

MS DAILY BRIEF - 25 September 2022

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[Russians use a recently repaired Tu-214R radio reconnaissance aircraft to find Ukrainian military facilities](#)



Russian news agency RIA Novosti reported on 24.09.2022, citing a source, that the Russian military has used a Tu-214R reconnaissance aircraft to find military facilities in Ukraine. One of two Tu-214R aircraft equipped with optical and radio-technical research systems in the service of the Russian military was used to detect military facilities. The aircraft was used after undergoing ongoing repairs. "This aircraft is capable of detecting and promptly transmitting to ground command points the coordinates and types of military installations of various classes, including radar stations, command posts, communications centres, columns of military equipment and others," the agency source said.

The Tu-214R was developed on the basis of the Tu-214 civilian aircraft produced by the V.I. Gorbunov Aviation Enterprise in Kazan. The aircraft is equipped with lateral and

omnidirectional radar stations, a high-resolution optoelectronic system, as well as radiolocation search systems (detection and location of active radars in the searched area).

Author's comment: the flight of the Tu-214R aircraft was also confirmed by aviation monitoring sources on Twitter and Telegram. It was carried out on September 22 by the aircraft with registration number RF-64514, which flew at an altitude of about 10,000 meters in a district north of Kazan.

Given the area in which the flight was carried out, it can be estimated that the flight was more for testing and calibrating the aircraft than to survey Ukrainian territory.

The Russian Federation's Aerospace Forces have two Tu-214R radio research aircraft (RF-64511 and RF-64514) which were developed in the early 2000s to replace the Il-20. The new radio research aircraft have been in experimental operation since 2012 and have been deployed to Syria on several occasions

[https://www.defenseromania.ro/rusii-folosesc-un-avion-de-cercetare-radioelectronica-tu-214r-recent-reparat-pentru-a-gasi-facilitati-militare-ucrainene\\_618361.html](https://www.defenseromania.ro/rusii-folosesc-un-avion-de-cercetare-radioelectronica-tu-214r-recent-reparat-pentru-a-gasi-facilitati-militare-ucrainene_618361.html)

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The Ukrainian Ministry of Foreign Affairs has decided to revoke the accreditation of Iran's ambassador to Ukraine.

It was also decided to "significantly reduce" the number of diplomatic staff of the Iranian Embassy.

The reason given is the Tehran regime's move to provide attack drones to Russian Federation troops, an official statement by the Ukrainian Foreign Ministry said.

"It has been communicated to the Iranian side that providing Iranian weapons to Russia for further use by Russian troops against the Ukrainian civilian population and Defense Forces directly contradicts the position of neutrality, respect for the sovereignty and territorial integrity of Ukraine, a position that has been publicly stated by Iran's top leadership," the message reads.

The Ministry of Foreign Affairs noted that providing weapons to Russia to wage war against Ukraine is an unfriendly act that deals a serious blow to relations between Ukraine and Iran.



On 23.09.2022, several Iranian-made Shahed-136 (Geran-2) drones were seen in the sky above the Ukrainian city of Odessa.

Using kamikaze drones, the Russian military struck several targets belonging to the Ukrainian army.

Several videos of the Iranian drones flying have been posted on social media. They show that the Ukrainian military on the ground tried to shoot down the drones with automatic weapons fire, but without success.

Among other things, the drones hit a Ukrainian military unit near the port of Odessa.

