme involves replacing the existing filling of the missile's solid-propellant rocket motor.

This will allow a major extension of the round's life, a factor that may prove of major interest to existing Osa-AK users, since the 9M33M2 missile is no longer in production, forcing users to rely on ageing stocks until these become life-expired.

Compared with the 9K331 Tor-M1 (SA-15 'Gauntlet') family of self-propelled



> Tetraedr displayed this 9M33M2 missile at the MILEX-2007 exhibition in Minsk.

surface-to-air missile (SAM) systems currently being marketed internationally by Russia's Rosoboronexport, the Osa-AK is relatively inexpensive but remains a very effective system for nations that do not require the level of performance offered by the more sophisticated and much more expensive Tor-M1.

The availability of re-motored Osa-AK rounds may radically change the market for Russian mobile SAM systems by allowing users to keep existing hardware in service without facing missile-life problems.