

POLITYKA
INSIGHT

Armaments Report

October 2017

DEFENCE POLICY

**SDR to decide
on the future
of defence orders**

AIR DEFENCE

**Poland delayed
360° radar
purchase**

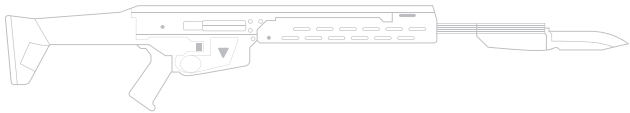
NAVAL FORCES

**Selection
of submarine
postponed**



Largest contracts concluded during MSPO 2017

ASSAULT RIFLES MSBS WEAPON SYSTEM CAL. 5.56 GROT „C”



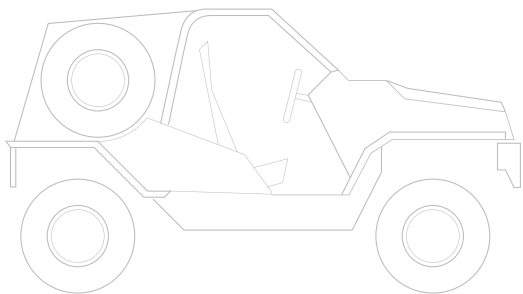
order value
(not disclosed):

PLN 500 mln

ca. 53 000 units

„fast track” purchase via NIL SOF unit from FB Radom-Łuczniczka
delivery between 2017-2022, pending on positive outcome of tests

„VIPER” RECONNAISSANCE VEHICLE



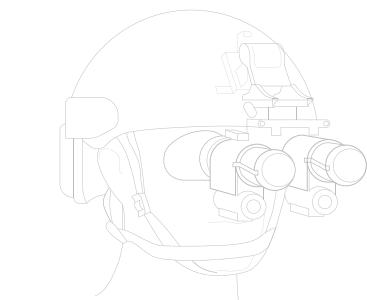
order value:

PLN 90.7 mln

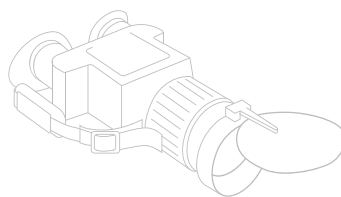
118 4x4 vehicles

purchase by Armaments Inspectorate from PHO/Concept consortium
delivery between 2020-2022

MU-3ADM NIGHT VISION GOGGLES



NPL-1M „BROM” NIGHT VISION BINOCULARS



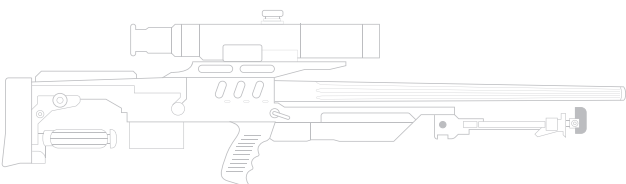
order value:

PLN 67.8 mln

266 pcs. of binoculars, 620 pcs. of goggles

purchase by Armaments Inspectorate from PCO

„BOR” SNIPER RIFLE



order value:

PLN 23.9 mln

657 sniper rifles cal. 7.62/51

purchase by Armaments Inspectorate from ZM Tarnów

What's new in the defense sector

LARGE ARMS DEALS

Saud Arabia	THAAD missile defence system	44 launchers, USD 15 bln
Bahrain	F-16V fighters	19 units, USD 2.7 bln
Greece	F-16 fighters upgrade to V version	123 units, USD 2.4 bln
Romania	Patriot missile defence system	28 launchers, USD 3.9 bln
Romania	HIMARS rocket launchers	54 units, USD 1.25 bln
Kuwait	M1A1 Abrams tank hulls (for upgrade)	218 units, USD 299 mln

○ **04.07 2017** **MinDef bought Boeings unlawfully.** The National Chamber of Appeal, which monitors public procurement, accused MinDef of buying them unlawfully in April. Yesterday the district court in Warsaw that is handling the appeal ruled that the first tender's failure did not allow the planes to be bought directly from the producer. MinDef bought three Boeing 737 aircraft for VIPs for over PLN 2.5 billion in March. The court's decision is a defeat for the ministry, but does not invalidate the contract, as companies withdrew their complaints earlier. The ruling will be used by the opposition, which calls the transaction Antoni Macierewicz's biggest scandal.