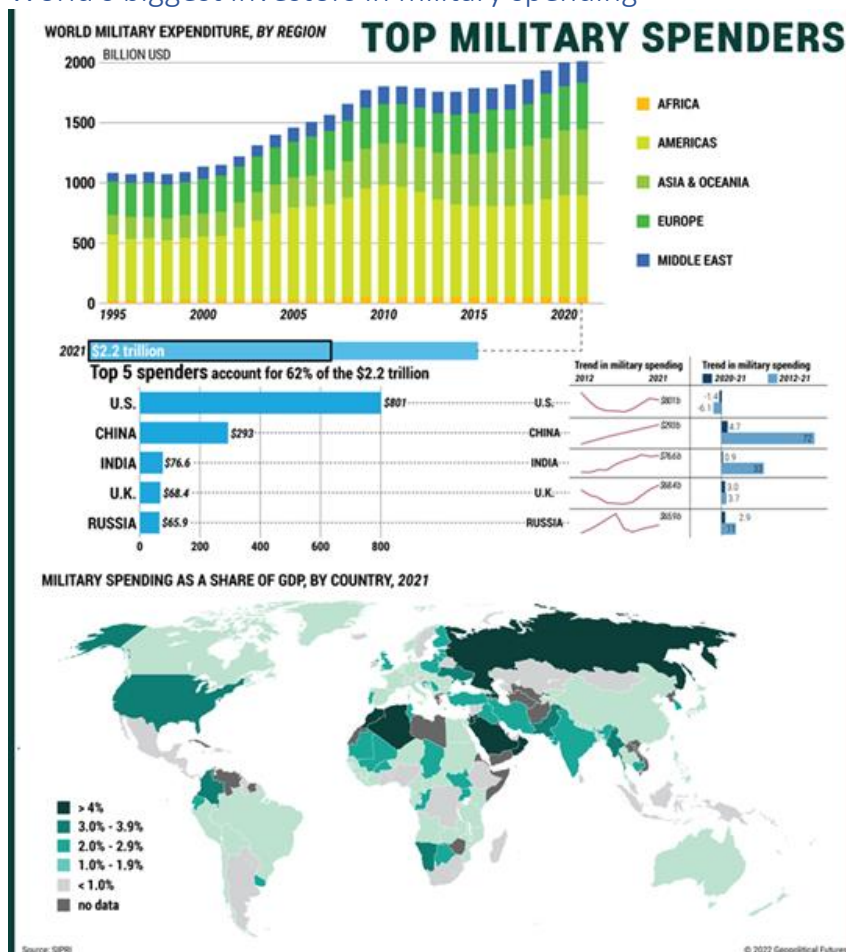
Earlier, with the help of Iranian drones, a Ukrainian Naval Forces tugboat in the port of Ochakov in Nikolaev Region was destroyed and a building in Krivoy Rog was hit.

Also, according to the US newspaper The Wall Street Journal, two self-propelled howitzers with a calibre of 152 millimetres, two self-propelled cannons with a calibre of 122 millimetres and two infantry fighting vehicles of a Ukrainian unit were destroyed. The Ukrainian Armed Forces leadership is concerned that Iranian Shahed-136 drones could interfere with the delivery of HIMARS complexes and other Western weapons to the front line.

To counter Iranian drones used by the Russian military, the Ukrainian side has turned to Israeli intelligence to obtain data on them.

Source: [https://www.defenseromania.ro/dronele-iraniene-au-ajuns-la-odesa-rusii-au-folosit-drone-shahed-136-pentru-a-lovit-obiective-ucrainene\\_618353.html](https://www.defenseromania.ro/dronele-iraniene-au-ajuns-la-odesa-rusii-au-folosit-drone-shahed-136-pentru-a-lovit-obiective-ucrainene_618353.html)

## World's biggest investors in military spending



The nature of military spending varies greatly between countries and regions, and gross figures cannot always be taken at face value. In America, the United States dominates in terms of defence spending. Similarly, India and China account for the bulk of military spending in Asia. Not all military spending is the same. In China and India, which have 2 million and 1.4 million active military personnel respectively, a large proportion of spending goes on meeting the basic needs of troops.

Both militaries also have major state-backed programmes aimed at increasing the size of their domestic defence industries. The United States also has 1.4 million active personnel, but spends nearly 10 times as much as India, mostly on developing advanced weapons. For Russia, military spending prior to the Ukraine conflict reflected a large-scale modernisation drive. And in the UK, spending has risen following national defence reviews that have urged a re-prioritisation towards emerging threats.

Source: [https://geopoliticalfutures.com/the-worlds-biggest-military-spenders/?tpa=ZjFjNTcyMzQzMjFIMWIyYjQ5YzVIMzE2NjUwNzA2NDU5ZGE1NzM&utm\\_source=newsletter&utm\\_medium=email&utm\\_term=https://geopoliticalfutures.com/the-worlds-biggest-military-spenders/?tpa=ZjFjNTcyMzQzMjFIMWIyYjQ5YzVIMzE2NjUwNzA2NDU5ZGE1NzM&utm\\_content&utm\\_campaign=PAID%20-%20Everything%20as%20it%27s%20published](https://geopoliticalfutures.com/the-worlds-biggest-military-spenders/?tpa=ZjFjNTcyMzQzMjFIMWIyYjQ5YzVIMzE2NjUwNzA2NDU5ZGE1NzM&utm_source=newsletter&utm_medium=email&utm_term=https://geopoliticalfutures.com/the-worlds-biggest-military-spenders/?tpa=ZjFjNTcyMzQzMjFIMWIyYjQ5YzVIMzE2NjUwNzA2NDU5ZGE1NzM&utm_content&utm_campaign=PAID%20-%20Everything%20as%20it%27s%20published)

