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## Greece and France signed a defence cooperation agreement

On 28 September 2021, Greece signed a mutual defence pact with France, the first between two NATO members.

The two countries are already bound to help each other from an attack originating outside the alliance. But the Strategic Partnership on Defence and Security for the first time joins two NATO members to support one another from an attack originating inside the alliance.

The two countries at the Élysée Palace reaffirming that the Greco-French alliance is stronger than ever. According to Emmanuel Macron, it “strengthens cooperation in the area of security and safeguards the sovereignty and territorial integrity of both countries”. This strategic partnership, besides the Greek purchase of 3+1 French frigates (costing 3bn

Euros), includes a mutual defence assistance clause in case of attack against the signatories.

This is a landmark military agreement that provides mutual assistance in the event of one party coming under attack by a third country, even if the latter belongs to NATO.

Specifically, Article 2 of the deal provides that “the parties shall provide each other with assistance, with all appropriate means at their disposal, and if necessary, by the use of armed force, if they jointly find that an armed attack is taking place against the territory of one of the two, in accordance with Article 51 of the Charter of the United Nations.”

Prime Minister Kyriakos Mitsotakis’ remarks after the signing of the Strategic Partnership Agreement for Cooperation in Defence and Security between Greece and France at the Élysée Palace,

*“Dear President of France, dear Ministers, ladies and gentlemen, Today is a historic day for Greece and France. Because, along with President Macron, we have decided to upgrade our bilateral defence cooperation, while also expanding the will of our two nations to stand side by side, to offer mutual assistance and act together on all fronts.*

*The signing of the Agreement on the establishment of a strategic partnership for defence and security cooperation does not only reflect but also reinforces a fact that is known to all: Greece and France have developed a very strong partnership, which essentially transcends their obligations towards each other in the context of the European Union and NATO. Foreign policy and defence cover a major*



A large, olive-green 8x8 military vehicle, the VBCI T40, is shown in a forest setting. The vehicle is equipped with various sensors and a turret. The word 'nexter' is visible on the front of the vehicle. A red diagonal graphic element is positioned above the title.

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*part of this partnership but, in fact, our cooperation is in no way confined to these issues.*

*The President pointed this out a few days ago in Marseille and shortly thereafter in Athens. Our joint efforts have, in the most suitable manner, cast a spotlight on the challenges posed by the climate crisis to the vulnerable ecosystem of our common sea, the Mediterranean.*

*Over the years Greece and France, France and Greece, have developed ties penetrated by common values: the faith in freedom, democracy, the rule of law, human rights. And of course the respect and advocacy of International Law and especially the United Nations Convention of the Law of the Sea.*

*Today's development seals this common, this consistent path. But it is also an initiative that corresponds to the demands of our times, in our continent. Because today Greece and France take a first, bold step towards European strategic autonomy.*

*With President Macron we have the same vision on the development of the necessary defence capabilities and the ability of Europe to respond autonomously to the challenges it faces. Therefore, this agreement lays the foundation for an autonomous and powerful Europe of the future. A Europe that -as President Macron pointed out- will be able to defend its interests in its broader neighbourhood, in the Eastern Mediterranean, the Middle East, the Sahel. A Europe that will have the means, the will and the clout, so that it can guarantee peace and progress at a global level. A Europe that will finally align its geopolitical power with its economic prowess.*

*Within the context of this new strategic partnership between Greece and France, following the acquisition of 24 Rafale fighter jets by the Hellenic Air Force, I announce today that our country will get three new French Belharra frigates for the Hellenic Navy, with the option of getting one more.*

*My will to equip the Greek fleet with modern French frigates obviously stems from a national incentive, as it shields our country. It also stems from a European incentive, as it reinforces our common defence industry; let me remind you that France has these same frigates. But this choice also has a Euroatlantic character. Because it concerns two partners in the European Union and allies within NATO. A Europe that boosts its defence strengthens the transatlantic alliance itself in the end.*

*Dear Emmanuel, the connection between our countries cuts across time and the history of European civilisation as well. Because civilisation - as you nicely said- could not exist without the foundation set by ancient Greek thought. "A secret Greece exists in the hearts of all people in the West," as André Malraux pointed out. But civilisation*

*could not have grown either without the fertile winds of the French Enlightenment.*

*Last night we met in one of the most important museums of the world, the Louvre, at the inauguration of an exhibition which is precisely dedicated to the close, timeless ties between Greece and France. I think it is especially symbolic that we are signing this important agreement 200 years after the start of the Greek war of independence. A struggle that would not have ended favorably had it not been for the support of France.*

*The French philhellenes who sailed to the aid of Greece during the Revolution embarked from Marseille. The same place where the first Ionian sailors had arrived in 600 BC. And our ties keep going from strength to strength.*

*Mr President, we are talking today about frigates. Nonetheless, they are but the descendants of the battleships "Hydra", "Spetses" and "Psara" that Charilaos Trikoupis ordered from the shipyards of Le Havre. As far back in 1884 a French naval mission under the command of Admiral Laurent Joseph Lejeune participated in the reorganisation of the Greek Navy. He hailed from Amiens, Mr President, like yourself. As regards the Rafale jets, they are the successors of "Aetos", "Condoras", "Daedalus" and "Falcon", the four French Henri Farman III planes that formed, in 1912, the first Greek military air squadron. It was an initiative by Eleftherios Venizelos, who picked the names himself.*

*Mr President, History wants us to be together. Just like geography. Like the Mediterranean and Europe, for which we are building a better future. "To build Europe. That is our mission. That is the mission to which we are summoned by the shadow of the Acropolis" as General Charles de Gaulle said in Athens in 1963. That is the mission that we are proudly honoring today in Paris"*

*Greece's Parliament on 7 October ratified the agreement with France, officially approving the establishment of a strategic partnership for cooperation in defence and security between the two countries.*

*Prime Minister Kyriakos Mitsotakis hailed the agreement as the cornerstone of an independent European defence policy. "The defence of European interests in the Mediterranean now acquires new substance," Mitsotakis told parliament.*

*"If attacked, our country will have at its side the most powerful military on the continent, the sole European nuclear power." Article 2 of the Partnership states that the pair will assist each other "with all the means at their disposal, in the event that armed force is needed, if they both ascertain that an attack is taking place against the territory of either."*



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## Third US –Greece Strategic Dialogue

The Governments of the United States and Greece held the third United States – Greece Strategic Dialogue in Washington, DC on October 14, 2021. Greek Minister of Foreign Affairs Nikos Dendias and U.S. Secretary of State Antony J. Blinken launched the Strategic Dialogue, which included high-level interagency representation from both countries.

The Strategic Dialogue underscores the deepening cooperation between the United States and Greece. This year marks Greece's bicentennial as a modern European state, and both the United States and Greece are highlighting an ever-stronger bilateral and transatlantic relationship based on shared values and interests and reaffirming the will to enhance cooperation in the areas described below.

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### Regional Cooperation

The United States and Greece underscored the continued importance of working together to strengthen peace and prosperity across the region. The two governments exchanged views on the Eastern Mediterranean, the Western Balkans, European and transatlantic institutions, and migration. The two countries also discussed wider international issues, including developments in the MENA region, Russia, and China. Greece and the United

States reinforced their commitment to a rules-based system and respect for international law, including international human rights obligations. They lauded the resumption of exploratory talks and stressed the importance of avoiding destabilizing actions. They emphasized the importance of diplomacy, good-neighborly relations and peaceful resolution of differences between countries. Both noted the importance of respecting sovereignty, sovereign rights, international law, including the law of the sea, and existing regional frameworks to prevent future tensions. They also reiterated their dedication to enhancing their close cooperation, using all appropriate means at their disposal to safeguard stability and security in the wider region. The United States applauded Greece's recent efforts to deepen ties with neighbors across the Eastern Mediterranean to enhance stability. The two sides reiterated their desire to bolster cooperation through the 3+1 format (Greece, Cyprus, Israel, plus the United States) on energy issues, economic development, counterterrorism, and the climate crisis and associated humanitarian challenges which recently affected the region. Greece and the United States reaffirmed the importance of the full, consistent and in good faith implementation of the Prespa Agreement. Both

parties resolved to support continued integration, investment, and infrastructure development of Western Balkan partners.

The United States and Greece both continue to strongly support the Euro-Atlantic integration of the Western Balkans, including Kosovo, and stress the importance of urgently commencing accession negotiations between EU and both Albania and North Macedonia according to the set conditionalities. Both

sides highlighted recent successes in national public health policies designed to curb the COVID-19 pandemic and cited the need to dispel disinformation and other malign influences that threatened public safety. Both sides discussed priorities in responding to the humanitarian crisis in Afghanistan. Greece shared the progress made in processing and integrating asylum-seekers and refugees; both countries affirmed the importance of respecting the human rights of asylum seekers, migrants, and refugees.

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## Defense and Security

The United States and Greece welcomed the recent update to the Mutual Defense Cooperation Agreement (MDCA), which greatly contributes to the security of both nations and reflects our long-term, deepening and expanding, strategic defense partnership and cooperation and Greece's geostrategic importance in contributing to the stability of the region. Both sides reiterated their firm determination mutually to safeguard and protect the security, sovereignty, independence and territorial integrity of their respective countries. They both emphasized the continued importance of bilateral exercises and training activities throughout Greece that enhanced their ability to address regional security issues. Both countries expressed interest in enhancing cooperation on security issues in the Western Balkans, Middle East, and North Africa, and the Eastern Mediterranean regions, and in that respect the United States acknowledged the importance of Greece in promoting stability and cooperation in the wider periphery. The two governments expressed the joint desire to assist each other in maintaining strong and capable militaries and increase their modernization and interoperability. The United States highlighted the F-16, S-70B, and P-3B upgrades and Greece's procurement of MH-60R anti-submarine helicopters. The United States welcomes Greece's expression of interest to join the F-35 fighter program. The United States expressed appreciation that Greece continued to exceed the 2014 Wales Summit pledge to spend at least 2 percent of GDP on defense and 20 percent of its defense budget on modernizing major equipment. The United States also thanked Greece for its many contributions to NATO's 20-year mission in Afghanistan.

### Law Enforcement and Counterterrorism

Both sides emphasized their commitment to continuing close cooperation to combat organized

crime, cybercrime, complex financial crimes, the illicit use of cryptocurrencies, malign influence, and terrorism. The two governments restated their shared interest in continuing law enforcement training to facilitate mutual legal assistance requests and extraditions, and enhance operations related to criminal investigations and homeland security reforms. The United States praised Greece for the implementation of its Passenger Name Record legislation and discussed Greek efforts to implement biometric-enabled national identity documents, which would permit a return to full Visa Waiver Program status. Greece underlined its recent efforts to increase border security infrastructure and surveillance, which helped stem the flow of cross-border crime and irregular migration. The United States and Greece underscored the need to increase cooperation with Western Balkan countries on law enforcement and border security programs. Greece announced the implementation of significant amendments to Greek law concerning preventing terrorism and violent extremism.

## Trade and Investment

The United States and Greece welcomed the initial recovery of their economies from the COVID-19 pandemic and looked forward to deepening trade and investment across various sectors. Both governments stressed the importance of bilateral trade and investment consistent with broader multilateral frameworks such as the U.S.-EU trade policy. They lauded the recent inaugural meeting of the U.S.-EU Trade and Technology Council (TTC), with the aim to expand and deepen transatlantic investment and update the rules-based framework for the 21st century economy. In this context, Greece stressed the importance of a transatlantic accord for removal of trade measures against EU on steel & aluminum that directly affect bilateral trade. Greece also stressed the importance of enhancing bilateral cooperation on mutual recognition of control systems for the entry of Greek agri-food products to the United States. Both sides hailed the presence of significant new U.S. investments in Greece's technology and digital sectors following the 2020 signing of our Science and Technology Agreement and Greece's removal from the USTR 301 Watch List. The United States congratulated Greece on its continued development of Thessaloniki as a regional technological and educational hub and expressed support for significant U.S. tech investments to further develop Greece's digital economy. Greece highlighted the main incentives granted for private and strategic investments with a special reference to the Emblematic Investments and the Just Development Transition Plan. Both sides welcomed bilateral cooperation on emerging technologies. Both sides reiterated their support for women's economic empowerment, with the United States highlighting TechCamp Thessaloniki, a U.S.-funded program designed to support women-led startups and create

equal opportunities in the entrepreneurship ecosystem. The United States and Greece noted they look forward to exchanging views on trends and best practices regarding investment screening. The United States highlighted the new Build Back Better World initiative as a possible area of cooperation for investment in low and middle-income economies. The United States also welcomed the investment of Greek companies in the United States. Through an innovative program in cooperation with Enterprise Greece, 43 companies from Greece participated in the annual SelectUSA Investment Summit last June – the largest delegation ever from Greece. The United States welcomed more investment successes from Greece. The United States welcomed the proposal of Greece for the signing of an MOU on Tourism. Both sides reiterated the importance of enhancing bilateral tourism flows. Greece expressed its satisfaction for the maintenance of flights uniting the two countries. Both countries intend to consider the establishment of new all year-round air connections.