○ **06.07 2017** **Wisła programme in two phases.** MinDef signed a non-binding agreement with the US Department of Defense, stating that it will buy this year, for delivery by 2022, two Patriot system batteries in their latest 3+ configuration, with PAC-3 MSE missiles and the IBCS command system. The other six batteries with omni-directional radars and low-cost SkyCeptor missiles are to be negotiated next year, with not date set for deliveries. This means that Poland is putting off obtaining the capabilities for the Wisła air defence system for around ten years.

○ **12.07 2017** **Poland to buy three times more surface-to-surface missiles.** According to Antoni Macierewicz, MinDef will buy 160, rather than 56, launchers as part of the Homar programme. He did not talk about the cost or timeline. The ordering of nine, rather than the planned three divisions has been confirmed by unofficial sources in the defence industry and at MinDef. The cost of three divisions was estimated at PLN 7 billion. Lockheed Martin is to provide the technology. If MinDef's announcements materialise, they will provide Poland with serious deterrence against Russia; Homar will enable the Polish army to hit targets 300 km away.

○ **12.07 2017** **F-16s to be fitted with SAR.** The Armaments Inspectorate said it would launch market research aimed at ordering a reconnaissance pod capable of taking aerial photographs of the earth's surface regardless of weather conditions. So far, Polish F-16s have been using DB-110 optoelectronic pods, which cannot operate in case of overcast sky. This could be improved by purchasing pods fitted with a synthetic-aperture radar (SAR), which would considerably increase the reconnaissance capability of the Polish Air Force.

○ **13.07 2017** **Romania buys Patriots before Poland.** The US State Department has approved the sale of the seven Patriot fire units ordered in March by the Romanian government. It will receive seven sectoral radars, 28 launchers, 56 older GEM-T missiles and 168 of the most modern PAC-3 MSE missiles. The maximum cost will be USD 3.9 billion, but it could be lower; Romania is not demanding offset or technology transfer. Romania will be the first country in Central Europe to buy the Patriots.

○ **20.07 2017** **Eleven companies want to deliver tanks to Poland.** Following an invitation for market research, the Armaments Inspectorate received responses from German KMW and Rheinmetall, which own the Leopards' technology, Swedish SAAB and System Haggblunds, Belgian Cockerill, arms trade intermediary Griffin and five Polish companies. From the PGZ group, Bumar Łabędy, OBRUM Gliwice and WZMot of Poznań applied. PGZ is applying separately, too, as is H. Cegielski. MinDef is looking for the classic tank of the future, so offers based on the Leopard may have a head start.