A Russian Kilo-class submarine leaves the Mediterranean Sea. Likely destination - the Baltic Sea for repairs



According to sources on Twitter and Telegram, a Russian Kilo-class submarine is heading for the Strait of Gibraltar, due to exit the Mediterranean Sea. It is most likely heading to the Kronstadt Shipyard for planned repairs.



Navigation monitoring sources have reported that the Russian Black Sea Fleet (RBSF) tug Sergei Balk is currently sailing off the coast of Algeria in the Mediterranean Sea, heading west. The tug, which left the Syrian port of Tartus last week, is reportedly not sailing alone, but is escorting a Kilo-class diesel-electric submarine, which is due to leave the Mediterranean Sea.

A Kilo-class diesel-electric submarine and a Yasen-class nuclear submarine, probably Severodvinsk, will remain in the Mediterranean.

Two Kilo-class diesel-electric submarines, Project 636.3, belonging to the FRMN, have recently been deployed in the Russian squadron in the Mediterranean. These are the B-261 Novorossiysk and B-265 Krasnodar submarines of the 4th Submarine Brigade - Novorossiysk. They were introduced into the fleet in 2014 and 2015 respectively. Both submarines have also passed through the Kronstadt Shipyard for planned repairs. Thus, the Krasnodar submarine has been in the Baltic Sea since April 2020 and the Novorossiysk since January 2021 for short periods of two or three months. Under these circumstances, it can be estimated that the submarine emerging from the Mediterranean Sea is the B-265 Krasnodar, while the B-261 Novorossiysk is still in the Tartus port area.

The other four Project 636.3 submarines of the MNRF: B-237 Rostov-on-Don, B-262 Stary Oskol, B-268 Veliky Novgorod and B-271 Kolpino are in the Black Sea. They normally perform missions from the Sevastopol and Novorossiysk Naval Bases. However, the latest information from the region indicates that all four submarines are currently stationed at Novorossiysk, probably for fear of subversive action by the Ukrainian military in the context of the conflict in Ukraine.

All four Russian submarines in the Black Sea are taking part in the special military operation in Ukraine, firing Kalibr cruise missiles at land targets on Ukrainian territory.

Source: <https://remnmilitaryblog.com/2022/09/21/un-submarin-rusesc-din-clasa-kilo-paraseste-marea-mediterana-destinatia-probabila-marea-baltica-pentru-reparatii/>

## Royal Navy and US Navy lead SINKEX

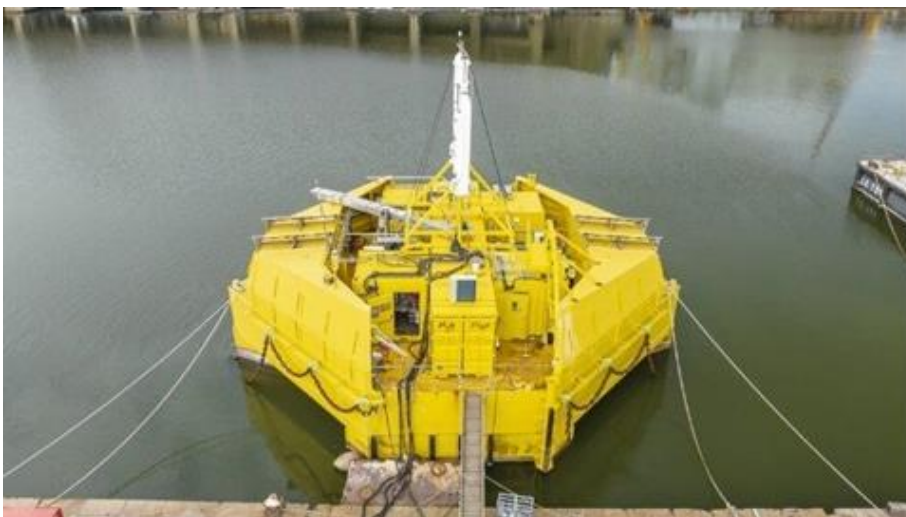
British and US forces took part in a SINKEX (diving exercise) that hit a former US Navy Oliver Hazard Perry class frigate in the North Atlantic. The Royal Navy and Royal Air Force put on a formidable display of firepower with US allies against a specially trained former US Navy warship in the North Atlantic. HMS Westminster, a Wildcat helicopter and three RAF Typhoon fast jets unleashed fire and fury on the decommissioned frigate USS Boone using an array of high-powered weapons. The exercise, dubbed Atlantic Thunder, was the first of its kind for the Royal Navy in 18 years and took place alongside US Navy and US Air Force counterparts. It was a rare live test of complex weapons against a realistic target far out to sea and tested the power and accuracy of naval and air forces, giving allies real experience of hitting targets at sea from long range and demonstrating the capability of several advanced technology. combat and targeting techniques. The Type 23 frigate HMS Westminster fired two Harpoon anti-ship missiles at the same time as a US P-8 Poseidon patrol aircraft launched one of them - 660kg of high explosive, simultaneously hitting the former USS Boone. The frigate's Wildcat helicopter quickly followed, hitting Martlet air-to-ground missiles in the Boone's hull. This was the first firing of the Fleet Air Arm's new anti-ship weapon against a realistic target at sea - up to this