Energy and Environment

The United States and Greece recommitted to their shared goals of increasing energy diversification and security, promoting fair and equitable access to greener sources of energy, and addressing climate change through decarbonization policies. The United States lauded Greece for its growing role as a regional energy hub and welcomed completion of the Trans-Adriatic Pipeline and progress on the Interconnector Greece Bulgaria, set to become operational in 2022. Greece shared developments on other regional energy projects that will further diversify regional energy supplies and support the phaseout of coal, such as the planned Greece-North Macedonia Interconnector and the Floating Storage Regasification Unit in Alexandroupoli. Both sides celebrated the increasingly interconnected energy relationship between Greece and the United States, both in terms of bilateral trade and investment and as a positive driver of progress towards energy security and diversification goals. Greece pointed out the importance of natural gas discoveries by Israel, Cyprus and Egypt as a valuable diversified energy source for southern and southeastern Europe.

Greece reiterated its goal to phase out lignite by 2025, and the United States praised Greece's steps forward on its 2019 National Energy and Climate Action Plan. Both sides acknowledged the importance of a diversified strategy to support the energy transition and our broader goal to achieve net zero emissions by 2050. This includes opportunities to expand energy efficiency initiatives and increase the supply of clean energy resources like offshore wind, energy storage, and hydrogen. The United States highlighted increasing U.S. investments in green energy projects in Greece and stressed the need for continued decarbonization and renewable energy development, and Greece shared updates on its planned windfarms and solar energy projects. The United States affirmed support for Greece's National Initiative Addressing

Climate Change Impacts on Cultural and Natural Heritage and welcomed the participation of American companies in Greece's innovative hydrogen power initiatives. Both governments underlined the unique role Greece could play in breaking regional energy monopolies, facilitating energy investment in developing economies, and confronting the global climate crisis head-on.

## Humanitarian Challenges and Disaster Preparedness

The United States and Greece acknowledged the long-term challenges posed by climate change, particularly the recent wildfires across the Mediterranean region, and committed to establishing a new Strategic Dialogue pillar on Humanitarian Challenges and Disaster Preparedness. Greece highlighted its resolve to confront these challenges by showcasing the creation of its new Ministry on Climate and Civil Protection. The United States and Greece

underscored their commitment to develop stronger ties between their respective agencies responsible for disaster prevention-preparedness and resilience building, including wildfire response and recovery. Greece thanked the U.S. for providing a P-8 Poseidon aircraft to assist Greece in fighting historic wildfires and welcomes a U.S. assessment team which is on the ground in Greece to assist in post-fire recovery. Greece expressed interest in capacity building related to fire suppression and organizational disaster management to tackle acute crises. Over the longer-term, Greece emphasized the importance of soil stabilization, erosion control, and reforestation. The United States and Greece discussed the importance of an implementation plan for future training and agreed to begin working level consultations.

## People-to-People Ties

The United States and Greece reaffirmed the meaningful connections that further mutual understanding between the people of both nations, especially in Greece's bicentennial year. Both countries acknowledged the challenges the pandemic posed and remain committed to supporting cultural and educational exchanges, particularly through the Fulbright Program, for which Greece has reinstated its annual contributions, and the recent signing of the Cultural Property Agreement, which stands as an enduring commitment to stem cultural property trafficking and to preserve heritage. Both countries also reiterated a commitment to collaborate on STEM programming, including via Mission Greece's expanded American Spaces program, English language training, and the TechGirls program. The United States reaffirmed support of Greece's efforts to establish new collaborations between U.S. and Greek universities.

The United States and Greece look forward to exploring opportunities to enhance vocational education and training in Greece as well as programs such as the Future Leaders Exchange (FLEX) that develop cross cultural and leadership skills while strengthening the transatlantic relationship. The two countries also reiterated a commitment to work together on capacity building and further collaboration in the creative industries, and in particular in the film and audio-visual sector, and to continue to explore public-private partnerships in culture and technology. Both countries expressed continued support for Holocaust Education and the United States praised Greece's first presidency of the International Holocaust Remembrance Alliance, dedicated to preserving the memory of historical events which are significant to both countries.

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## MINISTRY OF DEFENCE

### ➔ **Minister of National Defence Nikolaos Panagiotopoulos signs Military Cooperation Memorandum with the Austrian Minister of Defence Klaudia Tanner during official visit to Austria**



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The Minister of National Defence Mr. Nikolaos Panagiotopoulos, signed today, Thursday 23 September 2021, with his Austrian counterpart Ms Klaudia Tanner, a Memorandum of Understanding regarding the cooperation between Greece and Austria in military issues, both at a staff and operational level.

In the context of the official visit of the Minister of National Defence to Vienna, he was received by his Austrian counterpart and discussed issues of mutual interest, regarding the bilateral defence cooperation, the situation in the Eastern Mediterranean, the European perspective of the Western Balkans and the risks arising from the situation in Afghanistan.

Following the conclusion of discussions and the signing of the Memorandum of Understanding, Mr. Panagiotopoulos made the following address:

“Madam Minister, It is a great pleasure and honour to visit Vienna today and to meet you here, at the Ministry of National Defence. Allow me to say a few words in the German language since we are here: Greece and Austria have a strong and long-lasting friendship and they closely cooperate, as partners

in the European Union. We share a common vision, common values, and perspective, regarding the stability and the welfare of the wider region.

Returning to the Greek language, first allow me to thank you from the bottom of my heart for Austria’s essential and valuable assistance to my country, with regard to the devastating wild fires last summer. In Greece, we say that “real friendship shows in hard times” and what I want to say is that, as during the hardships in the summer of 2020 Austria stood by us, the same has happened this summer.

Today, we have had a very productive meeting to strengthen our defence cooperation. The Memorandum of Understanding, which we have just signed, serves exactly this purpose, specifying the cooperation fields and activities between our Ministries and the Armed Forces.

As partners in the European Union, I believe that we must extend our cooperation, in the context of the European Defence Initiatives, regarding programs of mutual interest.

With Madam Minister, we discussed the Security situation with our adjacent neighbours, the Eastern Mediterranean, a region of great strategic importance, with increasing opportunities and perspectives for stability, growth and welfare, but also challenges and threats for the states of the region and their allies, that we must face effectively.

Greece, which has always been a defender of peace and stability in the Eastern Mediterranean, has now undertaken initiatives for the stability and security in the Eastern Mediterranean. We have established strong alliances with the countries of the wider region, which share the same vision and the same values, based on International Law and the good neighbourly relations principle.

We also discussed about the Western Balkans, because we place great emphasis on their stability and welfare. Greece is a devoted supporter of the European perspective of the Western Balkans as a strategic goal.

In addition, as we are going through a period of serious challenges in Afghanistan, there is a risk of unusual migratory flows towards Europe. We believe that an effective cooperation is required, within EU as well, in order to support the countries which are directly adjacent to Afghanistan, and to avoid a migratory crisis in our borders.”



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**➔ Minister of National Defence Nikolaos Panagiotopoulos at the NATO Military Committee Conference at Chiefs of Defence level, held in Athens**

On Saturday 18 September 2021, the Minister of National Defence Mr. Nikolaos Panagiotopoulos declared the opening of the works of the NATO

Chiefs of Defence Conference, held in Athens, on the occasion of the 200 years since the outbreak of the Greek Revolution.

The Prime Minister Mr. Kyriakos Mitsotakis delivered a recorded address to the NATO Chiefs of Defence, while the Chair of the Military Committee Admiral Robert Bauer and HNDGS Chief General Konstantinos Floros both delivered introductory addresses.

In his address the Minister of National Defence highlighted the following:

"Allow me, first, to wish you successful and productive deliberations of the 2021 Military Committee's Conference.

Yesterday, I shared with you some thoughts about our Alliance and its key role in promoting democratic values and facing together constantly evolving threats in an unstable and turbulent international environment. Today, I would like to put forward some ideas concerning the present and, most importantly, the future of our Alliance.

First, following the recent developments in Afghanistan, I should underline the importance we attach to the efforts of the international community, which must work closely together to avoid a resurgence of terrorism in Afghanistan and beyond. We need to ensure the safety and security of vulnerable Afghans and the prevention of a humanitarian crisis.

It is our moral duty to help the Afghan people, and provide as much support as possible, especially to



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those who are at immediate risk. And those are women, girls and children, who make up the vast majority of internally displaced people.

We are going through a period of significant challenges in Afghanistan, including a risk of migration flows to Europe. We need to effectively cooperate in order to provide support to those countries in the immediate neighbourhood and to avoid a migration crisis in our borders.

What happened in Afghanistan should clearly help us draw useful lessons for the future and strengthen our joint sense of purpose in defending our common values and ideals, keep NATO capable of dealing with any potential threats, emanating from any direction. That is why a clear roadmap to the future of the Alliance has been defined with “NATO 2030” Process.

Enhancing our Resilience is a basic dimension of this Process, an important aspect in the effort of building up improved Defence capabilities for the future. Although, Resilience is a national responsibility, it certainly reflects on the survivability and the overall warfighting capability of NATO as a collective entity. Hence, it is considered that common standards concerning Resilience should be adopted, the same objectives should be aimed for and pursued. There is evidently an added value in our Alliance becoming a platform of Allies sharing best practices on designing their own tailor-made national plans and procedures.

Another essential factor of vital importance to the future of the Alliance is of course technology. In the past, our technological advantage has largely determined to our benefit the outcome of conflicts, in which we were engaged. This particular advantage must surely be preserved. Moreover, I strongly believe that our assets should consist of interoperable, technological platforms, permitting their integration into a common Command and

Control (C2) structure. In relation to systems procurement, multinational initiatives are considered to represent a “smart” approach, splitting the Research & Development cost. Synergies in maintenance are also most valuable, maximizing the usage of critical material and facilitating the sharing of technological know-how.

In our effort to forge the future for our Alliance, military training is considered to be of outmost importance. Common training actions bring together personnel from different member states, thus enabling better communication, whilst also building up a well desired mutual understanding. This approach can certainly help bridge any existing gap in perceptions, allowing for effective interoperability. Furthermore, joint exercises constitute an opportunity, as well as the motive for the development of new tactics, techniques and procedures. And of course, it is essential that any training activities cover the whole spectrum of forces, capabilities and entities, from the strategic level down to the tactical one.

On climate change, I think we all agree that it is the defining challenge of our time. It affects our daily lives, our future, but also our security. We support the idea that NATO should become the leading international organization in analyzing how it affects security and intensify our initiatives and work with a view to understanding and adapting to its impact. Talking about the future of NATO, we should not forget the importance of our Partners’ substantial contribution to our missions and operations. Over time, they have shared our values and interests to safeguard the rule-based international order and suffered losses along our forces. Overall, it is considered of absolute necessity for NATO to enhance its cooperation with any friendly international players. In doing so it would actually increase its own capacity.