- **31.07 2017** **Polish ultimatum on Patriots.** Warsaw is threatening to break off negotiations if the US government does not guarantee that it will transfer the technology of the Patriot system's newest elements. MinDef Bartosz Kownacki set out the demands in a letter dated July 12, accessed by Polityka Insight. Poland demands the technology of the PAC-3 MSE missiles, the IBCS command system, the GaN omnidirectional radar, which is not yet in active use, and the US-Israeli SkyCeptor missiles. MinDef's radical stance could hamper progress on Poland's latest Wisła armaments programme.
- **15.08 2017** **Duda criticises Macierewicz on Army Day.** The president said that the Polish Army is not a private army, that types of troops cannot be treated differently and that all soldiers deserve equal respect. He was opposing how the MinDef favours the territorial defence forces. Andrzej Duda called for unity to be maintained during the modernisation of the army, which was an allusion to the dispute between the BBN and MinDef on equipment for the navy. His standing up to Antoni Macierewicz means that the struggle for control over the army will continue.
- **17.08 2017** **Macierewicz criticises offset.** In an interview with *Gazeta Polska*, the MinDef said that offset requirements and so-called polonisation of arms purchased abroad makes negotiations and the execution of programmes take decades, with towering costs. Antoni Macierewicz argued that, faced with a growing military threat, one should sometimes abandon offset, buy licences and cooperate on production with foreign companies. He added that the Polish defence industry will not suffer, as it is inundated in orders and lacks spare capacity. This suggests that the MinDef wants to speed up arms purchases by buying off-shelf equipment abroad.
- **17.08 2017** **New head of US arms export agency.** Gen. Charles Hooper replaced Vice-Adm. Joseph Rixey as director of the Defense Security Cooperation Agency. Since 2013, Rixey had been one of Poland's chief negotiating partners when buying arms from the US. Hooper will take over the finalisation of the contracts for Patriots and Homar launchers for Poland, if they go ahead as announced. He is an experienced military diplomat, having served as an attaché in China. He is less familiar with eastern Europe, though, which could make negotiations more difficult for Poland.
- **23.08 2017** **PGZ suspects sabotage at Autosan.** PGZ's CEO Błażej Wojnicz has announced a request cancelling the PLN 30 million tender for buses for the army in which the state-owned Autosan submitted its offer 20 minutes after closure. PGZ claims that a crime may have been committed by an employee of the company, who has already been dismissed. Deputy MinDef Bartosz Kownacki notified the CBA and SKW, suggesting that it was deliberate action by someone linked to the previous ruling camp. MinDef hopes to distract attention away from the lack of professionalism at a state-owned company that it oversees.
- **30.08 2017** **Defence spending to increase.** Poland will spend PLN 41.14 billion on it, 2 per cent of planned GDP for 2018. This means an increase of 10 per cent in nominal spending on defence. Over 26 per cent of this amount, PLN 10.9 billion, will be spent on modernising the armed forces. Spending on army maintenance will be PLN 3 billion higher than in 2017. If the current draft budget is adopted, Poland's defence spending will exceed PLN 40 billion for the first time and amount to 2 per cent of that year's GDP.
- **31.08 2017** **First Krab squadron in service.** The first 24 self-propelled howitzers manufactured in Huta Stalowa Wola will be officially added to the equipment of the 11th Mazurski Artillery Regiment in Węgorzewo. Krabs are the most modern guns of its type within NATO. The contract for a total of 120 howitzers and several hundred associated vehicles is the second largest order for Poland's defence sector worth PLN 4.6 billion. The procurement will allow the army to support land forces much better and will give the industry the experience in serialised integration of components into one weapon system.
- **31.08 2017** **Government rescuing company that would co-produce radars.** The Polish Academy of Sciences' High Pressure Institute signed a leasing agreement for Ammono, the producer of semiconductor substrates for one of the key gallium nitride technologies, which is in a state of liquidation bankruptcy. MinDef is banking on its development after the signing of an offset agreement with Raytheon as part of the acquisition of the Patriot air defence system. Gallium nitride is considered a future type of semiconductor, which improves radar performance while using less energy. The six-month lease of the company will help maintain its capabilities and staff until the offset is launched.
- **01.09 2017** **MinDef sends president new report on the army.** The National Security Bureau (BBN) confirmed that Andrzej Duda received a corrected version of the report on the Strategic Defence Review on Monday. According to MinDef, the changes reflect new long-term financial forecasts published by MinFin, which required „correcting the Polish Armed Forces' model". Neither party revealed what the changes involve. The BBN is analysing the document, which concerns the controversial changes to the command structure, among other things. If the new report takes into account earlier comments by the BBN and the president, it will be a sign that Antoni Macierewicz is making concessions.
- **05.09 2017** **MSBS rifles purchased for territorial defence forces.** The PLN 500 million contract was signed by the special forces' unit Nil, rather than the Arms Inspectorate, so it was not on the list of contracts announced earlier. Justifying this, MinDef Antoni Macierewicz cited a special fast-track for orders, which will be used by the territorial defence forces. The 53,000 rifles will be produced by Fabryka Broni Łucznik-Radom. MSBS is a modular system of firearm developed in Łucznik, which enables ten sorts of standard and smaller rifles to be produced from a few parts.

○ **05.09 2017** **No major armaments contracts at Kielce trade fair.** The Arms Inspectorate announced that four contracts worth a total of PLN 185 million will be signed at the armaments industry trade fair in Kielce. The biggest will be the order for 114 Żmija distant recognition vehicles. The army will also buy night vision goggles, sniper rifles and airport equipment, but not order MSBS rifles. MinDef is to announce its planned contracts for the rest of the year, including for the Wisła air defence system, the Homar missile launchers, two Kormoran II mine destroyers and over 600 Antos light mortars. The list does not include multi-task or attack helicopters, which shows that discrepancy between the purchases and planned technical modernisation.

