IGLA FOR ISRAEL, STRELETS FOR SYRIA

Events in the beginning of 2005 showed that Russia would not be allowed to sell its arms to the international market quietly.

Immediately after the New Year 2005 some Russian newspapers ran articles under headlines like "Russian Missiles Chill Relations With Israel". All the buzz was about possible sales to Syria of the Russian latest operational-tactical ballistic missile system – Iskander-E, highly precise and capable of engaging targets on the entire territory of Israel. There were also allegations made that Syria expressed its interest in procuring the Favorit and Tor-M1 air defence missile systems.

These articles had numerous repercussions worldwide. Our country was pretty much reprimanded by so called "global freedom fighters" for its military-technical ties with Syria who they believe to be one of the countries sponsoring terrorism. Explanations on the Russian Side only poured oil on the flames. It came out later that Russia planned to sell to Syria purely defensive weapons - air defence missile systems, but not Iskanders at all. It was an issue of delivering 200 Igla man-portable air defence missile systems (MANPADS) by a \$20 mln contract planned for signing during the visit of the Syrian President Bashar Asad. But the US and Israel insisted that not all of the self-defence weapons can be allowed for sale to such countries as Syria. They believe that the Igla MANPADS offered for delivery might fall into the hands of Islamic terrorists supported by Syria.

It is known that Russia has been the initiator of strengthening controls over MANPADS proliferation. It has had its negative combat experience in Chechnya actions where MANPADS shot down a great number of helicopters of the Russian military force. It turned out that guerrillas received MANPADS from neighbouring coun-



The Igla-S is the latest generation MANPADS



tries who were making some kind of business on arms sales to illegal armed factions. By the way, nobody still knows exactly what happened to hundreds or thousands of the Stinger MANPADS handed over by the USA to Afghan mojahadins in the 1980s. Unfortunately, not all countries are inclined in favour of this initiative of Russia.

On the other hand, it can be inferred from the statistics of Russia's military-technical cooperation with foreign countries that the Igla MAN-PADS are one of the best-selling arms. Together with the S-300PMU and TOR-M1 air defence missile systems, the Igla weapon conquer the market of anti-air assets. This system belongs to the second-generation MANPADS meeting most stringent requirements to combat effectiveness in harsh jamming environment. In 2004 the Russian army adopted the new MANPADS – Igla-S (sometimes called "Igla-Super") which is much more sophisticated and efficient in countering air threats.

Historically Syria was an ally and an outpost of the USSR in its Middle Eastern policy plans, and also a major recipient of Soviet military hardware. Since it was at a permanent standoff with Israel conducting combat actions against it Syria took delivery of most advanced Sovietmade weapon systems. After the defeat in 1982 when Israel occupied Syrian Golan Heights, Syria demanded that its air defence system should be reinforced. Following the demarche of Syrian authorities the USSR quickly transferred to Syria two regiments of the longest-range air defence missile system at that period – S-200M. Syria was armed, besides the S-200s, with the S-75, S-125, Kvadrat, Strela-1, Strela-10, and Osa-AK surface-to-air missile systems, as well as the ZSU-23-4 self propelled anti-aircraft artillery mounts. These combat assets were supported with contemporary radar and other electronic equipment (radio-altimeters, etc).

After the collapse of the Soviet Union the military-technical cooperation with Syria was frozen. Russia demanded that Syria should recognise its \$12-13 bn debt for previously supplied defence materiel. But Syria refused to recognise it as well as to serve it. As a result, the volume of Russia's military-technical cooperation with Syria fell down sharply. In addition, Russian-Syrian relations were affected by other states' interfering. As has admitted the former Foreign Minister Sergei Ivanov, in 2002 Israeli Prime-Minister Sharon turned to Russian leadership with his concerns about delivery to Syria of

a large lot of the IGLA MANPADS. Russian President Putin answered by making decision to stop the transaction - so these systems were not supplied to the region. Cancellation of the contract, thoroughly prepared and signed, was a telling blow to Russian defence enterprises-participators in the Igla design, development and manufacturing, such as the KBM Federal State Unitary Enterprise, ZiD Joint Stock Company, and others. On the eve of the US invasion of Iraq in 2003 Syria again asked Russia to urgently deliver the S-300PMU longer-range air defence missile system, but neither received positive answer: actual refusal was justified by common US-Israeli concerns.