I firmly believe that, amongst our Partners, a predominant position belongs to the EU. EU is by no means a competitor of NATO, on the contrary it is an indispensable Partner, adding up to the Alliance’s broader Defence and Security Capability, reinforcing NATO. Therefore, we support a strong, closer, synergetic mutually beneficial relation between NATO and the Union, in accordance with the two Joint Declarations, which constitute the framework of our cooperation, and the principles of inclusiveness, reciprocity and the respect of decision-making autonomy of both organizations.

Let me conclude with one last thought: it is my strong belief that today, as ever, our most important asset, the one that will lead us to prevalence over any potential adversary, if need arises, is not other than the women and men in service, the people you command, the people you lead. They constitute the

formidable human capital of our Nations and our great Alliance. I therefore urge you to make the best for them, and thus, the best of them.

Greece is stable, credible and reliable Ally in the region. We always support the cohesion and the unity of the Alliance, and the stability and security in the Eastern Mediterranean, the Balkans and beyond, ready to assume our regional role. We built strong alliances with countries of the broader region, which share the same vision and values, based on the rules of International Law and the principle of good neighborly relations.

As Prime Minister Kyriakos Mitsotakis said, last June, on the occasion of NATO's Summit in Brussels, "Greece is a pillar of stability in the Eastern Mediterranean. It is a country that, even during the difficult times of the economic crisis, steadily spent over 2% of its GDP on defence expenditures. Today, Greece invests increased resources in its military capabilities, so that it can be even more reliable in its obligations vis-a-vis the alliance".

I wish you every success in this important Conference, which, I am convinced, will provide important conclusions and inspiring perspectives for the future of the Alliance. Thank you."

## ➔ Military-Technical Cooperation



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On 22 September 2021 was held in Athens the 16th Meeting of the Hellenic-Russian Committee for Military-Technical Cooperation. The Hellenic side was represented by a GDDIA and General Staff delegation, headed by Vice Admiral (Rtd) Aristeidis Alexopoulos, GDDIA General Director, while the Russian side represented by a delegation from the Federal Service for Military-Technical Cooperation (FSMTC) of Russia, headed by Mr. Dmitry E. Shugaev. During the meeting, which took place within the frame of promoting and strengthening the cooperation between the two countries in the

Military-Technical field, issues of common interest were discussed.

## ➔ Meeting with the Defence Attaché of Egypt

On 16 September 2021, a meeting was held at GDDIA premises between the General Director of GDDIA, Vice Admiral (Rtd) Aristeidia Alexopoulos HN and the Egyptian Defence Attaché Staff Colonel Mohamad Sayed Marei accompanied by the upcoming Attaché Colonel Ayman Alian Mahmoud Alian after their request. During the meeting issues of common interest were discussed.

## ➔ Meeting with the Defence Attaché of Zambia

On 13 September 2021, a meeting was held at GDDIA premises between the General Director of GDDIA, Vice Admiral (Rtd) Aristeidi Alexopoulo HN, and the Defence Attaché of Zambia Brigadier General Newton Chibuye Chitambo after his request. During the meeting issues of common interest were discussed.

## ➔ Hercules 21



©<https://www.mod.gov.eg>

The training witnessed the implementation of many activities and events, which included holding a number of theoretical and practical lectures in the field of combating terrorist, training in managing joint combat operations among the participating elements, training of fighting in built and open spaces, hostage rescue and medical evacuation, as well as carrying out airborne and naval landing operations by the special forces of both commandos and airborne elements, in addition to executing raid attacks.

The training (Hercules 21) comes within the framework of the joint training plan implemented by the Egyptian Armed Forces with brotherly and friendly countries aiming the exchange of experiences and refining the skills of the participating elements from the Special Forces, which contributes to achieving the highest rates of efficiency and combat readiness. Leaders of the Armed Forces of the countries participating in the training attended the training activities.

## HELLENIC ARMED FORCES ARMAMENT PROGRAMS

### ➔ Defence Minister the Special Standing Committee of the Hellenic Parliament on Armament Programs and Contracts

On 7 October 2021, the Minister of National Defence Mr. Nikolaos Panagiotopoulos addressed the members of the Special Standing Committee on Armament Programmes and Contracts of the Hellenic Parliament, in a briefing about the activation of programmes which was held in the Senate Hall.

The briefing was also attended by the Deputy Minister of National Defence Mr. Nikolaos Chardalias, the Chief of HAFGS Lieutenant General Georgios Blioumis, the Chief of HAGS Lieutenant General Charalambos Lalousis, the Chief of HNGS Vice Admiral Stylianos Petrakis, the Deputy Chief of HNDGS Vice Admiral Ioannis Drymousis and the General Director of Defence Armaments and Investments Vice Admiral (ret.) Aristeidis Alexopoulos.

Following a 0 briefing by the Political and Military Leadership of the Armed Forces, the members of the Special Standing Committee approved the following actions:

#### Programs under the responsibility of the HAGS

- Construction of a wind tunnel to be used as a free fall simulator.
- Upgrade of electro-optic systems for 1906 AH-64A+ helicopters of the Army Aviation.
- Procurement of an Anti-tank Missile System.
- Procurement of Missile System for the AH-64 (A/D) helicopters.

#### Programs under the responsibility of the HNGS

- Procurement of Guided Missiles for the armament of four Gunboats and four Unconventional Warfare Vessels of the Hellenic Navy.

#### Programs under the responsibility of the HAFGS

- T-6A Training Aircraft Support.
- Procurement of cartridges for F-16 and F-4 fighter aircraft of the Hellenic Air Force.
- Update of the Decision for the Activation of the Sub-Contract for the Operational Leasing of MALE category UAV System.0%0
- Support of the Hellenic Air Force IRIS-T Missiles.

In addition, the members of the Special Standing Committee approved the the contract awarded regarding the general inspection – repair of /the MEKO class frigates main engines.

## HELLENIC ARMY

### ➔ OH-58D KIOWA WARRIOR

On 9 January 2018, Greek MOD signed a contract with the US Department of Defence regarding the procurement 70 OH-58D KIOWA WARRIOR utility helicopters to be used by the Hellenic Army Aviation, worth \$ 46,7 million. For better supporting and maintaining the OH-58D KIOWA WARRIOR military helicopters, the Hellenic Army General staff has currently under consideration the announcement of a Follow-on Support program worth €34 million.

## HELLENIC NAVY

### ➔ Greece signs a Memorandum of Understanding with Naval Group and MBDA opening negotiations for the supply of three FDI HNs and one optional

On September 28th, Nikólaos Panayotópoulos, the Greek Minister of Defence, Pierre Eric Pommellet, 9CEO of Naval Group, and Eric Béranger, CEO of MBDA, signed a Memorandum of Understanding to open negotiations to provide the Hellenic Navy (HN) with three Defence and Intervention frigates (FDI HN) and their equipment as well as an optional additional frigate.



The FDI HN frigates will be built in the Naval Group shipyard in Lorient, where the second in the series for the French Navy has just entered production.

The FDI HN will be an asset of power and sovereignty for Greece. With the FDI HN, the Hellenic Navy will have a state-of-the-art, high-performance surface fleet.

As a first-rank frigate, the FDI HN is a compendium of the best technologies of Naval Group, Thales and MBDA, which will notably supply the ASTER 30 B1 and Exocet MM40 Block 3C missiles. It will be fully interoperable with European and NATO fleets. The FDI will have a length of 122 m, a beam of 17.7 m, and a displacement of 4,460 tons. The ship will have a crew of 110 people as well as an aircrew detachment of approximately 15 people. She will also have a flight deck and one hangar to accommodate one unmanned VTOL (Vertical Take-Off and Landing) aircraft or one NH-90 naval helicopter. The frigate will be powered by a combined diesel and diesel (CODAD) propulsion system. She will have the capability to reach a top speed of 27 knots (50.0 km/h) with a maximum cruising range of 5,000 nmi (9,300 km) at 15 knots (27.8 km/h).

Greece will become the second customer of this multi-mission frigate, bringing the number of units

produced from five for the French Navy to eight in total, plus one as an option. ©

MBDA is the only European defence group capable of designing and producing missiles and missile systems that correspond to the full range of current and future operational needs of the three-armed forces (land, sea and air).



With a significant presence in five European countries and within the USA, in 2020 MBDA achieved revenue of 3.6 billion euros with an order book of 16.6 billion euros. In total, the group offers a range of 45 missile systems and countermeasures products already in operational service and more than 15 others currently in development. MBDA is jointly owned by Airbus (37.5%), BAE Systems (37.5%), and Leonardo (25%).

## ➔ Lockheed Wins \$21M to Modify Standard MH-60R to Greek Configuration

Lockheed Martin has won a \$21 million contract to customize four MH-60R helicopters ordered by the Hellenic Navy from standard export configuration. Work is expected to be completed in September 2027.

The Greek Ministry of Defense had signed a Letter of Acceptance (LoA) for 4 MH-60R helicopters with the US government under the foreign military sales (FMS) program in July 2020. Greece is to receive four of the seven MH-60R Seahawk helicopters it has been approved to buy, with a USD193.98 million contract announced on 26 October 2020.

The new MH-60R helicopters will replace the Agusta Bell 212 in anti-submarine warfare (ASW) missions. Combined with 11 modernized Sikorsky S-70B6 they will be the "long" arm of the Hellenic Navy for missions against submarines and ships in the Aegean and Eastern Mediterranean.

The MH-60R Multi-Mission Helicopters will be equipped with APS-I 53(V) Multi-Mode Radars, T700 GE-401 C Engines, Airborne Low Frequency System (ALFS), AN/ AAS-44C(V) Multi-Spectral Targeting Systems, Embedded Global Positioning System/Inertial Navigation Systems with Selective Availability/Anti-Spoofing Module (SAASM),

AN/SSQ-36/53/62 Sonobuoys, AGM-114 M36-E9 Captive Air Training Missiles (CATM), AGM-114Q Hellfire Training Missiles, Advanced Precision Kill Weapons System (APKWS) Rockets, MK 54 Torpedoes, M-2400 Crew Served Guns; and GAU-21 Crew Served Guns. Also included AN/ARC-210 APX-1990A(C) Radios, AN/AVS-9 Night Vision Devices, AN/APX-123 Identification Friend or Foe (IFF) transponders, spare engine containers; facilities study, design, and construction; spare and repair parts; support and test equipment; communication equipment; ferry support; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support. S-70 helicopters

The Israeli company BET SHEMESH ENGINES LTD (BSEL) has been awarded with a contract for the maintenance, repair and the overhaul for the T700-401C engines of the Hellenic Navy's S-70 helicopters.

## HELLENIC AIR FORCE

### International Flight Training Center of the Hellenic Air Force

On the 13-14 September 2021, was contacted a Program Manager Review meeting (PMR-1) at the Hellenic Air Force 120 Wing premises between GDDIA and HAIFGS officers and representatives International Defense Cooperation Directorate of the Israel Ministry of Defense and the Israeli company ELBIT.

The aim of the meeting was to access the work progress of the establishment of International Flight Training Center of the Hellenic Air Force in Kalamata.

On April 18, 2021, Elbit Systems Ltd. announced, further to the Company's announcement of January 5, 2021, that it was awarded a contract valued at approximately \$1.65 billion (approximately €1.375 billion) for the establishment and operation of the International Flight Training Center of the Hellenic Air Force, as part of an agreement between the Israeli Ministry of Defense and the Hellenic Ministry of National Defense.

The contract will be performed over a period of approximately 20 years and will include price indexation. Under the contract, Elbit Systems will supply new M-346 training aircraft and will maintain the entire training fleet, comprised of dozens of M-346 and T-6 training aircraft for a period of approximately 20 years. In addition, the Company

will provide its latest advanced Embedded Virtual Avionics (EVA) onboard the training aircraft, deliver networked flight simulators and an array of Ground-Based Training Stations (GBTS) as well as a command-and-control system to enable efficient management of the flight training operation.

## HOMELAND SECURITY

### Elbit Systems Completes Acceptance Tests for Hellenic Coast Guard Combat Suites

Elbit Systems Ltd. has successfully completed the acceptance tests for new patrol vessels of the Hellenic Coast Guard (HCG). In March 2019, the Company reported that it was awarded a contract from Cantiere Navale Vittoria SpA to supply combat suites and perform systems' integration for the new patrol vessels of the HCG.