○ **06.09 2017** **Borsuk and tanks at MSDR.** HSW presented a new amphibious infantry fighting (IFV) vehicle called Borsuk. The IFV has a Polish-made unmanned turret fitted with a 30 mm cannon and anti-tank Spike launches. Bumar-Łabędy presented a modernisation of the T-72 tank (PT-91M) with a Slovak-made 125 mm cannon, night vision produced by PCO, an auxiliary power unit (APU) and reinforced suspension. The PT-17 has a Ukrainian-made 120 mm cannon – which equals that of the Leopard. Both demonstrate options of modernising older-generation tanks owned by Poland.

○ **08.09 2017** **Poland to receive offers for helicopters by year end.** The potential suppliers, Airbus Helicopters, Leonardo/PZL-Świdnik and Sikorsky/PZL-Mielec collected documents setting out requirements from the Arms Inspectorate. Final offers, with prices, are expected by the end of December. After rejecting the French offer for 50 Caracals last year, MinDef initially said that Black Hawks would be bought soon. In March, it launched a tender in urgent operational need mode for 12-16 helicopters. Eight for the special forces are to be bought first. Negotiations on marine helicopters have not yet begun. This means that, despite earlier announcements, the helicopters will not be delivered by next year.

○ **19.09 2017** **Second Mustang tender.** A new tender, which now includes 12 companies, aims to replace 3,700 Honker all-terrain military vehicles. The previous tender was cancelled because the only bid that included militarised versions of Ford Rangers exceeded MinDef budget. Now Ford chose not to participate in the new tender and PGZ, which offered the Ford Rangers, is cooperating with Toyota. Other bidders include specialist vehicle converters, distributors and producers of military vehicles. The Armaments Inspectorate wants to order 872 vehicles with an option to purchase additional 2,787. In The tender will be one of the largest defence orders of the coming years.

○ **21.09 2017** **Macierewicz to put pressure on Raytheon.** The MinDef announced that he will spend the second day of his visit to the US on talks with the defence industry. Unofficially, it is clear that he means Raytheon and Lockheed Martin, which are to submit offset offers for the Wisła air defence programme tomorrow. Antoni Macierewicz will personally press them to meet all of Poland's expectations, which have so far been opposed by the US government and partly by companies. Contracts for delivering launchers, which Macierewicz hopes to sign by the end of the year, are conditional on the acceptance of the offset.

○ **24.09 2017** **Offset from Raytheon a month later.** MinDef has extended the deadline for the offset offer for the first phase of the Wisła air-defence programme to October 20. The ministry and main supplier Raytheon did not say why. Unofficially, it is clear that Northrop Grumman, which is responsible for the IBCS command system and is submitting the offset offer with Raytheon, has not presented its proposals. MinDef representatives will travel to the US this week, probably for the final negotiations before the US response to the Polish order, expected in November.

○ **24.09 2017** **Macierewicz supports Apache helicopters.** The MinDef announced that his visit to the US included a „long and important” conversation with Boeing representatives on buying AH-64 Apache attack helicopters. In his view, these are unique machines that would guarantee Poland's security, though they are very expensive. The Apache's superiority supposedly transpires from the analyses conducted as part of the SDR. Naming a favourite producer of attack helicopters before the tender begins could prompt competitors (Bella, PZL-Świdnik and Airbus) to submit more attractive offers.

○ **11.10 2017** **MinDef changing army despite dispute with president.** On September 19, Antoni Macierewicz signed a classified decision on implementing the recommendations of the strategic defence review. MinDef confirmed the reports on the matter yesterday. According to deputy MinDef Tomasz Szatkowski, concrete plans on increasing the army to 200,000 soldiers, establishing a fourth division and changes to armament priorities will be prepared by the general staff. The government is to adopt a resolution on a new technical modernisation plan by the end of the year. The implementation of the recommendations, even though the changes to the command system were not agreed on with the president, shows that the political dispute over the army is becoming entrenched.

○ **12.10 2017** **Mi-14 with increased service life.** The Navy's Air Brigade transferred the first of the two Mi-14 PŁR helicopters to be overhauled at WZL-1 in Łódź, which would extend its service life. After the overhaul is completed, the helicopter will remain in service until, at least, 2022 since the order for new naval search and rescue helicopters has not been completed. The brigade has two Mi-14PŁR helicopters, both of which will be overhauled in order to extend their service life.

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SDR to decide on the future of defence orders

The paper outlines a road map for armed forces reforms planned for the next 15 years.

