



# BULLETIN

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## Crossing the Vistula River: The Importance of the Air and Missile Defence of Poland

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*Poland's medium-range air and missile defence system programme is a priority, and biggest investment within the modernisation plans for the Polish armed forces in the period 2013–2022. Previous technical negotiations, and Russia's aggression towards Ukraine, have had a clear impact on the recommendation of the Polish Ministry of National Defence (MOND) to purchase American Patriot systems. The final agreements are expected to be signed in 2016, and the completion of the deals should strengthen not only Poland's defences, but also its bilateral partnership with the U.S. and role within NATO.*

According to MOND plans for the period from 2013, a system called Wisła (Vistula) should be implemented, in order to counter airplanes, cruise missiles and UAVs with a range of up to 100 km, as well as short range ballistic missiles in their terminal phase. In the spring of 2014, the MOND invited the European Eurosam consortium, manufacturer of SAMP/T systems, and the American company Raytheon, which produces the Patriot (PAC) system, to further dialogue on Poland's needs. In the autumn of 2014, the ministry formally concluded the analytical conceptual phase of the Wisła, and started to work on invitations for Eurosam and Raytheon to move with delivery and offset agreements. In the spring of 2014, Poland decided that the selected supplier would be expected to deliver two batteries of its current system within three years of the deal being signed, in order to achieve so-called bridging capability. Finally, on 21 April 2015, the chief of the MOND recommended PAC to Polish ministers, who authorised him to negotiate an intergovernmental agreement with the U.S.

**Planned Needs and Capabilities.** Poland is currently without missile defence capabilities, and air defence is based on a few dozen Vega/SA-5s, Neva-M/SA-3s and Kwadrat/SA-6 systems. They are Soviet constructions, and their capabilities to counter many air threats are limited, so modernisation would not improve their effectiveness. Under such conditions, Poland's air defence is mainly the responsibility of air force fighter units. Moreover, in recent years Russia and Belarus improved equipment and training of their air forces. This has been accompanied with the armament of the Russian rocket brigade with new Iskander-M/SS-26 ballistic missiles and Iskander-K/R-500 cruise missiles.

Creation of an integrated air and missile defence system for Poland must take into account a whole spectrum of threats, and the result must be a multi-layered shield. With more layers of defence, many more options of interception are available, and defence of the civilian population and military is more effective. A sophisticated network of interceptors, radar and command systems is also necessary. Plans for a "Polish Shield" are based on three layers, with the Wisła as a medium range system (up to 100 km), due by 2025 to be based on eight batteries. The second layer will be based on 19 Narew system batteries, capable of countering different air threats in the 25 km range. The lowest layer of the shield will be based on 79 Poprad system units. This defence architecture will be augmented by Piorun and Grom MANPADS, and new Pilica short range radar units.

**Technologies and Industry.** The plans for Wisła were of interest to a few producers with different levels of support from their governments. The scale and cost of the Wisła project (which is expected to run into tens of billions of zloty) meant that the project was put out to tender, and opened to public debate in Poland. MOND's technical and tactical requirements excluded systems in development and those not currently in equipment of the NATO countries, such as Israel's David's Sling and the international MEADS. Patriot's advantages were their

modernisation, their use in 13 countries, and U.S. army plans for their use until 2048. In future negotiations, the conditions of an offset agreement would also be an important factor for Poland. According to the MOND, participation of Polish companies in the development and production of Patriot Next Gen should be around 50 % of whole contract's costs. Raytheon declared that PAC-2 GEM-T interceptors would be produced and serviced in Poland, and that Poland would also produce some elements of PAC-3 MSE interceptors, the mobile launchers for these, and planned 360° radar units. That means that Polish companies will participate in development of Raytheon products both domestically and globally. Such cooperation would also increase Poland's independence in production, technologies and research and development of future radar systems, interceptors and other missiles or rockets.

**The U.S.–Poland Strategic Partnership.** The shift from purely commercial to government level talks between Poland and the U.S. is a very important aspect of further negotiations about Patriot deliveries. These negotiations should be finalised in the second half of 2016, and will increase transparency of the whole process as well as engage the U.S. government in talks with Raytheon. The U.S. will be legal guarantor of deliveries of Patriots, and protect sensitive information. An agreement between the governments of Poland and the U.S. will be accompanied by an offset agreement with Raytheon. These solutions should first and foremost strengthen bilateral strategic cooperation, based on the growing presence and long-term interests of the U.S. in Central Europe. In military terms, such a partnership would be strengthened by the increased rotational presence of U.S. units with Patriots in Poland, with the aim of strengthening NATO's eastern flank in light of the conflict between Russia and Ukraine and of Moscow's shows of force towards Alliance members. Such cooperation will deter any potential aggressor, and prepare Polish units for the rapid introduction of the Patriot system.

**NATO's Strength.** The wider NATO context has, so far, been as important as technical details during Wista negotiations. The U.S. is providing nuclear deterrence, while Poland and other members of NATO should work on conventional deterrence, including modern air and missile defence. With the implementation of all layers of the "Polish Shield," national and allied capabilities for defending NATO's eastern flank will increase. Having mobile batteries of missile defence will also be necessary in the case of the Polish armed forces' engagement in allied countries, or in regions in which missile threats are also present. An important aspect of Poland's preference for Patriot is also its interoperability with allies' defences, also based on this system, and full integration with the NATO Integrated Air and Missile Defence (NATINAMDS). This will also make it easier to integrate Polish units with other allied systems, such as THAAD and BMD Aegis, for countering missile threats over longer range and at higher altitudes. This might be contrasted with Turkey's negotiations to buy a Chinese missile defence system (copies of the Russian S-300), which might be hard to integrate with NATINAMDS and will not strengthen the whole of NATO's southern flank.

The introduction of Patriot units to the Polish armed forces will also complement other elements of the NATO missile defence "System of Systems." The U.S. administration states that its continental defence system against medium and intermediate range missiles from the Middle East, the European Phased Adaptive Approach (EPAA), is being implemented according to schedule, as is work on the Redzikowo base, with Aegis Ashore system, planned for the third stage of the EPAA. Moreover, even the expected deal with Iran, on limiting its nuclear programme, will not eliminate the potential threat to Europe of missiles with conventional and chemical warheads, and it cannot be excluded that Tehran will progress faster with intercontinental missiles, under the guise of a civilian space programme, even after the deal.

**Shield and Sword.** The decision by the Polish government to choose the Patriot system, and further negotiations with the United States, are in every aspect of strategic importance. The preferred system should provide Poland with many operational, industrial and political gains. Building the "Polish Shield" is also the most important element of the long-term modernisation of the Polish armed forces. With this, Poland will be able to prevent and deter aggression, as well as regain initiative in military conflict in the event of escalation or the need to counter a surprise attack. The swift decision about the Wista system is also an indicator of the determination of Poland and the U.S. to have a stronger strategic partnership, independent of the political landscape in either country. The planned introduction of Patriot into Poland's arsenal will also increase the capabilities of NATO as a whole, at a time when some members are showing less determination in their defence commitments. This should also be stressed during preparation for the NATO summit in Warsaw in 2016. In the event that Moscow further violates the INF Treaty, and modernises Russia's ballistic and cruise missiles, Poland should work on a national concept, doctrine and advanced capabilities for conventional retaliation strikes. Initially, this might be based on the NSM, JASSM and eventually cruise missiles, as well as on Homar rockets.