© Elbit Systems Two Hellenic Coast Guard new patrol vessels equipped with Elbit Systems combat suites.

The acceptance tests were conducted in the Aegean maritime arena and included integration level tests of the combat systems and subsystems onboard the vessels as well as live firing tests from the onboard Remote Controlled Weapon Stations.

The systems supplied and integrated by Elbit Systems include the SPECTRO XR Electro Optical payloads, Radars, Navigation Systems, Warship Automatic Identification System (W-AIS) as well as Remote Control Weapon Stations (RCWS) with full integration into a Command-and-Control software. The combat suit is designed to support future "plug and play" integration of aerial and surface unmanned systems that will enable expansion of

the operational envelop of the patrol vessels far beyond line of sight.

Its broad portfolio of maritime capabilities ranging from EW, sonars, EO and CMS, to autonomous platforms and weapon systems enables Elbit Systems to provide navies with enhanced situational awareness and deterrence capabilities, as well as integrated combat suites for new and in service ships.

## HELLENIC DEFENCE INDUSTRY

### ➔ Naval Group selects STELMA for complex support activities on a French nuclear submarine

The industrial relationship between Naval Group and the Hellenic industry has reached a new milestone with the attribution to the Greek company STELMA of a major contract worth more than half a million Euros to ensure the protection against corrosion through the painting of the hull of one of the French Navy nuclear submarines.

This new success for STELMA demonstrates once again the willingness of Naval Group to integrate the Greek industry into the French naval programs.

Naval Group and STELMA started discussing after the company has been identified and contacted by the task force deployed in Greece by Naval Group earlier this year.

It is part of the Group's larger effort to identify and develop partnerships with Hellenic partners and is upstream of the implementation of the Hellenic Industry participation plan developed by Naval Group as part of its bid for the new Frigates program for the Hellenic Navy.

STELMA is a Hellenic company specialized in protective works on industrial, marine and other metallic surfaces. Its main activities include mechanical erection-construction and relevant civil works activities, sandblasting, painting and insulation works.

The intervention of STELMA on a key asset of the French nuclear deterrence demonstrates the close ties between Greece and France and will be carried out on a very sensitive site and will be subject to strict safety regulations.

Naval Group has been present in Greece since 2008. Naval Group's objective is to further develop its local footprint through partnerships with industry, research and academic partner. The Group has deployed a task force whose mission is to meet with

all potential partners and identify future collaborations.

Beyond the frigates program, Naval Group seeks to support the development of the future Hellenic naval warfare capabilities through R&D projects with Hellenic companies, universities and research institutes in cutting edge technologies such as additive manufacturing, predictive maintenance, drones or naval mission systems.

## ACTIVITIES OF FOREIGN INDUSTRIES RELATED TO THE HELLENIC ARMED FORCES ARMAMENTS PROGRAMS

### ➔ IAI



© IAI

On 24 September 2021, a meeting was conducted at the Hellenic Navy General Staff premises between HNGS officers and representatives of the Israeli company IAI and the Greek company ALTUS LSA. The aim of the meeting was to present company's surface to air missile BARAK MX.

Based on the Air & Missile Defense Division acclaimed and field proven BARAK family, the BARAK MX Naval is an advanced Air & Missile Defense System that provides a single integrated solution for multiple simultaneous aerial threats from different sources and different ranges.

The BARAK Weapon Control System (WCS), which creates and manages a unified multi-sensor aerial picture, coordinates the force operation networks and manages the launch arrays. Integrate into any existing Naval CMS system for air picture and engagement coordination

The BARAK Interceptors, all with vertical launch capabilities supporting 360° coverage, quick reactions, short minimal ranges and an active

high-end RF seeker for targets with low radar cross sections and low altitude:

- BARAK MRAD, with a single pulse rocket motor for a range of 35 km
- BARAK LRAD, with a dual pulse rocket motor for a range of 70 km
- BARAK ER, with a dual pulse rocket motor and an additional booster for a range of 150 km and enhanced TBM capabilities

Compatible and easily integrated with a variety of ELM or other Naval Radars

BARAK MX's innovative, software-based modular approach offers you exceptional flexibility in operation and power build-up and ensures simple adaptation to future threats, making it one of the most powerful, all-weather, day & night solutions for today's most challenging of threats.

#### Technical Details

Range: 35km / 70km / 150km

Altitude: 20km / 30km

Maneuverability: 50g

Missiles per Launcher:8

Vertical Launch

Data Link between BMC and Missiles

All-weather

#### Capabilities

Sea-Skimming and Cruise Missiles

- Fighters
- TBMs
- UAVs
- Helicopters
- Gliding Bombs

Any mission:

- Point defense
- Area defense

Any battle condition:

- Naval
- Joint Taskforce Coordination (JTC)

#### ➔ **BOEING**

On 20 September 2021, a meeting was conducted through videoconferencing between HAIFGS officers and representatives of the US company BOING. The aim of the meeting was to present company's 767 Tanker Transport (767TT)

#### ➔ **ILIAS SOLUTIONS**

On 20 September 2021, a meeting was conducted through videoconferencing between HAIFGS officers and representatives of the Belgian company ILIAS SOLUTIONS. The aim of the meeting was to present company's products and services.

#### ➔ **SAAB & DIEHL GmbH**

On 17 September 2021, a meeting was conducted at the Hellenic Navy General Staff premises between HNGS officers and representatives of the Swedish company SAAB and the German company DIEHL GmbH. The aim of the meeting was to present the technical specs and the operational capabilities the RBS-15 guided missile.

#### ➔ **EODH**

On 7 September 2021, field demo was conducted of the Hoplite armored vehicle produced by the Greek company EODH, at the Hellenic Army military camp premises in presence of Hellenic Army General Staff, Hellenic Air Force, Hellenic Police and Hellenic Brigade staff officers. The vehicle is based on a heavy-duty, mine resistance, optimized for maximum interior space and flexibility in shipping. The vehicle offers various configuration options and can be equipped with a remote-control weapon station.

**NATO**

#### ➔ **Thirty Allied Chiefs of Defence discuss the changing character of warfare**



© NATO

NATO's thirty Chiefs of Defence gathered in Athens, Greece for the fall session of the Military Committee Conference 2021. The agenda for the Conference was challenging but necessary so that the Military Committee, in its highest format, could provide guidance to the Strategic Commanders and advice to the NATO Secretary General and the North Atlantic Council.

Discussions focused on NATO-led operations, missions and activities and the threats and challenges facing NATO. The Chiefs of Defence exchanged views on the military input to the Alliance's lessons learnt process that will evaluate the Alliance's engagement in Afghanistan. The Military Committee received briefings from NATO's Strategic Commanders, General Tod Wolters, Supreme Allied Headquarters Commander Europe (SACEUR) and General André Lanata, Supreme Allied Commander Transformation (SACT) on the concept of Deterrence and Defence of the Euro-Atlantic area and NATO's Warfighting Capstone Concept.

The Chief of Defence discussed enduring threats and peacetime challenges. They stressed how the geopolitical environment was changing and the line between peace and crisis was increasingly blurred. The Military Committee then deliberated the changing character of warfare and how the Alliance needs to maintain pace with the speed of technological change.

The NATO 2030 agenda was the focus of the next session as the Chiefs of Defence discussed its implications and opportunities for the NATO Military Authorities. Discussions then turned to how the Chiefs of Defence would provide their military advice into the next NATO Strategic Concept.

The final meeting of the day saw the Chiefs of Defence nominate Lieutenant General Janusz Adamczak as the next Director General of the International Military Staff. Lieutenant General Janusz Adamczak from Poland will take office in the summer of 2022.



© EDA

marks a major milestone for the project in demonstrating enhanced situational awareness in a maritime environment through the integration of new technologies for unmanned systems.

The Second Baltic Sea Demonstration tested how the information collected from the assets deployed in the area of operations can be integrated to create a Recognised Maritime Picture (RMP). The execution of two scenarios was based on the utilisation of the twelve different unmanned systems that proved their capacity of patrolling, detection, identification, and classification of threats thanks to the information acquired by different types of sensors. Some unmanned systems were deployed for patrolling and threat detection, while others tracked the threat up to interception and dissuasion.

OCEAN2020 aims to achieve operational and technical objectives, ranging from enhanced situational awareness, autonomy, cost effectiveness and increased interoperability for joint missions. The variety of assets involved in OCEAN2020 highlights how collaborative autonomy between multi-domain unmanned vehicles can provide a force multiplier.

Coordinated by Saab, the sea demonstration ran two scenarios: a high-speed surface threat and an unknown submerged activity scenario. While the first scenario combined surveillance, interdiction, and engagement of multiple high speed unmanned surface threats with all types of UxV's, with Persistent Wide Area Surveillance and Maritime Interdiction actions including radar detection and EO/IR video, the focus of the second scenario was to detect and identify underwater threats (e.g., sea mines or IED), laid from hostile submarines and to detect the insertion of hostile Special Forces on a friendly coast.

Building on the experience and lessons of the first sea demonstration in the Gulf of Taranto (Italy 2019), the second sea demonstration focused on

## ESDP

### ➔ Successful second sea demonstration for OCEAN2020 in the Baltic Sea

OCEAN2020, the largest EU funded defence research project, has concluded two successful days of testing in the Hanö Bay, Sweden. The sea trial brought together 12 unmanned systems, 4 naval vessels, 5 tactical command and control systems, one earth observation satellite system plus a prototype of an EU Maritime Operations Centre, installed at the EDA. The live demonstration

the verification of objectives, such as the launch and recovery of Unmanned Systems (UUV) from a vessel, integration between tactical systems and naval Combat Management Systems, coordination between unmanned assets operating in squad with the use of AI and demonstration of how data fusion can improve the tactical picture at the tactical and operational level.

## CYPRUS

### ➔ Regional Strategic Leadership Programme

Cypriot Minister of Defence Charalambos Petrides in the occasion of the opening ceremony for the Regional Strategic Leadership Programme made the following speech,

“It is a great pleasure to be here today for the opening ceremony of the 4th Regional Strategic Leadership Programme. At the outset, I would like to thank the Defence Academy of the United Kingdom and Cranfield University for delivering the Programme as well as the British High Commission and its Defence Attaché for the hard work in organizing this event.

This Course constitutes just one of the various activities which are included into the Bilateral Defence Cooperation Programme between the Republic of Cyprus and the United Kingdom. Undoubtedly, our two countries have achieved significant progress the last years, in enhancing our bilateral cooperation in the fields of defence and security.

Our region has been at the heart of significant conflicts and geostrategic developments due to its central strategic location at the crossroads of three continents and of major civilizations and religions. The current instability in Syria, Libya and recent events in Afghanistan, the political and economic situation in Lebanon, the refugee crisis, terrorism and the volatile situation in the Middle East, remain major security challenges. The discovery of vast quantities of natural gas and oil in the Eastern Mediterranean, added to the geopolitical and geo-economic importance of the region. The illegal and provocative seismic surveys and drilling activities by Turkey in the Exclusive Economic Zone of the Republic of Cyprus, Turkey’s illegal activities in the Continental Shelf of Greece, which are violating their sovereign rights, do not comply with the



© Cypriot MOD

international and European law but also the Law of the Sea and constitute an immediate risk to the stability of the entire region with unknown consequences. Furthermore, the decision of the occupier Turkey, to proceed with the creation of new fait accompli, announcing on the 23rd of July further illegal actions regarding the reopening of part of the fenced area of Varosha, constitutes a flagrant violation of the international law and UN Security Council resolutions and contravenes the latest European Council conclusions. At the same framework and further to the reopening of Varosha area, just a couple of days ago, the occupying regime gave for use to the Turkish army, an area of 145 thousand square meters located in Karpasia peninsula, within the boundaries of the community of Rizokarpaso. These illegal actions do not coincide with the UN Secretary – Generals’ efforts for the resumption of negotiations to reach a comprehensive settlement.