Marek Świerczyński, Senior Security Affairs Analyst

MinDef implements SDR guidelines. On September 19, MinDef signed the decision to implement the strategic defence review (SDR), despite the fact that there is not agreement with the president on the new army command structure. The implementation of SDR guidelines will be fundamental for the upcoming defence programmes, which include boosting the army to 200,000 troops and increasing defence spending to 2.5 per cent of GDP. SDR will form the basis of a new decade-long technical modernisation plan (PMT) and will complete the priorities of the current programme. A detailed defence programme based on SDR guidelines is set to be completed by the end of the year.

Access denial systems and long-range firepower. It is still unclear, how the SDR recommendations will be rendered in the new PMT. In one of his most recent statements, Maciejewicz stressed the need to increase offensive capabilities of tube and rocket artillery. This will include, among others, extending the order for self-propelled Krab gun-howitzers over the current 120 pieces on order and introducing their wheeled Kryl version. There are indications that the number of long-range Homar rocket launcher divisions will also be increased. Current proceedings involve three divisions (a total of 56 launchers). Unofficial information based on SDR data suggests it would be extended to as many as 160 launchers.

Air defence to expand its lower tiers. It is quite likely that the medium-range Wisła air defence system will be extended to include additional elements that create a cohesive, tiered system. The elements will mainly include a short-range Narew air defence system, designed to destroy air targets, including guided missiles. In the Polish configuration, the Wisła system will mainly have anti-ballistic capability, and the first batch of missiles will be used to protect strategic areas from Iskanders. The medium and short-range systems are to be linked by the US-made Integrated Air and Missile Defense Battle Command System (IBCS), but its integration with Polish and third-party components might be problematic.

The Navy to go underwater and reinforce coastline. The largest systemic change for the Navy would include re-directing investment from surface vessels to submarines and new orders for coastal missile systems. Both directions are set to create a protective barrier on the Baltic Sea, while fitting submarines with long-range cruise missiles will additionally provide deterrence and retaliation capability. This will result in postponing the orders for classic surface combat vessels. Two Kormoran-class minehunters and as well as Ślęzak, whose construction spans nearly two decades, are the only surface vessels to be completed in the coming years.

Missiles to support territorial defence forces. Man-portable anti-tank missiles are one of the recommendations included in SDR for the territorial defence forces (WOT). The new force might not only receive licenced Spike missiles with a range of 4 km, but also short-range anti-tank missiles (nickname Pustelnik) as well as shoulder-fired Piorun air defence missiles. WOT will also receive a loitering munition system with swappable warheads, which with a partial autonomous capability. As a result, WOT units would be able to identify and destroy armoured targets. Given the right level of saturation with weapons and reconnaissance capabilities, the new units would create a form of an access denial system.

A new tank and anti-tank helicopters looming on the horizon. The most long-term and costly among SDR recommendations involves the order for a large number of attack helicopters capable of destroying enemy tanks as well as the programme of developing a new generation main battle tank. Currently, it is difficult to estimate the cost, chances and time necessary to implement both programmes. According to unofficial sources, MinDef is considering a move to purchase over a hundred helicopters, yet the current Kruk programme includes an order for 32 aircraft, which will mostly be delivered after 2022. The development of a new generation tank exceeds the capability of the Polish industry, so Poland would have to join, for instance, the French-German programme developed by Nexter and KMW or the American NGFV.

Poland delayed 360° radar purchase

Ministry of Defence will decide in a year's time whether to order the anti-missile system in its expanded configuration.

Marek Świerczyński, Senior Security Affairs Analyst

The first phase of Wisła system is nearly a foregone conclusion.

By the year-end or early in 2018 Poland and US are set to sign an agreement to deliver two Patriot batteries equipped with an ICBS command system. It will be the first stage of the Wisła programme aimed at creation of the medium range missile defence system. The offset is based on Raytheon's agreement with the state-owned companies of the PGZ group and was formally filed on October 13. In November MinDef expects the formal Letter of Acceptance from the US to its Letter of Request to sell the Patriots. Meanwhile, the ministry has formed a Wisła programme bureau and appointed a plenipotentiary for its implementation. A similar cell was formed at PGZ.

Radar decision delayed by a year. In the preferred configuration the system was supposed to include a 360-degrees radar and low-cost missiles. Without the two elements there is no way the requirements of the Polish military and weapons industries will be met. Raytheon has proposed a 360-degree active radar based on gallium nitride (360 AESA GaN) with the budget addition of Israeli-American SkyCeptor missiles. However, decisions on both elements were delayed by MinDef until end-2018. In practice, currently only the first stage of the Wisła programme is certain while the second is in question.