point the Martlet had only been used against purpose-built targets. The Wildcat crew stayed in the air and used the on-board laser targeting pod to guide a Typhoon fighter from 41 Squadron RAF to launch Paveway IV precision-guided munitions against the target. This was the first time an RAF Typhoon had dropped live munitions on a warship used as a maritime target and the first time a Royal Navy helicopter had guided the Paveway IV to its eye. Commander Ed Moss-Ward, Commanding Officer of HMS Westminster, said, "Atlantic Thunder demonstrated that UK and US naval and air forces can work together to provide an end-to-end chain of destruction against a long range maritime target. "The integration of advanced weapons, sensors and communications with our NATO allies is key to the Alliance's collective warfighting capability, demonstrated by the sinking exercise. "The shoot supported the development of the Royal Navy's targeting and weapons capabilities and provided an opportunity to conduct realistic training to validate tactics and operating procedures." Lieutenant Ross Gallagher of 815 Naval Air Squadron, in command of Westminster's Wildcat helicopter, said, "The exercise was an excellent opportunity for Wildcat to showcase the Martlet missile system and Laser Target Designated for Typhoon to launch Paveway IV."

The Americans used their own SM-6 multirole missile launched from the destroyer USS Arleigh Burke, before the US Air Force F-15E Eagles, assigned to the 494th Fighter Squadron, guided more direct air-to-ground joint strike munitions against the former USS Boone. . Shortly after Atlantic Thunder, the target came to rest on the ocean floor, where it will remain the property of the US government forever. Extensive preparations had taken place several months beforehand to ensure that the exercise was conducted in a safe and environmentally friendly manner, including the removal of toxic materials and pollutants from the US ship before it could be used as a target in this way. The Oliver Hazard Perry-class frigate USS Boone served in the US Navy from 1982 to 2012. She is named after Vice Admiral Joel Thompson Boone, Medal of Honor recipient and the most decorated medical officer of World War I.

Source: <https://www.navalnews.com/naval-news/2022/09/royal-navy-and-us-navy-conduct-sinkex/>

## First floating offshore hydrogen production pilot project begins tests



The concept of offshore hydrogen development linked to wind farms is taking a step forward, with the first dedicated test facility in France. The Sealhyfe platform has been installed on a Wavegem wave energy platform and is now preparing for testing near a breakwater in the port of Saint-Nazaire, France, before being moved to a position off the Atlantic coast for the second phase of testing. The platform has been dedicated by Lhyfe, a French company focused on green hydrogen production. The company has inaugurated its first onshore industrial green hydrogen production site in France, linked to a wind turbine in the second half of 2021. A six-month trial phase begins at the quay to obtain initial baseline measurements and test all systems. At the end of this first phase, Sealhyfe will then spend 12 months off the Atlantic coast. It will be installed about two-thirds of a mile from the floating wind turbine, secured to the ground by a system of anchors and connected to the site's underwater hub using a connection designed to support power and data transfers. The company highlights some unique design development challenges for the first demonstration model. The Int had to be largely self-contained, with systems including desalination and cooling, stack behaviour, remote control and energy management, while being resilient to environmental conditions, including motion caused by the sea. It must be able to perform all stages of hydrogen production, including converting the electrical voltage from the floating wind turbine, pumping, desalinating and purifying seawater, and breaking down water molecules by electrolysis to produce renewable green hydrogen. Lhyfe, working with Plug Power, has developed the first electrolysis capable of operating on a floating platform. They report that Sealhyfe can produce up to 400 kg of renewable green hydrogen per day, which is equivalent to 1 MW of power. At the end of the test, Lhyfe expects to have a substantial amount of data, which should enable it to design mature offshore production systems and deploy robust and proven technologies at scale, in line with the EU's goal of producing 10 million tonnes per year of renewable hydrogen by 2030.