As can be understood from the aforementioned description, the Eastern Mediterranean is of cardinal importance for regional security with wider significance for the global security system. The situation demands concerted action. Cyprus has maintained long - standing historical ties of friendship, cooperation, and mutual understanding with all neighbouring countries, with the exception of Turkey for well – known reasons. We have promoted bilateral, trilateral and quadrilateral cooperation mechanisms with key players in the region, partners within EU and with other friendly countries respectively. The common denominator for the countries that participate in these cooperation mechanisms is the understanding that these arrangements serve as a model of regional dialogue, contributing to the consolidation of peace, stability and prosperity but also as a tool for achieving greater understanding and cooperation. The Eastern Mediterranean region can be

transformed into a zone of stability, growth and prosperity, if all parties acknowledge that our common interest is to work together, in order to create conditions fostering maritime and energy security. In this framework, we consider the United Kingdom a key partner in this effort to address common threats and security, and we believe that has an important role to undertake, as a country with a longstanding tradition and influence on the international scene, but also as a permanent member of the United Nations Security Council.

It is very important that the participants in this Course are not only from our National Guard, but there is broader representation from the security sector and also regional partners. I see a wide array of participants including, inter alia, from other Ministries, the Police force, Cyprus Customs, the Cyprus Academy of Public Administration, members of the academia, from Greece, Egypt, Israel, Jordan and the United Kingdom. As I mentioned before, the situation demands concerted action. In this complex and multi-agency environment, the way to work together should be found, at the strategic level. Inevitably when circumstances require it, the leaders from different sectors should take logical and immediate decisions, taking into consideration many factors and actors. And leading at the strategic level requires different leadership styles, approaches and ways. It requires inspired and decisive leadership.

I am convinced that, the aim of the course which is to “enhance strategic leadership and management at the strategic level across defence and the wider security sector”, will certainly be achieved. I wish you all, every success in your future endeavours.”

## TURKEY

### ➔ Anadolu Shipyard Launches New LCT For Qatari Navy

On September 25, a ceremony in Istanbul marked the official launch of the Landing Craft Tank (LCT) FUWAIRIT (QL-80) for the Qatari Emiri Navy by Turkey's Anadolu (ADIK) Shipyard. The FUWAIRIT is the first LCT built by a private Turkish shipyard that has been exported.

Cevat Rifat Atilhan, CEO of Anadolu Shipyard, said: “The contract for this ship was signed in September of last year. The 12-month period has ended, and we are proceeding with the launch as planned today. We intend to complete all tests and training sessions over the next 24 months and deliver them

to Qatar.” Anadolu Shipyards has previously built and delivered eight of these types of vessels for the Turkish Naval Forces with local industry participation of more than 70%.

### ➔ Bayraktar TB2

The Turkish Bayraktar TB2 is becoming a successful player on the unmanned combat aerial vehicles' market, increasing significantly Turkey's defence industry's export capabilities.

According to the Turkish newspaper Daily Sabah Kyrgyzstan is becoming the latest buyer of renowned Turkish combat drones in an effort to develop its defense industry capabilities, a senior official announced on 21 October 2021.

The Bayraktar TB2 entered the Turkish army's inventory in 2014. Armenia, Qatar, Ukraine, Poland and Azerbaijan have already ordered the UCAVs, Angola had recently requested to acquire drones, while negotiating deals with Morocco and Ethiopia is ongoing.

The United Kingdom may consider the purchase of Turkish drones, Turkey's minister of industry and technology recently revealed according to the Middle East Monitor (MEMO). Speaking to CNN Turk, Mustafa Varank said that "the UK is very interested in Turkish armed drones. Now, they have to decide. We presented them with the options. Right now, they're seriously considering these options."

## EGYPT

### ➔ Egyptian President inspects some armored vehicles developed by Armed Forces



© Presidency

On 18 October 2021, President Abdel Fattah El Sisi inspected a number of armored vehicles that have been

developed by the Armed Forces. The president was accompanied by director of the Armed Forces vehicles department Kamel Wafa'ee, and assistant director of the vehicles department for armament Mohamed Abdel Fattah, Presidential Spokesman Bassam Radi said.

President Sisi inspected different models of armored vehicles that have been developed at factories of the Armed Forces in accordance with the state-of-the-art design and manufacturing systems. Capabilities of those vehicles have been maximized in terms of versatility, whether for the Armed Forces or the police, as well as their ability to maneuver, the spokesman said.

Sisi was briefed in detail about stages of design and manufacturing, which showed how much this industry is developing in line with the latest methodology used worldwide. This comes in preparation for putting those vehicles on display at the second edition of Egypt's Defense Expo (EDEX 2021), added the spokesman. The president was also informed about the measures taken and the time plan set for introducing the electric car industry into Egypt; with a view to keeping pace with the global development in this field.

## BULGARIA

### ➔ Opticoelectron Group" JSC

Opticoelectron Group"JSC once again have participated successfully in the International Exhibition of Defence and Security DSEI, which was held from 15 to 18 September in London, UK.

DSEI combines an international exhibition and conference, addressing the issues of defense and security. Exhibitors presented their systems for defence and security equipment for Air, Sea and Land Forces. Discussed topics during the conference are related to the border control and surveillance, counterterrorism, human trafficking and organized crime. The main task of the event was to promote the relationship between manufacturers and potential customers.

Visitors to the stand of "Opticoelectron Group" had the opportunity to experience the latest advanced and innovative developments in the product range of the company, like the system LARTOS, which can be used for target acquisition and observation for field artillery. It is a great instrument for target determination by forward observer, with a digital and mechanical magnetic compass, rangefinder and thermal camera. This version LARTOS is designed to determine spherical and rectangular co-ordinates of the target. The software automatically assists the operator in some tactical tasks necessary for forward observer and field



© Opticoelectron Group" JSC

artillery fire control. LARTOS system includes: – Laser Range Finder; – Calculation Computer; – Digital Goniometer; – Thermal imaging camera; – GPS; – Tripod; – Case.

Multicopter Drones for search and rescue "SENSOR OE-1" ("SEarch aNd reScue multirOtor dRone"), which were also presented for the first time at the exhibition as a part of the product portfolio of the company, have sparked huge public interest with their shape and main advantages. They are equipped with top class sensors and thermal imaging technologies such as: radio for bidirectional transmission of commands, telemetry and video signal between aircraft and mobile ground station; specialized recognition software for finding survivors in fires when shooting with a thermal imager; mapping software for industrial, agricultural and other areas; Autopilot software to implement the missions without the need for operator intervention; Software for Perimeter surveillance (according to previously specified maps and missions) and implementation of passive security; software for remote video control and real-time transmission of video; GPS, barometer, compass.

New Short Wave Infrared Lenses (SWIR): "SWIRECON 50", "SWIRECON 25", "SWIRECON 14"; "SWIRECON 100" have been presented as well. OPTICOELECTRON had VIP Visitors of the stand as Deputy Minister of Economy Lyuben Petrov; Mr. Konstantin Dimitrov – the Bulgarian Ambassador in the UK; MOD and Government buyers and decision makers from the key growth markets; very high calibre representatives from the Middle East, India, South America, South and Far East Asia, Australasia, United States and Europe.

Clear vision, innovative and high-quality products, best developed technologies are what OPTICOELECTRON demonstrated at its stand during DSEI 2015.

## DSEI 2021: IAI Integrates Barak MX Interceptors on Sa'ar 6 Corvettes

- Barak MX is IAI's flagship Air & Missile Defense System and is a part of the Naval Combat Suite IAI is integrating on the Israeli Navy's Sa'ar 6 premier defense warship
- Chosen by the Israeli Navy to be SAAR 6 primary defense system
- The system will provide a layer of defensive and offensive capabilities from air and sea

Israel Aerospace Industries (IAI) is integrating offensive and defensive systems, to enhance the 'Sa'ar 6' corvette's capabilities and usher the Israeli Navy into a new technological era, under the guidance of Israel's Ministry of Defense (IMoD) and the IDF.

IAI's Barak MX interceptors along with IAI's complete naval combat suite will provide advanced defense systems to the Israel Navy's Sa'ar 6 corvettes. The systems will be used to protect Israel's exclusive economic zone and strategic facilities that face diversified threats in the marine arena. The Barak MX system was chosen after it was demonstrated to meet the operational requirements and future challenges faced by the Israeli Navy.

IAI's naval solutions are battle-proven naval systems and technology, IAI sets new standards for Maritime Domain Awareness, Naval Combat Systems, Network Centric Operation, EEZ Protection, and Coastal Security. From sensors and weapon systems to integrated systems-of-systems,

IAI offers a broad portfolio of solutions to the requirements and challenges of today's naval forces. These combat systems are designed to maximize and optimize the individual systems' performance and capabilities in a manner that will enable them to operate synergistically with efficiency and full effectiveness.

The Barak MX Air & Missile Defense System developed by IAI's is one of the world's advanced operational air defense systems, used by IDF naval forces and the Indian Land, Navy and Air Force. The Barak MX Air & Missile Defense System provides both wide-area and targeted defense capabilities to an array of threats, including land, air and sea. The system aggregates several key cutting-edge systems: digital radar, weapon control system, launchers, and a range of interceptors for different ranges with advanced homing devices, data-link communication and system wide connectivity. Developed by IAI, the Barak family includes various range interceptors- 35 km, 70 km, and 150 km, and combines the capability to intercept various air defense threats from naval and land platforms.

**Boaz Levy, President and CEO of IAI**, said: "The combat and air defense systems installed on the Sa'ar corvettes represents the significant tier now being integrated on the rest of Israel's air defense array, an integral aspect of IAI's system wide naval solutions. With land and naval modules, the system provides a complete response to a wide range of threats and is developed to work with other systems. IAI's air defense systems boast successful, combat proven operational experience and we are proud to be the home of the Israeli Navy's systems".

Israel Aerospace Industries (IAI) is a world-leading aerospace and defense company innovating and delivering state-of-the-art technologies in space, air, land, naval, cyber & homeland security for defense and commercial markets.



© IAI - MFSTAR Installed on Sa'ar 6

## Nexter exhibits its products designed for security forces at Milipol

From 19 to 22 October 2021, the Milipol trade show dedicated to safety and internal security was held in Villepinte (Seine-Saint-Denis). On this occasion, Nexter presented a model of the TITUS vehicle in its law enforcement version (MO), its robots adapted to security missions, and also the nuclear, radiological, biological, chemical and explosive (NRBCe) protection systems of its subsidiary NBC-Sys.

The TITUS MO is currently used by the RAID unit. Thanks to its great modularity, the TITUS can be fitted with various mission kits such as a clearing blade, additional lightings or an external step to ensure the vehicle's self-protection. The entire vehicle - including the openings - is protected against all types of projectiles used in the riots. It also has excellent mobility, thanks to its six-wheel drive and front/rear steering. In addition, this vehicle can accommodate drones and robots produced by Nexter.

In addition, Nexter's robotics entity is presenting its NERVA range of ground robots. Already sold and delivered in 29 countries, this range is characterised by the versatility and modularity of its platforms. For example, the NERVAXX, mounted on tracks, integrates both a manipulator arm for mine clearance operations and modular payloads (visual and thermal observation, mapping, CBRN detection and IED destruction, etc.).

Moreover, for observation, Nexter offers a particularly discreet and compact means with the NERVA S. Designed to operate in all types of terrain, these robots are characterised by their robustness and ease of use. These qualities make them valuable tools for the many armed and security forces that already operate these systems.

NBC-Sys, a Nexter subsidiary specialised in CBRN detection and protection, is presenting a scenario for the use of its equipment, together with other specialist manufacturers. In this context, NBC-Sys equips a tent with a NBC-filter system for the protection of people in a contaminated environment. Finally, NBC-Sys unveils a new concept of individual mask with lateral cartridge made from an ARFA mask, a model that is in use in the French army.



© Nexter Group

Internas

## Czech Republic officially orders 52 CAESAR 8x8

On 30 September 2021, Czech Defense Minister Lubomír Metnar signed a contract for the acquisition of 52 CAESAR self-propelled artillery guns in an eight-wheel drive (8x8) version, in the presence of French Minister of the Armed Forces Florence Parly and Nicolas Chamussy, CEO of Nexter Group. With this major order, the Czech Republic becomes the third European customer and the seventh user of the CAESAR in the world. With more than 350 units ordered in France and abroad, the CAESAR is the benchmark in the wheeled artillery systems market.