Radar selection could delay Wisła. Poles want the system to be equipped with the same radar the US Army missile defence will receive. Just like Poland, the Americans have requested the GaL technology and 360-degree capabilities. Pentagon has opted not to modernise the existing Patriot radar and select a new through a tender process. However, the deadline has not been set and the procedure to-date means the selection is impossible in 2018. Beside Raytheon, Lockheed Martin and Northrop Grumman also said they will place offers with the US Army.

Negotiations with US and Israeli governments. Poland will try to convince both states to gain access to restricted and currently un-exported technologies including the most advanced rocket engines, guidance warheads, and semi-conductor GaL radars. The technologies are being developed in both countries by private companies, but remain state-controlled providing military advantage over potential enemies. Allies could be acquiring the techs as closed systems, but will not receive the knowledge allowing for their development, modification, and modernisation - elements that Poland requested as part of offset and technology transfer.

Americans calm on the offset. Deputy MinDef Bartosz Kownacki received a verbal response from Pentagon to his reservations from July 12 letter. He threatened to walk away from the negotiations on Patriots, if the US government does not guarantee offset agreements with suppliers. In Kielce Kownacki met with Ann Cataldo, a Pentagon representative for ground troops weapons exports. According to unofficial information, he was assured the US understood Poland's legal constraints and dependence of the Wisła system approval on earlier deal on offset areas. However, no declarations were made on the requested knowledge transfer.

WHAT'S NEXT

MinDef will want to give an impression of fast implementation of the Wisła programme. If an agreement for the first stage is signed this year, Antoni Macierewicz will announce a breakthrough and the biggest success in the government's armaments policy. However, the most important elements for the Polish defence and weapons industries come with the delayed second stage of the Wisła system. The real scale of benefits for the military and the industry will remain unknown for at least 12 months. Resorting to acquisition of Patriots in their current specifications would be a failure of the Polish plan to build a modern air defence system.

Helicopter orders delayed again

Helicopter orders for special forces are set to be concluded in 2018, but the Navy will have to wait until 2019.

Marek Świerczyński, Senior Security Affairs Analyst

Final bids for eight helicopters in December at the earliest.

The request for proposal (RFP) for combat search and rescue helicopters (CSAR-SOF) for special forces was posted on September 7. The potential vendors are set to present their proposals by December 28, declaring the price and scope of offset. RFP prepared by the Armaments Inspectorate (AI) is an extensive document of 4,000 pages. Potential suppliers – Airbus Helicopters (H225M Caracal), PZL-Świdnik (AW101) and PZL-Mielec (S70i Black Hawk) – have yet to complete their analysis of the document and it remains uncertain whether all of them would place their bids. They might also send in some questions, which would postpone the procedure.

The delivery contract in late 2018. If the proposals are received by MinDef in December or January, their analysis would last until spring. The end result would involve choosing a helicopter that best complies with the requirements and testing it. The French H225M Caracal, which was to have been a common platform for several types of helicopters, underwent two weeks of testing in Powidz. We can assume that the tests of Combat-SAR will be shorter. After the tests are positively concluded, negotiations will begin, which would settle the final price. In order to comply with the Polish law, before the delivery contract is concluded, both sides have to sign an offset agreement, which would likely happen in late 2018.

MinDef opts for low price and quick delivery. According to unofficial sources, the price weighs in to amount to a half of all points awarded in the competition for helicopters. Other decisive factors include performance and delivery dates. MinDef would like the first helicopters to be delivered to Poland by mid-2019. All of this means that the vendor would have to produce the first helicopter in less than a year. MinDef wants deliveries to be concluded within 18 months, and additional points are awarded for earlier deadlines. This gives competitive edge to Airbus and Sikorsky, which have large production facilities and are able to carry out huge orders. A small Polish order might easily be incorporated into current production.

The navy will have to wait until 2019. AI has not yet begun negotiating the second helicopter package of four to eight naval aircraft that would combine search and rescue capabilities with anti-submarine ones. Those helicopters are more advanced, so it is unlikely that the contract will be concluded in 2018. Initial bids were placed by PZL-Świdnik and Airbus Helicopters only. Helicopters for the navy should be relatively large, and PZL-Mielec has no such aircraft on offer. In addition, the company chose not to propose any of the larger helicopters produced by its parent company Sikorsky Aircraft. In both proceedings, PZL-Świdnik proposed a large three-engine Agusta Westland AW-101, while Airbus – the H225M Caracal.