It looks probable that the articles published in Russian press early this January were part of information diversion, in some observers' opinion, timed with the beginning of the visit of the Syrian leader Bashar Asad. At present Syria is among few countries against which the US may plan aggressive actions similar to those in Iraq. So Russia's backing for Syria in such tumultuous period would go against liking of its opponents. During the visit a debt settlement agreement was signed on the writing down of a part of the Syrian foreign debt with Syria approving its remaining part and payments timetable. No major arms delivery contracts were signed, but Bashar Asad confirmed Syria's intentions to procure Russianmade defensive weapons, including air defence systems. Israel strongly reacted and exerted an exceptional pressure on Russian authorities attempting to thwart the planned Iglas' contract.

In response President Putin and other officials informed the Israeli Side that Russia did not plan to supply the Iskander-E tactical ballistic missile systems to Syria, but also that delivery of defensive weapons had no restrictions being a sovereign right of either state. Putin declared that Russia would meet its commitment to Syria.

The international defence exhibition that took place in Abu-Dhabi early February this year, soon after Assad's visit, added new intrigue and rumours to Russian-Syrian military-technical cooperation theme. New media reports said that Russians planned to deliver to Syria the Pantsir latest air defence gun-missile systems ordered before only by the United Arab Emirates. Unfortunately this advanced weapon system has not been unveiled to public so far, and nobody knows when its delivery to the UAE will start. According to Israeli militaries, the Pantsir system will be supplied in two-years time for integration into a renewed Syrian air defence system. Its modernisation will, in their opinion, substantially strengthen defence potential of Syrian armed forces.

By mid-February both Russian and Syrian Sides managed to define equipment list of supplies. It turned out that the delivery would involve the Strelets launch units accommodating from 4 to 8 surface-to-air missiles of the Igla MAN-PADS. The Strelets units would be mounted on automobile chassis precluding their dismounting and transformation into MANPADS.

A set of the Strelets launch units and control equipment was developed by the KBM Machine-

building Design Bureau, Kolomna, to provide a remotely-controlled automated single/salvo missile launch capability. The Strelets systems can be mounted on ground-based, airborne and seabased platforms. Its full-reloading time is 4 min, loaded launch unit weight - 70 kg, control equipment weight - 24 kg.

News about the planned delivery of the Strelets systems was officially confirmed by the Information and Public Relations Department of the Russian Defence Ministry, an unheard-of-before fact. "At present talks are underway on selling to that country a Strelets close-range air defence missile system which has no limitations on its delivery in accordance with international agreements. The launch unit of this system is mounted on tracked or wheeled-type chassis and cannot be employed in a portable version. There is no question whatsoever of deliveries of the Iskander-E tactical ballistic missile systems or improved Igla-SA-18 MANPADS, as reported by the press".

Several years ago Russia refused to deliver to Syria the Igla MANPADS at the request of Israeli Prime Minister Ariel Sharon. It is not improbable that once again Russia will back out of the deal under pressures of its partners in the anti-terror coalition – and there will no contract with Syria.

Yet such docility mars Russia's image in the eyes of Arab buyers of its weapons who will not accept that their military-technical cooperation with Moscow may be controlled from Tel-Aviv and Washington. Whereas arms trade with these



The Strelets SAM launch units can be fitted on any type of chassis and stationary mounts