### A consolidating partnership

After the sale of 19 CAESAR 8x8 to Denmark mounted on Tatra Trucks chassis and the supply of 6x6 TITUS armored vehicles to the Czech Army, produced under license with the Czechoslovak Group (CSG), cooperation between Nexter and the Czech defense industry is developing around a large-scale artillery program.

In addition to Tatra Trucks, who supplies the chassis, the contract provides for the involvement of several CSG Group companies: Excalibur Army is in charge of assembling the CAESARs intended for the Czech Republic, Tatra Defence Vehicles produces the armored cabin locally, and RETIA integrates the communication resources and equipment linked to the artillery fire control system.

The partnership also covers ammunition, mainly with the companies STV and Explosia, to enable local supply of conventional shells and modular charges. Special ammunition such as complex ammunition or ammunition with insensitive explosives will be supplied by Nexter's ammunition unit.

### A modern, proven and robust artillery system

CAESAR is a 155mm (52 caliber) self-propelled gun in service since 2008. This weapon system, designed by Nexter, is the main armament of the French army's artillery regiments as well as many foreign artilleries that have chosen this robust, high-performance gun. Designed for direct support of troops in contact or support in depth, it has proven its worth in numerous external operations. Its high performance makes Nexter an undisputed reference in the field of land artillery.

By selecting the CAESAR eight-wheel drive (8x8) version, the Czech Ministry of Defense has chosen a system that is perfectly suited to high-intensity combat. On the one hand, this version of the CAESAR carries 36 shells, which gives it a high ammunition autonomy. On the other hand, resupply is carried out at a high rate (three minutes compared with ten for its fully automated competitors). Thanks to its low mass, the CAESAR 8x8 has a lower fuel consumption than heavy tracked howitzers, which is a major advantage in high-intensity combat configurations where the fluidity of logistical supplies is threatened by long-range artillery. Lastly, the CAESAR is recognized for its excellent battery in and out of action performance.

Nicolas Chamussy, CEO of Nexter Group, praises the Czech Republic's decision to acquire an "innovative, proven artillery system known for its high reliability. Following the TITUS program launched in 2019, this additional acquisition is a testament to the quality of the partnership between Nexter and the Czech defense industry. Thanks to this new success, Nexter is once again contributing to the consolidation of the European defense industrial base"

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**in AUSA 2021**

INTRACOM DEFENSE (IDE) participated in the “AUSA 2021” international Annual Meeting & Exposition, held in Washington DC, USA, between October 11-13.

IDE was one of the exhibitors in the Hellenic Pavilion, which was held under the auspices of the Hellenic Ministry of National Defense - General Directorate for Defense Investments and Armaments (GDDIA) and was organised by the American-Hellenic Chamber of Commerce. The Hellenic delegation was headed by the General Director of GDDIA, Mr. Aristeidis Alexopoulos.

The Ambassador of Greece to the US, HE Mrs. Alexandra Papadopoulou, accompanied by the Defense Attaché Col. Panagiotis Vlachopoulos, the Naval Attaché Capt. Prokopios Charitos HN and the Air Attaché Col. Dimitrios Bitsis, was welcomed to IDE’s stand and briefed regarding the company’s international activities in Tactical Communications and Hybrid Electric Power Systems, as well as on the prospects for the US market. IDE’s booth was also visited by the Secretary General for International Economic Affairs of the Ministry of Foreign Affairs, Mr. Ioannis Smyrlis.

The company attracted the interest of government representatives, foreign military delegations and executives of the defense industry, who had the opportunity to be informed about IDE’s innovative technologies and products.¶



## INTRACOM DEFENSE participated in DSEI 2021 and AFCEA 2021 Exhibitions

The Ambassador of Greece in London, H.E. Mr. Ioannis Raptakis, accompanied by the Defense Attaché Captain (HN) Ioannis Papavlachos, was welcomed to IDE's stand and had the opportunity to be updated on the company's international activities in Tactical Communications and Hybrid Electric Power Systems, as well as on the prospects for the UK market.

Considering the emerging multi-sensor and network-enabled battlefield environment, where tactical power supply and sustainment is a critical capability for mission success, IDE and Marshall Land Systems had the opportunity to jointly present their cooperation for markets of mutual interest in the sector of Hybrid Power Systems, which were a focal point of interest throughout the exhibition. Furthermore, in the frame of the Prototype Warfare Innovation program of the UK MoD, WiSPR CIS was on display by ATDU (Armored Trials and Development Unit), integrated on a British Army Jackal 2A.



During the same week, IDE also participated in AFCEA 2021 Exhibition in Bonn, Germany, an exhibition with particular focus in military communications, IT technology and the digitization of the armed forces

At the AFCEA Exhibition, IDE dynamically demonstrated, in cooperation with the vehicle integrator FFG (Flensburger Fahrzeugbau Gesellschaft), a Silent Auxiliary Power System (SAPS) capability upgrade on the G5 Armored Personnel Carrier, based on its Hybrid GENAIRCON architecture. The vehicle also incorporated WiSPR CIS for crew intercommunication.



## Helping Armed Forces to Defend, Move and Fight

- **Enhancing the capability of Armoured Engineer Vehicles and Armoured Fighting Vehicles through their combat proven approach to rapidly interchangeable vehicle attachments.**
- **Providing momentum and choice on the battlefield.**

Based in the United Kingdom, Pearson Engineering has provided Armed Forces around the world, including the Hellenic Corps of Engineers, with the equipment they need to succeed in their missions for more than three decades. Their modular approach to vehicle integration has supported the company in becoming the world leader in the design and supply of proven combat engineering, battlefield mobility and counter-mobility equipment for armoured vehicles.

Pearson Engineering champions a flexible, agile, and adaptable approach to Armoured Vehicle capability. Using innovative vehicle integration kits, vehicle Commanders can choose to use Pearson Engineering products such as route opening mine ploughs, general purpose blades and bridge launch mechanisms as and when the mission requires it. On an increasingly dynamic, complex, and connected battlefield, options deliver a tactical advantage.

### Pioneering products, proven on the battlefield

The Route Opening Mine Plough in use by the Hellenic Corps of Engineers is a minefield breaching tool designed to move through the most challenging terrain to defeat sub-surface explosive ordnance. Ground engaging tines across the full width of the plough push through the earth to move mines out of the path of the vehicle to create a safe lane. Blast resistant and able to remain operational after a mine detonation, the Route Opening Mine Plough is used around the world to support Combat Engineering tasks. With an understanding that minefields may not always be the primary obstacle, and Armoured Engineering Vehicles are often in high demand, the plough can be removed and interchanged with other equipment to overcome natural or deliberate obstacles, gaps such as rivers, or other types of explosives such as scatterable-mines.

In comparison to Pearson Engineering's Self-Protection Mine Plough, which is configured to support 'freedom of manoeuvre' for fighting vehicles, the Route Opening Mine Plough offers the capability to deliberately overcome the threat to mobility and life posed by minefields. The Self-Protection Mine Plough covers the vehicle tracks only, limiting the impact on the vehicle's own inherent mobility and survivability but providing a capability to move across a minefield, should the mission require it.

The Route Opening Mine Plough is often used together with an Obstacle Marking System from the company which pneumatically fires marker poles into the ground at controlled intervals to clearly indicate hazardous areas or breached routes.



## Scalable battlefield mobility



If options deliver a tactical advantage to Armoured Engineering Vehicles, then Pearson Engineering's latest development, SLICE, has the potential to disrupt the battlefield. SLICE is a new vehicle integration kit which allows Main Battle Tanks and other combat vehicles to use ploughs, dozer blades and other equipment to defeat and create obstacles and to provide independent manoeuvre support.

The development furthers Pearson Engineering's approach to modularity, providing Commanders with the capability to scale activities through the sharing of front-end equipment across both Armoured Engineer Vehicles and Armoured Fighting Vehicles.

Enhanced mobility and adaptability are critical assets in reducing the predictability of armoured vehicles. SLICE provides Commanders with the option to rapidly mobilise a broader range of vehicles, drawing upon a common pool of Front-End Equipment that is both suitable for dedicated engineering vehicles, and for use temporarily by others. In this way, a Mine Plough normally used by a dedicated engineering vehicle, and which already exists in an inventory could be used by a Main Battle Tank, when needed.

Whilst Armoured Engineer Vehicles prioritise mobility when considering the traditional 'Iron Triangle', Armoured Fighting Vehicles must balance Mobility, Lethality and Survivability. SLICE is a lightweight interface that is designed to be quickly and easily fit without permanent modification to the host vehicle, therefore having no impact on the vehicle's survivability, and carefully avoids any interference with the gun sweep.

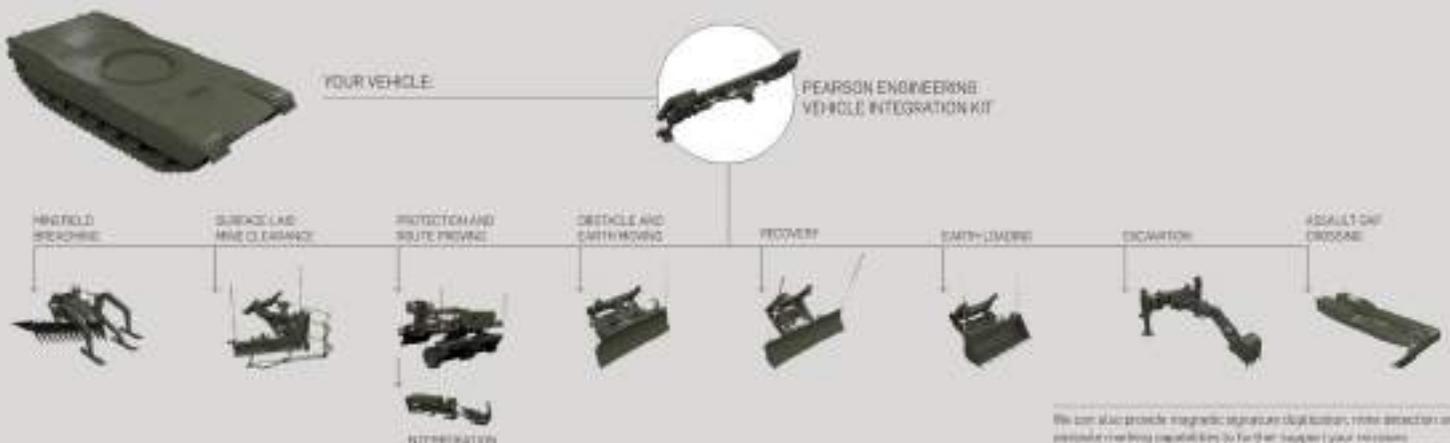
When SLICE is fitted, there is minimal to no change to the approach angle nor its step height. SLICE also does not affect the driver's vision. The product includes an integrated hydraulic motor pump and control system, further lessening the impact on the host vehicle.

When the needs of the battlefield evolve, and front-end equipment is no longer needed, the host vehicle can be returned to its original state to continue with its core mission.



© Photos credit- Pearson Engineering

### OUR APPROACH



## Naval Group will be technical coordinator for the European Unmanned Semi-Fixed Sea Platforms for Maritime Surveillance (USSPS) project led by ETME

At the end of a highly contested competition, the European Commission through the European Defence Industrial Development Program (EDIDP) has selected on June 30th, 2021 the USSPS solution developed by the European consortium led by the innovative Greek company ETME with two of the largest EU defence manufacturers Naval Group and Navantia ensuring the highest appropriate level of experience on naval engineering and technical coordination. USSPs will develop a system to

improve Maritime Surveillance by exploiting unmanned semi-fixed platforms at sea.