Attack helicopters might be placed on a fast track. AI said that this year it would launch the Kruk programme and conclude the contract by the end of 2018. Bell Helicopters and Boeing, which promote the AH-1Z Viper and AH-64E Apache Guardian respectively, have begun an intensive informational campaign. The competition might also include Airbus Helicopters with the Tiger and PZL-Świdnik with the Turkish T129 Atak, based on the Agusta Westland A129 Mangusta. According to the Strategic Defence Review (SDR) attack helicopters are set to become one of defence priorities in the coming years. AI is working on the order for 32 aircraft, but SDR recommends ordering over a hundred rotary aircraft.

WHAT'S NEXT

The procedure of ordering helicopters for the navy and special forces would last for at least a year, despite the fact that MinDef declared it would complete the order in several months. The concept of urgent operational need did not result in a quick purchase, since AI has to meet formalities much like the ones required in a cancelled tender, despite a considerably lower value of the order and smaller number of helicopters involved. If MinDef decides to open a parallel order for attack helicopters, AI will fall short of manpower to process several proceedings at once and the orders would accumulate further delay.

Selection of submarine postponed

In the coming months, Poland will only decide how it would order its new submarines.

Marek Świerczyński, Senior Security Affairs Analyst

Naval Group might supply a complete system. France is the only partner capable of offering Poland modern Scorpene-class submarines and specially-designed, non-integrated guided MdCN/Scalp Naval missiles. French authorities maintain that the use of missiles will not fall under any political or military restrictions. A state-controlled shipyard in St. Nazaire wants to cooperate with PGZ on submarines, surface vessels and wind turbines. The Naval Group (formerly known as DCNS) has gathered experience from similar projects in India, Malaysia and Brazil. As a bridging solution, it proposed to convert a Kilo-class submarine (ORP Orzeł), fitting it with Scorpene-class systems, but the process might be difficult and costly.

Saab is offering the latest submarine. The first A26-class submarine, ordered by Sweden, is set to be delivered in 2021 – it will not, however, be fitted with missiles. In order to comply with Polish requirements, this year the Swedish producer presented an enlarged version with three launchers holding 18 missiles, similar to those fitted on latest US Virginia-class submarines. The Kockums shipyard has offered to cooperate with Poland to construct submarines and gradually transfer the necessary technology. If Poland chooses Saab, it would need to separately purchase cruise missiles and integrate them, which would require additional funds and time. It would lead to a de facto new submarine model. A bridging solution would involve purchasing Swedish second-hand Södermanland-class submarines.

Germany wants to support industry. The TKMS shipyard said it could open, either in Szczecin or Gdynia, a production line for U212/214-class submarines. For training purposes and in order to maintain the habits of submarine crews the German navy offered to temporarily lease to Poland one of its own U212s. TKMS is Europe's most experienced producer, which supplies submarines to five NATO countries. The producer maintains that the submarine complies with the requirements for the Baltic Sea, for instance can operate at the depth of only 20 m. The U212/214 can be fitted with guided missiles, but they need to be separately purchased and integrated. Poland could draw on the modifications introduced by Israel, which installed its Popeye missiles on the Dolphin-class submarines.

Missiles could be critical to the decision about the order.

In the Strategic Defence Review (SDR) MinDef confirmed that it wants to purchase submarines fitted with long-range guided missiles, which shows that it is the missiles, not submarines, that are the key component of the system. Currently, only the French proposal contains both elements. Poland, on the other hand, would like to buy US Tomahawks, but the letter of request sent during Barack Obama's presidency remains unanswered. According to unofficial sources, the US will reply when Poland chooses the submarine where the missiles would be fitted. If the sale of Tomahawks to Poland were approved, it would mean that Warsaw joined the group of the US' closest allies.

The dispute with the president might affect the programme.

Before SDR was published, President Andrzej Duda announced its own naval security strategy. He questioned the move to place Poland's offensive potential solely on submarines and supported the construction of multi-task surface vessels. MinDef, however, decided to implement recommendations included in SDR, which involve the expansion of the submarine fleet at the expense of the surface one. The decision was taken before SDR was analysed by the presidential National Security Bureau (BBN), which remains at odds with MinDef over structural changes in the army. If the dispute escalates, it could also affect modernisation issues, including those involving the navy.