Source: <https://www.maritime-executive.com/article/first-offshore-hydrogen-production-pilot-begins-tests>

## [US Navy 'struggling' to get attack submarines out of repair on time as demand grows](#)

Less than a third of the Navy's attack submarines have come out of maintenance on time in the past decade as demand for the craft remains high, the head of Naval Sea Systems Command said Wednesday. "We're really struggling to get submarines out on time. In the last ten years, 20 to 30 percent [have come out] on time," Vice Admiral Bill Galinis said at the American Society of Naval Engineers' annual Fleet Maintenance and Modernization Symposium. The Navy currently has a fleet of 50 attack submarines divided among the Los Angeles (SSN-688), Seawolf (SSN-21) and Virginia (SSN-774) classes, with more Virginia under construction. While the US strike force is critical to the Pentagon's plans to counter the Chinese People's Liberation Army Navy, the service has struggled to keep up with maintenance requirements. As of Thursday, 18 submarines were in some sort of maintenance, Rear Admiral PEO Submarines Jonathan Rucker told the ASNE conference. "That's too high a number," Rucker said Wednesday. The older Virginia-class boats are among the hardest submarines to repair on time. "We've seen a significant increase in the number of man days required for submarine availability, particularly in the Virginia class," Galinis said. "We're doing a deep dive

to figure out why that is. It's really an ongoing process." While private yards such as HII's Newport News Shipbuilding and General Dynamics' Electric Boat have taken on submarine maintenance work, the bulk of attack submarine work is taking place at the Navy's four public yards. Attack craft are third behind nuclear-powered ballistic missile submarines and aircraft carriers when it comes to priority repairs and can take the brunt of shipyard deficiencies. Shipyards have improved on-time results for boomers and carriers, but record attrition at public yards and a 1,000-worker gap have leaked into submarine repairs as demand for attack submarines has grown. According to the Government Accountability Office, "Virginia-class submarines returned to operations nearly nine months later than expected, on average; Los Angeles-class submarines took, on average, four and a half months longer than scheduled to return to the fleet. As a result, some submarines missed deployment or had their deployments at sea cut short."

The class was designed after the end of the Cold War as a less expensive attack submarine compared to the high-performance Sea Wolf-class craft. Virginias were designed to operate closer to shore and with components that met NAVSEA's rigorous standards for submarine safety, but were not as durable as some of the older components on Los Angeles-class craft.

"When we got out of the Sea Wolf class, we had an extremely capable, but significantly more expensive submarine," Rucker said.

"Where we were at the beginning of the Virginia class, we still had a charge to build a design and build a submarine at an affordable cost to make sure we had the numbers we needed."

Sustaining the submarine class was not a major requirement for the program, and the Navy set aside maintenance for other cost-saving considerations.

"Unfortunately, some of those challenges are here today," Rucker said.

The USS Virginia (SSN-774), commissioned in 2004, is ending a mid-life availability, and lessons from this repair and other early boats in the class inform a class-wide maintenance plan to help schedule and secure materials.

That marina will implement that plan beginning in FY 2023 and may not see improvements until FY 2024.

"If you throw a rudder over the Titanic, it's going to take some time for the ship to turn around," Rucker told USNI News.

"It's going to take some time, just because there's a lag and getting resources or changing behavior or making sure we plan better what we're going to do."

In the long run, lessons from the Virginia-class sustainment issue have informed how the Navy has planned for the repair and maintenance of Columbia-class ballistic missile submarines and the next-generation SSN(X) attack submarine, Rucker said. Maximizing the time the submarine can be deployed is key to the new design.

"The initial capabilities document actually contains operational availability and sustainment requirements," Rucker said.

"It's one of our four key requirements for the SSN(X)... Speed, [signatures], payload and operational availability."