The project “Development of Unmanned Semi-fixed Sea Platforms for Maritime Surveillance” (USSPS) will develop the backbone of an advance (C5ISTAR) federated system of systems. USSPS will integrate legacy assets and systems with innovative solutions, aiming to improve maritime surveillance capabilities, reduce high value asset utilization and mission related costs, and provide cross-domain persistent and permanent maritime situational awareness. The project will develop an unmanned highly autonomous, energy efficient and miniaturized oil rig technology-based platform capable to integrate a wide range of air, surface and underwater sensors. The platforms will enable deployment in any geographical region, including all types of sea-beds and deep-sea regions, and operation under adverse environmental conditions.

With ETME, as leader of the consortium, and Naval Group as Technical coordinator, the consortium brings together major European industrial actors (Navantia, Applied Intelligence Analytics Limited,



# NEXT GENERATION CROSS DOMAIN C5ISTAR



The Project has been selected for funding from the European Defence Industrial Development Programme (EDIDP) 2020 under Project ID EDIOP-MSC-2020 -117-USSPS



**Alain Guillou, Senior Executive Vice President Development Naval Group & Antonios Peppas CEO ETME**

Prolexia, Multimedia Workshop, Sener Aeroespacial, SIGNALGENERIX, SMST Designer & Constructors, Techlam, Tecnobit Slu, Unmanned Teknologies Applications) as well as research centres (CY.R.I.C Cyprus Research And Innovation Center, Foundation For Research And Technology Hellas (FORTH) and Stichting Maritiem Research Instituut Nederland).

Together, they will create a very innovative and high-value solution to secure and protect various maritime areas allowing to cover both air, surface and underwater dimensions thanks to suitable sensors.

Emerging from the original patented concept of platforms developed by ETME, a Greek leading company specialized in design and management of engineering works and innovative solution, the USSPS system will combine innovative solutions for the integration and coordination of C5ISTAR capabilities to generate maritime surveillance networks of sensors based on semi fixed unmanned platforms.

## **Making Greece a centre for naval innovation**

Naval Group has been present in Greece since 2008. As a bidder in the frigates program, Naval Group designed a robust Hellenic Industry Participation plan to develop new capacities in the Greek industry, sustaining several hundreds of highly qualified jobs and generating long-term economic spin-offs in Greece.

Naval Group's objective is to further develop its local footprint through partnerships with industry, research and academic partner. Beyond the frigates program, Naval Group seeks to support the development of the future Hellenic naval warfare capabilities through R&D projects with Hellenic companies, universities and research institutes in cutting edge technologies such as additive manufacturing, predictive maintenance, drones or naval mission systems.

This 42-month program to study, design, prototype and test the solution is part of a long-term cooperation in R&D between France and Greece and should lead to significant market opportunities.

# New missile for Russian Air Forces

By Yuri Laskin

The ARMY-2021 became a premier for the light multipurpose guided missile for helicopters which got designation 305E (with E showing that it is certified for export).

The missile was developed by the Kolomna-based KBM Design bureau of the High Precision Weapons Holding.

It was showcased at the exposition of Holding. Besides, being positioned as one of the main types of guided weapons for the modernized Mi-28NM and Ka-52M helicopters the missile was demonstrated to Russia's Defense Minister Sergei Shoigu on board these combat helicopters

During ARMY-2021 the Ministry of Defense signed a contract for the supply of a batch of 30 modernized Ka-52M helicopters within 2022 and 2023.

Earlier, at ARMY-2019 the Russian military contracted Rostvertol plant for delivery of 98 Mi-28NM helicopters by 2027.

The 305E missile is designed for round-the-clock engagement of single/group, moving/stationary, ground/surface heat-contrast objects and sheltered/openly deployed manpower.

The light multipurpose guided missile 305E is built according to the aerodynamic "duck" scheme, the rudders are in the head of the rocket, and the wings, which also serve as a stabilizer, are located in the tail part of the rocket body. They are foldable.

According to the official data distributed by the manufacturer at the Army-2021 forum, the 305E missile has weight of 105 kg, length of 1945 mm, and body diameter of 200 mm.

The weight of the blast-fragmentation warhead is 25 kg. The solid-propellant engine provides missile's speed of up to 250 m / s, a guaranteed (as said in official booklet) flight range of up to 14,500 m, and a flight altitude of 100 to 600 m.



The missile features modular design and can be armed with different warheads.

The missile's guidance system is combined: inertial guidance with correction from satellite navigation equipment and self-guidance under control of seeker with ability to involve operator at the terminal part of trajectory.

The missile is fired from the APU-305 launchers, designed for one or two missiles.

According to the KBM Chief designer, the missile is produced serially. In addition to integration with Ka-52M and Mi-28NM, the missile can be adapted to other helicopters, on customer's request, Chief designer added.

According to the information of Russian media, Ministry of Defense is working out the issue of equipping not only helicopters, but also combat aircraft with the new guided missiles.

It is also considered as a promising weapon for attack UAVs.

According to experts, in terms of weight and dimensions, it is well suited for arming attack aircrafts, like Su-25 and Orion drones.



© Photos - Yury Laskin



# Development and Security Challenges in the Sahel Region

The Sahel countries—Mauritania, Mali, Niger, Burkina Faso and Chad—face many challenges, including chronic insecurity, rising extremism, a lack of economic prospects, and poor access to education, employment and essential services such as water and electricity. Climate change is weakening the region even more.

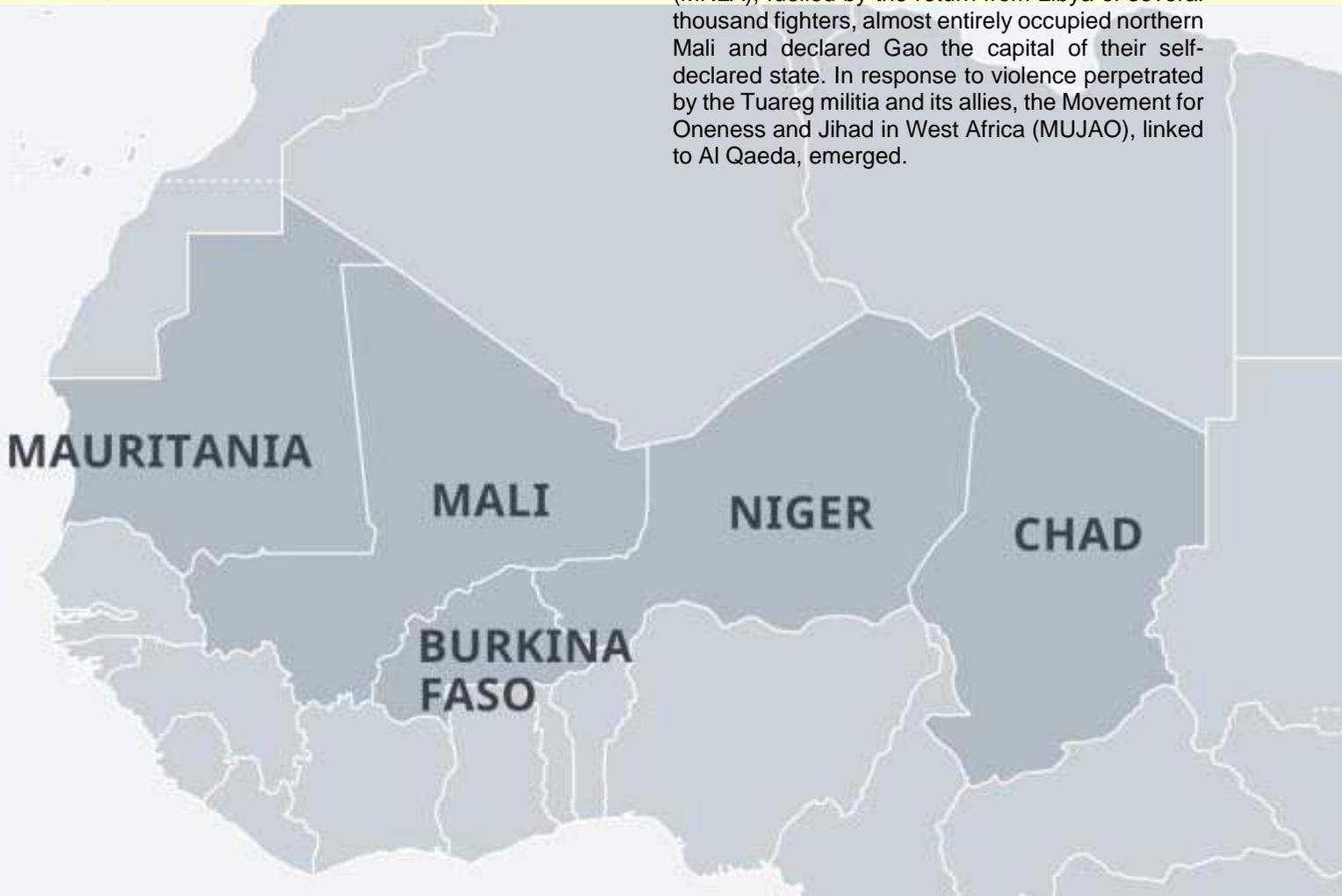
Armed conflicts, dramatic climate change and little opportunity to receive an education or find a job, are an everyday reality for many in Africa's Sahel region. With the region's rapidly expanding population compounding these challenges, the hope of a future is vanishing for millions of young people.

Insecurity has spread across porous borders with dramatic repercussions for the region's inhabitants. Conflict, in turn, is further impoverishing a region already burdened with endemic poverty, inequality and social and political exclusion. The conflict has also triggered a massive IDP and refugee crisis with thousands seeking sanctuary in neighbouring countries or further afield in the Maghreb and Europe.

The Joint Force of the Group of Five for the Sahel (also known as G5 Sahel joint force, FC-G5S), including Burkina Faso, Mali, Mauritania, Niger and Chad. Launched in February 2017, this regional partnership, which consists of 5,000 troops from the G5 Sahel states, was authorized by the Peace and Security Council (PSC) of the African Union (AU) (April 2017) and strengthened by the adoption of United Nations Security Council (UNSC) Resolution 2359 (June 2017) (Cooke, Toucas, & Heger, 2017). G5 Sahel joint force aims at fighting terrorism, organized crime and smuggling through enhanced cooperation among national armed forces and surveillance of rural areas. On their side, France and other European countries (especially Germany, the United Kingdom and Italy) have pledged broader support for security and stabilization in the Sahel during the G5 Sahel summit in Celle-Saint-Cloud (13 December 2017).

The G5 Sahel countries will have 83.7 million inhabitants in 2019, of which about 50% are under 15 years old, and 196 million in 2050. There is a real urgency to draw the consequences to avoid what always happens in history in case of overpopulation, such as immigration, wars, famines, epidemics, because there will not be enough space and resources for everyone.

Moreover, the difficult situation in the Sahel has also been shaped by political, social, and economic developments in North Africa and terrorist organizations fed by the instability and proxy wars in the Middle East more broadly. A consequential shift occurred in the Sahel region in 2012 when a Tuareg-dominated separatist armed group, the National Movement for the Liberation of Azawad (MNLA), fuelled by the return from Libya of several thousand fighters, almost entirely occupied northern Mali and declared Gao the capital of their self-declared state. In response to violence perpetrated by the Tuareg militia and its allies, the Movement for Oneness and Jihad in West Africa (MUJAO), linked to Al Qaeda, emerged.



MUJAO cleverly exploited both the aspirations and anxieties of the local population while drawing support from powerful criminal organisations operating in the region. MUJAO attracted substantial numbers of recruits from central and northern Mali and Niger, including the Fulani community's self-defence militias. MUJAO expelled MNLA fighters from Gao in July 2012 allowing it to extend its influence along the length of the Malian belt of the central Sahel. Only the French military operation Serval, launched in January 2013 at the request of Malian authorities, managed to stop MUJAO's advance toward Bamako.