WHAT'S NEXT

On several occasions this year, MinDef stated it would take "the decision on the decision" how the supplier of cruise missile submarines would be chosen. The ministry might opt for an intergovernmental agreement (G-G) or choose a foreign supplier in a competition. Only the first option would allow Poland to choose a specific design during the initial stage, the second one would delay the procedure by at least year to process and analyse the bids. As a result, the order for the submarines will not be concluded before end of term of the current government.

How the Krab artillery system works

The Polish army has introduced the world's newest self-propelled gun-howitzer. Precision-guided munition will allow Krabs to destroy tanks.



Marek Świerczyński, Senior Security Affairs Analyst

First-line division. In late August, 11th Mazury Artillery Regiment in Węgorzewo received the first fire division module of self-propelled 155 mm Krab gun-howitzers. This constitutes the single largest increase of firepower in the Polish land forces in 21st century. The first division of Krabs, out of five ordered by MinDef, is deployed in a “frontline” unit on the NATO’s eastern flank. The regiment from Węgorzewo will become the strongest unit (in terms of firepower) among allied forces deployed in the vicinity of the so-called “Suwałki Gap”. The field artillery units will receive a total of 120 Krab gun-howitzers.

Kit howitzer assembled at HSW. Krab combines a UK-made turret, French gun, German engine and Korean chassis. The current model of the self-propelled howitzer is the result of nearly two decades of work of engineers from Huta Stalowa Wola and from companies active in the consortium. The AS90 Braveheart turret was licenced in 1999 from BAE Systems. Initially, the chassis was to have been manufactured in Poland, but when the chassis, after a decade-long work, proved to be faulty, Poland licenced the South-Korean K9 Thunder chassis. 155 mm guns are manufactured at HSW, using technology developed by Nexter and Rheinmetall. Internal gun mechanisms, the fire control and communication systems are made in Poland. The 48-tonne vehicle is powered by a 1,000 HP 12-cylinder diesel engine manufactured by Germany’s MTU.

Fire module consisting of 24 guns. A division of Krabs consists of six fire platoons, with four guns each. A single battery, consisting of two platoons, may operate independently because it has its own backup and a target indicator system. Each platoon has a command vehicle, which gives it considerable freedom when manoeuvring and directing fire. The Topaz fire control system, which collects target data and assigns fire tasks, is at the heart of the system. Other units in a division include a logistics company, communication, reconnaissance and medical evacuation platoons – a total of over 80 vehicles. A fire module nicknamed Regina is an example of a complex approach to weapons design. As a result, a complete system was created, offered by a single producer.

Krab as a multi-task gun-howitzer. A classic howitzer uses indirect fire, or fires projectiles at an angle. Trajectory of projectiles is steep and they hit targets almost vertically. A gun is mostly used for direct fire. The Krab is a gun-howitzer, which combines indirect and direct capability. As a long-range howitzer is designed to destroy reinforced targets, heavy hardware and areas of troops concentration. It was tested also direct firing with anti-tank ammunition. Due to its light protective armour and lower mobility such option could only be used in self-defence. The efficiency of fire depends largely on the quality of ammunition, which will be gradually developed by the Polish industry, using in part licencing options and technology transfer.

New guns to double the range of artillery. Krabs can fire at targets 5-40 km away. The gun-howitzer can fire a maximum of six projectiles a minute – such salvo can last up to three minutes. A complete division is able to strike enemy positions with an imposing number of 432 projectiles. The use of laser-guided precision munition allows for spot targeting of, among others, the enemy’s air defence and artillery units. Reconnaissance is facilitated by UAVs, which are part of the division. The army is looking for suppliers of electromagnetically guided projectiles, which are capable of detecting tanks and armoured vehicles on their own. Each Krab is ready to fire 30 seconds after it assumes a firing position, with further 30 second necessary to withdraw.

WHAT'S NEXT

In order to fully take advantage of its gun deterrence and defence capability, Poland should develop a precision short-range reconnaissance and battle command system. As a result, it is necessary to resume the programme that aims to develop Orlik/Wizjer reconnaissance drones, which was halted by current MinDef leadership, purchase a greater number of Liwiec artillery radars (there are four such radars currently in service) and combine the reconnaissance systems with control and command ones by means of the Battle Management System (BMS).



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