AIR DEFENCE

Exports of Russian-made Igla MANPADS							
Recipient country	Item	Prime contractor	Date	Delivery	Quantity,	Cost, \$ mln	Notes
			of contract	period	missiles		
Armenia	Igla	Defence Ministry of Russia	1995	1995-96	200		40 launch units and 200 missiles
Brazil	Igla	KBM, Degtyarev Plant	1994	1994-96	112		56 launch units and 112 missiles.
							Contract fulfilled
Vietnam	Igla	KBM, Degtyarev Plant	2001	2001-03	250	64	Contract fulfilled
Vietnam	Igla	KBM, Degtyarev Plant	1996	2001-03	72		For arming BPS-500 missile boats
India	Igla	KBM, Degtyarev Plant	December 2000	2001-03	Several	ca.50	Contract fulfilled
					hundred systems		
Malaysia	Igla	KBM, Degtyarev Plant	April 2002	2003	382	48	40 launch units Ë 382 missiles
							(including Strelets launch units and
							Djigit launch support pedestals
Mexico	Igla	KBM, Degtyarev Plant	2002	2002	30	2,14	5 Djigit twin launch units and 30 missiles
Singapore	Igla	KBM, Degtyarev Plant	1997	1998	350		30 launch units and 350 missiles
Syria	Igla	KBM, Degtyarev Plant	2003				Contract suspended in 2003
Syria	Strelets	KBM, Degtyarev Plant	2004	2005			Contract cost being negotiated
Ecuador	lgla-1	KBM, Degtyarev Plant	1997	1998	222	14	Contract fulfilled
Republic of Korea	Ìgla	KBM, Degtyarev Plant	1995	1996	45		For clearing off Russian state debt

countries is the main chance for our arms exports to stay afloat after completion of important arms trade contracts with China and India in the coming years. The best way out of this sensitive situation is to offer to Syria such air defence assets as cannot be used by terrorists. They could be, for example, the Tor-M1 short-range air defence missile system or longer-range anti-air assets. Certainly, our partners may classify these systems as "posing threat if obtained by terrorists". But in fact the Tor-M1 will pose threat to

the US and Israeli missiles, if a new attack should be undertaken against another "stronghold of terrorism". This weapon system is not more terrorist-friendly than a tank: one such US ally as Italy was engaged recently in upgrading Syrian armour arsenal. Frankly speaking, the proposed air defence systems are more expensive than the Strelets and more difficult to sell given Syria's poor solvency. But the problem still seems solvable.

Said AMINOV



Israeli alarms at the Iskander-E tactical ballistic missile systems delivery proved false

BRIEF HISTORY OF THE IGLA/IGLA-S DEVELOPMENT

It was in 1971 that the USSR started development of a new generation man-portable air defence missile system (code-named "Igla"). The Igla MAN-PADS, as a whole, was to be developed by the Kolomna-based KBM machine-building design bureau headed by S.P.Nepobedimy, and the missile's thermal homing head - by the Leningrad-based LOMO optical-mechanical association headed by O.A. Artamonov. Difficulties connected with the complexity of creating jam-resistant seeker ruined the timetable of the seeker's development. Therefore it was decided to take an interim decision and make a simplified version of the Igla system equipped with the seeker from the Strela-3 older-generation MAN-PADS. That Igla entered service on 11 March 1981. The genuine Igla was successfully tested in 1982 and entered service with the Soviet Army on 23 September 1983. The Igla system boasts high jamming immunity attained thanks to excellent target selectivity against the man-made interference background. This advantageous capability was provided by a new dual-channel optical homing head with the logic unit for a true target selection against clutter. The development of the Igla MANPADS was awarded with the State Prize of the USSR.

In the 1990s the KBM continued improving the Igla MANPADS. As a result, a new Igla-S system entered service with the Russian Army in 2004. The most recent system is substantially more efficient than the Igla and the US Stinger MANPADS. The Igla-S is armed with the increased-weight warhead and a contact-proximity fuse. Its control algorithm ensures selection of the most optimal moment for the warhead's explosion as far as its effectiveness is concerned, both in the contact and non-contact modes. Besides, the Igla-S control system architecture is based on revolutionary (compared to the Igla) principles providing considerably improved missile accuracy. Designers and other specialists of the KBM and its subcontractors were awarded with the State Prize of Russia for the development and introduction into production of the Igla-S MANPADS.