

Poland Upgrades Soviet-Origin Land Military Hardware

Defense-aerospace

MOSCOW - Warsaw is upgrading the pieces of land military hardware inherited from the Soviet Union and former state members of the Warsaw Pact in order to increase the level of compliance with the armed forces of NATO nations. However, the share of the Soviet-originated equipment in service with the Polish army remains high.

In late August 2016, Poland's media released a footage, showing the demonstrator of an upgraded PT-91 Twardy [a modification of T-72M1 - TASS] main battle tank developed by the OBRUM design bureau and manufactured by the Zaklady Mechaniczne Bumar-Labedy SA. The combat vehicle was designated as PT-16. It received a 120mm STANAG-compatible main gun designed by Polish Huta Stalowa Wola SA.

The vehicle was supposed to be able to fire all types of tank munitions [including armour-piercing fin-stabilized discarding sabot (APFSDS), high-explosive anti-tank (HEAT), and high-explosive (HE) rounds - TASS] used by the armed forces of NATO state members. TASS supposes that the vehicle received an autoloader developed by the Polish industry that replaced the ageing one of PT-91/T-72M1 MBTs.

The tank's armour protection was drastically reinforced over its predecessors. The frontal arc of PT-16 was shored up with composite armour plates that allowed increasing of the vehicle's front protection to 1,000 mm of rolled homogeneous armour (RHA) against HEAT rounds [it is equal to the armour protection of the Leopard 2A5 main battle tank - TASS]. The MBT is planned to get an advanced fire control system (FCS), as well as turret and main gun electric drives with digital control. PT-16 is powered by single V-46TK (1,000 h.p.) multi-fuel diesel engine designed by the Serbian defense industry.

The main gun was complemented by the ZSDU Korbuz remote controlled weapon station (RCWS) armed with a 12.7mm WKM-Bm [a licensed copy of the Soviet NSVT light weapon - TASS] heavy machinegun chambered for 12.7x99mm STANAG 4383 cartridge. The WKM-Bm machinegun is produced by the Tarnov Mechanical Plant. The PT-16 program was implemented within six months [including the manufacturing of the demonstrator - TASS] by the Polska Grupa Zbrojeniowa SA (PGZ) consortium, using the enterprise's own funds.

Despite the decline to upgrade the PT-91 Twardy tanks announced by the Polish Defense Ministry, the national military has revealed its interest in the PT-16 MBT, according to PGZ. The company is planning to conduct the negotiations over PT-16 development and further acquisition with Poland's Land Forces at the MSPO 2016 defense show in Kielce that will open on September 6.

At present, the Polish military operates a mixture of Leopard 2A4/2A5, T-72M1, and PT-91 main battle tanks. According to the Military Balance 2016 report issued by the International Institute for Strategic Studies (IISS), Warsaw has 971 MBT in service, including 142 Leopard

2A4, 91 Leopard 2A5, 233 PT-91 Twardy, and 505 T-72/T-72M1/T-72M1D tanks. Hence, the venerable T-72 tank previously produced in Poland under the license granted by the Soviet Union remains the backbone of the Polish Land Forces. Considering the lack of the national Defense Ministry's intention to update the Twardy tanks, the ageing T-72/T-72M1/T-72M1D MBT might be rebuilt into PT-16s in a long-term perspective.

Warsaw is rapidly upgrading its fleet of armoured fighting vehicle (AFV).

Several years ago, the Polish defense industry acquired the license from the Finnish Patria company to produce Patria AFVs equipped with an Oto Melara combat turret under the Rosomak (Wolverine) designation. According to the Military Balance 2016 report, the Polish army has received 570 operational Rosomaks, while retaining 1,268 BWP-1s [a copy of the Soviet BMP-1 infantry fighting vehicle (IFV) produced by Poland under license - TASS]. The replacement of the BWP-1 vehicles is a bread-and-butter issue for the Polish government, as the IFVs are obsolete and do not meet the requirements to modern armour to full extent. BWP-1 is a full copy of its Soviet ancestor armed with a 73mm Grom semi-automatic cannon, a PKT Kalashnikov machinegun, and one ready-to-use 9M14M Malyutka-M (NATO reporting name: AT-3 Sagger B) anti-tank guided missile (ATGM).

Poland also operates 237 BRDM-2 and 73 BWR-1D Soviet-originated armoured reconnaissance vehicles (ARV) that are also supposed to be replaced by modern ARVs in the near future [probably, by a reconnaissance variant of the Rosomak IFV - TASS]. However, the fleet of Polish mine-resistant ambush-protected vehicles is relatively new, as the United States have supplied 115 MRAPs to Warsaw in the recent years, including 40 Cougars (on loan from the US), 45 M-ATVs, and 30 Maxxpros.

The Polish artillery units are equipped with Soviet-originated military hardware to a high degree. According to the Military Balance 2016 report, Warsaw has in service 292 122mm 2S1M Gozdzik [a licensed copy of the Soviet 2S1 Gvozdika/Carnation self-propelled gun - TASS] and 111 152mm M-77 Dana [supplied by Czechoslovakia - TASS] self-propelled guns (SPG), 75 BM-21 Grad, 30 RM-70, and 75 WR-40 Langusta multiple launch rocket systems (MLRS), 89 M-98 and 95 Soviet 120mm mortars.

Poland's arsenal of ATGMs includes Soviet 9M14M Malyutka-M and 9M111 Fagot (AT-4 Spigot) missiles, as well as Israeli Spike-LRs.

The Polish air defense units have retained a huge number of Soviet-originated surface-to-air missile (SAM) systems. As of 2016, the national Land Forces operate 20 2K12 Kub (SA-6 Gainful), 64 9K33 Osa-AK (SA-8 Gecko; partially upgraded by the Polish defense industry) SAM systems, as well as 9K32 Strela-2 (SA-7 Grail) and GROM/GROM-2 man-portable air defense (MANPADS) weapons. They have also retained Soviet anti-air guns, including 8 ZSU-23-4 Shilka and 20 ZSU-23-4MP Biala [an upgrade of Soviet ZSU-23-4 Shilka by the Polish defense industry - TASS] self-propelled anti-air guns (SPAAG), 252 ZU-23-2 and 72 ZUR-23-2KG/PG AA guns.

The acquisition of modern combat and utility helicopters is a vital issue for Poland's Defense Ministry, as the national Army Aviation is using ageing Soviet-originated platforms, for the most part. The Polish rotor-wing aircraft fleet includes 28 Mil Mi-24V/D (Hind D/Hind E) gunships, 7 Mi-8MT (Hip), 7 Mi-8T (Hip), 3 Mi-17 (Hip-H), 5 Mi-17-1V (Hip), 25 Mi-2 (Hoplite), 16 Mi-2URP (Hoplite), and 24 W-3W/WA Sokol multirole helicopters, 1 Mi-17AE (Hip) and 2 W-3AE Sokol medical evacuation helicopters, and 4 W-3PL Gluszec combat search-and-rescue (CSAR) helicopters.

Despite relatively high defense budget [PZL32 billion/USD10.2 billion in 2014 and PZL38.3 billion/USD10.3 billion in 2015] and the military aid provided by the United States [USD14 million in 2014, USD9 million in 2015, and USD6 million in 2016], most of the programs to phase out Soviet-originated equipment have stalled. Hence, the Soviet platforms will remain the backbone of the Polish Land Forces for years to come.