Source : <https://news.usni.org/2022/09/21/navsea-navy-struggling-to-get-attack-subs-out-of-repairs-on-time-as-demand-increases>



## European corvette program picks up speed. Other PESCO programmes

According to Defense News, the European corvette program launched under PESCO and involving Italy, France, Spain and Greece is picking up speed. Last year, the European Defence Fund (EDF) contributed €60 million to the development of the project. This EU funding is matched by €90m invested by participating countries. And next year, €200m of EU funding is expected to come in to build the prototype. Denmark and Norway have also joined the project. Pretty much all the big names in European industry (Fincantieri, Navantia, Naval Groupe) are already involved.

According to a statement by an Italian Navy official, Captain Andrea Quondamatteo of the Italian Naval Staff, "next year EDF will launch a 'call' for participants to continue the programme, with an EU grant of around €200 million available, which will lead to the production of the first prototype."

The corvette will be about 110 metres long and have a displacement of about 3,300 tonnes. It is intended to be a modular platform that will allow each nation to install its own sensors and weapon systems, removing one of the problems so often encountered in joint European projects. The participating countries also have different plans for the corvette: Italy and Spain want their ship to be able to fight in all environments, while France wants a long-range version, probably closer to the characteristics of a patrol ship.

"The Italian version is designed for use in the Mediterranean with anti-air, anti-ship and anti-submarine warfare capabilities, including surface-to-air missiles and torpedoes," Quondamatteo added.

Therefore, the Italian version could include a 76mm gun, a short/medium range missile-based anti-aircraft system backed by a CIWS artillery system, while all versions will be able to operate a medium helicopter and will have a modular airframe.

"By 2027 or 2028, about half of the corvettes in service in the world will be close to the end of their operational life, so I believe this innovative new naval programme could find a market inside and outside the EU," Quondamatteo added.

Anticipating perhaps future problems with recruitment, the designers are trying to reduce the crew by 30% compared to a similar corvette now in service and are carrying out tests to check the potential for all-electric propulsion, perhaps something like Integrated Electric Propulsion.

Italy could order up to four corvettes and France and Spain will order six corvettes each, at least that's my understanding. We know Greece was interested at one time in buying Gowind corvettes, so their involvement in the project seems to make sense. On top of that, with Denmark and Norway joining the project, the conditions are ripe for a total order of more than 10 units, so there is a good chance that the programme will also be a commercial success. Exports should not be ruled out either.

This type of corvette seems to be very much in demand, especially if we look at the latest purchases made by navies in the Persian Gulf area: the Avanti corvette built by Spain for Saudi Arabia, the Doha-class corvettes built by Italy for Qatar or the Gowinds built by France for the United Arab Emirates.



The Italian-built corvette for Qatar is similar in size to the future European corvette. Photo source: <https://www.edrmagazine.eu/first-sea-trials-for-the-qatars-new-first-of-class-multi-purpose-corvette>



Avante 2200 class corvette produced by Navantia for Saudi Arabia. Photo source: <https://www.thedefensepost.com/2022/09/13/saudi-arabia-avante-corvette/>

And because we are in the European project area, two new programmes in which Romania is also participating have been added to the PESCO session on 16 November 2021:

Medium size Semi-Autonomous Surface Vehicle (M-SASV) in which Estonia, France, Latvia and, of course, Romania are participating. The aim of this programme is to develop a medium-sized semi-autonomous craft, which can operate both manned and unmanned, and which can be equipped with mission-specific modules for research, anti-submarine or anti-ship combat and anti-sea mines. When I hear about interchangeable modules I think it wouldn't hurt

to have Denmark involved, the only ones who have come up with something viable in this area - StanFlex.

The other programme adopted on the same date, the Next Generation Small RPAS (NGSR), aims to develop an unmanned aircraft that will operate at tactical level: brigade/division. In addition to us, Spain, Germany, Portugal and Slovenia are participating in this programme. The drone will be able to be used in different environments, including at sea, by both the army and other structures in the country's defence system. Take-off and landing will not require a runway and the range will be up to 200 km while the autonomy will be 5 to 10 hours. The aim is to build an open architecture system, capable of being equipped with various specific modules which will maximise the interoperability and efficiency of the system.

P.S. This article is not about the Romanian corvette programme.

Source: <https://www.rumaniamilitary.ro/buletin-naval-programul-corvetei-europene-ia-viteza>