In July 2014, France expanded its presence throughout the region with the launch of operation Barkhane. Barkhane mission has been more ambitious and includes: fighting terrorism in a territory the size of Europe, bringing out the G5 Sahel Joint Force, and supporting the Malian armed forces and MINUSMA. Consisting of 4,500 French soldiers with operational headquarters in Chad's capital, N'Djamena and operating with a yearly budget of EUR 600 million, according to French Senate, Barkhane is operating in Burkina Faso, Chad, Mali, Mauritania, and Niger. Small units composed of special forces elements capable of intervening very quickly have been deployed in the field to take on extremist fighters with the support of fighter aircraft, drones, and a range of intelligence assets. In December 2019, France carried out the first armed drone airstrike during an assault against armed terrorist group fighters in Mali's Mopti region. Since the beginning of its operations Serval and Barkhane in 2013 and 2014, 44 French soldiers have died in combat in the Sahel.

France has consistently advocated stronger international engagement, and its MoD announced the creation of the international special operations task force Takuba in November 2019. Takuba's objective, in addition to freeing up Barkhane personnel and enabling them to focus on pursuing insurgents and preventing attacks, is to advise, assist and accompany Malian Armed Forces, in coordination with G5-Sahel partners and other international actors on the ground, including the UN mission MINUSMA, as well as the EU missions EUTM Mali, EUCAP Sahel Mali and EUCAP Sahel Niger. Takuba will ultimately consist of a French contingent and special operations element and military observers from numerous European nations including Ireland, Estonia, Latvia, Denmark, Spain, Belgium, Sweden, Norway, the Netherlands, Greece and Italy. The plan is ultimately to have 16 500 operators in the task force. The first 100 troops, comprised of French and Estonian special operations forces, were deployed in Summer 2020. In response to manifestations of hostility in West Africa towards the French and international military presence, President Macron asked G5 Sahel leaders to offer public support for France's military presence. During the Summit organized in Pau in January 2020, the city where most French soldiers who died in November 2019 were stationed, the G5 leaders "expressed the wish for the continuation of France's military engagement in the Sahel". The increasing number of terrorist attacks and casualties has served as a catalyst to unite French Barkhane and G5 Sahel Joint Force under a new command structure: announced at the Pau summit at the request of Sahel states.





© AFP

The impetus given in Pau has materialised with the creation of the Coalition for the Sahel, which the G5 Sahel countries – celebrating the 60th anniversary of their independence this year – and the European Union officially launched on 28 March 2020.

The Coalition for the Sahel aims to provide a collective response to the challenges in the region. In February 2020, French Defence Minister Florence Parly announced the deployment additional soldiers, primarily in the three borders areas. The reinforcement of Barkhane decided at the beginning of the year – with the deployment of 600 additional soldiers-, increased coordination with the Sahelian forces, the concentration of joint efforts towards the “three borders” zone, on the borders of Mali, Niger and Burkina Faso, and the creation of the Takuba Task Force, have made it possible to weaken the ISGS.

At the Pau Summit on 13 January 2020, the International Coalition for the Sahel was launched by the Heads of State of France, Burkina Faso, Chad, Mali, Mauritania and Niger, in the presence of the United Nations Secretary-General, the President of the European Council, the European Union High Representative, the Chairperson of the African Union Commission and the Secretary General of La Francophonie. The gravity of the crisis in the Sahel, the sense of urgency, and the volume of the needs require stronger, more inclusive action. The International Coalition for the Sahel aims to provide a collective response to the challenges of the Sahel region by pooling the work undertaken by the G5 Sahel States and their international partners. The goal is to take coherent action across the Sahel by including all relevant levers and stakeholders, whether dealing with the issues of security, politics or development.

Terrorism and irregular migration remain the primary reason for the international involvement in the Sahel. As the violent extremist threat and terrorist attacks expand and with civilians dying in inter-ethnic conflicts, the presence of foreign forces has become increasingly difficult for local populations to fathom or accept.

The security situation in the Sahel continues to deteriorate, with terrorist groups operating in the Sahel expanding their presence southward, increasingly threatening coastal West African states. Recent months also witnessed political instability in Chad following the death of President Idriss Déby while fighting rebels invading from Libya and in Mali when the perpetrators of last year’s coup d’état carried out a second coup against Mali’s transitional authorities. Following a recent mandate renewal of MINUSMA, France proposed an approximate 2,000-person increase in the mission’s troop ceiling, which currently stands at 13,289 military and 1,920 police personnel, to improve its ability to protect civilians from terrorist groups and inter-communal violence in Mali’s central region. While the proposal was not accepted, Council members may take up this issue again in July as the new MINUSMA resolution requests the Secretary-General to produce a report by 15 July with recommendations on the mission’s force level.

Maghreb security challenges are intrinsically intertwined with Sahel instability. Both the Sahel and the Maghreb face significant security concerns, magnified by the regions’ indelible interconnection. Maghreb geopolitical hostilities and power relations are echoed in the Sahel, while the hybrid security crises erupting throughout the Sahel become push factors, ultimately weighing heavily on the policy agendas of North African countries and the EU as well.

Since 2011, the European Union (EU) strategy for the Sahel has focused on both security and development to address these numerous and interconnected challenges. However, EU efforts have remained dominated by a military approach to tackle rising terrorist activity, achieving concrete results but ultimately falling short of long-term regional stability. The new EU integrated strategy in the Sahel aims to strengthen action at the political level, focusing on governance mechanisms, human rights, and collaboration with civil society and local authorities, while maintaining security cooperation with states in the region. EU must maintain a military presence in the Sahel region if it wants to help prevent future terror attacks. Europe faces two serious risks. The first is to have terrorists who will arrive in Europe under cover of refugees, as we had in 2013-2014 from Syria and who made the attacks in Paris and Brussels and the second is a victory for the global jihad. The capture of Kabul by the Taliban was considered a victory and it could give a new boost to the jihad movement.

**Dimitrios Angelopoulos M.Sc.**  
*Advisor on Defence and Security issues*



## Hornet displayed THeMIS Combat unmanned ground vehicle at DSEI 2021 in London

The French remote weapon systems manufacturer Hornet, which is part of Arquus and Europe's leading developer of robotics and autonomous systems Milrem Robotics display a new THeMIS Combat unmanned ground vehicle at DSEI 2021 in London.

The system features Milrem Robotics' THeMIS unmanned ground vehicle (UGV) with the Hornet Remote Controlled Weapon System (RCWS). The Hornet was developed for the new French 4x4 and 6x6 armoured vehicle program "Scorpion", however, it offers unique features for UGV applications.

RCWS are now at the heart of modern land combat. They offer protection and accuracy to the gunner, versatility, tactical overview, and collaborative combat capabilities to the commander. Having designed and engineered systems that deal with system stabilization, weapon adaptation and firing accuracy, Arquus has decided to take up the challenge of combining modern military vehicles and efficient weapon systems, built for accuracy, stability, lightness, compacity.

Since 2015, Arquus has been putting together all its on-field expertise and in-house technologies, providing with a complete range of high-performance RCWS: the Hornet family, now offered worldwide by the Hornet Business Unit.

"The Hornet includes a specific cleaning system for the optronics as well as the option to flip down the sensors to protect it from dirt and damage – crucial aspects for an unmanned vehicle operated from a distance. It's also equipped with a protected ammunition feed," explained Jean Boy, Managing Director of Hornet, adding that the Hornet was developed keeping in mind the French Army's high standards for firing accuracy.

THeMIS Combat UGVs provide direct fire support for manoeuvre forces acting as a force multiplier increasing stand-off distance, force protection and situational awareness. The THeMIS is equipped with intelligent functions such as waypoint navigation, follow-me, obstacle detection and avoidance. The intelligent functions are only used for mobility and the weapon system is controlled by a human operator. "Combat robotics is the future of warfare that will significantly increase the capabilities and survivability of units. Milrem Robotics' THeMIS is the preferred UGV for weapon systems integrations. With the future-oriented Hornet that has several innovative features, we have created an unmanned system that allows combat units to encounter today's challenges on the battlefield more effectively," said Captain (res) Jüri Pajuste, Director of Defence Research and Development at Milrem Robotics.

Milrem Robotics is the European leading robotics and autonomous systems developer and systems integrator with offices in Estonia, Sweden, Finland and shortly in the Netherlands.

© DBDC- THeMIS Combat unmanned  
ground vehicle at DSEI 2021 in London



## Naval Group delivers A.R.A. Storni, third multi-mission offshore patrol vessel for Argentina

The third of the four Argentinian offshore patrol vessel (OPV) ordered by the Argentine Navy, OPV 87 A.R.A. Storni, was delivered on October 13 in the presence of Captain Santiago Villemur, representative of the Argentine Navy in France.

A.R.A. Storni has been delivered to the Argentine Navy today in Concarneau in the presence of Captain Santiago Villemur, representative of the Argentinian Navy in France, who also handed over the commandment of the ship to Commander Óscar Latorre.

This delivery was carried out by teams from Naval Group and Kership, a joint-venture between Piriou and Naval Group. It is part of the contract signed by Naval Group with Argentina in 2019 for the delivery of four multi-mission patrol vessels. A.R.A. Bouchard (former L'Adroit) was delivered in December 2020 and A.R.A. Piedrabuena on April 13th this year.

With the delivery of A.R.A. Storni, the program keeps progressing as scheduled to conclude with the delivery of the last vessel scheduled for April 2022. A 44-people crew from the Argentine Navy has been trained in the operation and maintenance of the vessel.

This third patrol vessel of the series acquired by the Argentine Navy offers the same assets and features as those of the A.R.A. Piedrabuena. Better armed and motorised than the Bouchard, equipped with an active stabilisation system and a bow thruster, it is also Ice proven, i.e. adapted to navigation in the cold waters of Antarctica.

Jean-Claude Flandrin, Program Director, said: "The delivery of this third patrol vessel marks a very important milestone for the program, which was achieved on time despite the health crisis that has marked the last two years. The teams are still mobilised to finalize the training of the crew that will leave for Argentina with the vessel. Once the training is completed, we will concentrate our efforts towards the delivery of the last of the series, which was launched last month".

Olivier Michel, Sales Director for Latin America, added: "We are proud of the trust that the Argentine Navy has placed in Naval Group for the supply of these latest-generation

multipurpose vessels that will enable the country to carry out its sovereign missions. This delivery is another demonstration of Naval Group's and its partners' capacities and commitment towards its customers to respond to their operational needs."

### OPV 87, an innovative vessel

The Argentine offshore patrol vessels benefit from innovations developed by Naval Group and proven by the French Navy, which has operated L'Adroit in several oceans for six years for multiple maritime security operations, alone or in cooperation:

- Very high endurance and excellent seaworthiness.
- A 360° visibility from the bridge and a unique mast for a panoramic radar coverage;
- The rapid, safe and discrete deployment of intervention crafts launched by a double system of ramps at the stern of the patrol vessel.

This range of ships also benefits from Naval Group's expertise in information and command systems, allowing for extensive surveillance of the maritime space and the detection of suspicious behaviours. The A.R.A. Storni is equipped with the POLARIS® system and NiDL® tactical data link system, specifically developed by Naval Group for state action missions at sea and sea-proven by the French Navy.

### Technical features

The Offshore Patrol Vessel is able to stay on high seas during more than three weeks, to reach a speed of 20 knots and to accommodate a helicopter. Implemented by a reduced crew of 40 members, it is also able to accommodate about twenty extra passengers.

- Length: 87 meters
- Beam: 14 meters
- Displacement: 1,650 tons
- Max. speed: over 20 knots
- Accommodation: 59 (crew and passengers)
- Endurance: > 7,000 nautical miles
- Boarding capacity: two light crafts of 9 meters and one 10-ton class helicopter

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**THALES SEA FIRE  
FULLY DIGITAL  
RADAR WITH ACTIVE  
ANTENNA FOR  
FRANCE’S FUTURE FDI  
FRIGATES**

On 27 April 2021, Thales has delivered the first digital Sea Fire radar for integration on the French Navy’s first Defence and Intervention Frigate in Lorient. A key milestone in the FDI program, following a seven-year development and in-line with the French defence procurement agency’s initial schedule. The Sea Fire is the latest-generation solid-state modular multifunction radar, with a four-panel AESA1 antenna, simultaneously performing long-range air and surface surveillance, as well as fire control to protect the French frigates from all types of threats in complex environments.

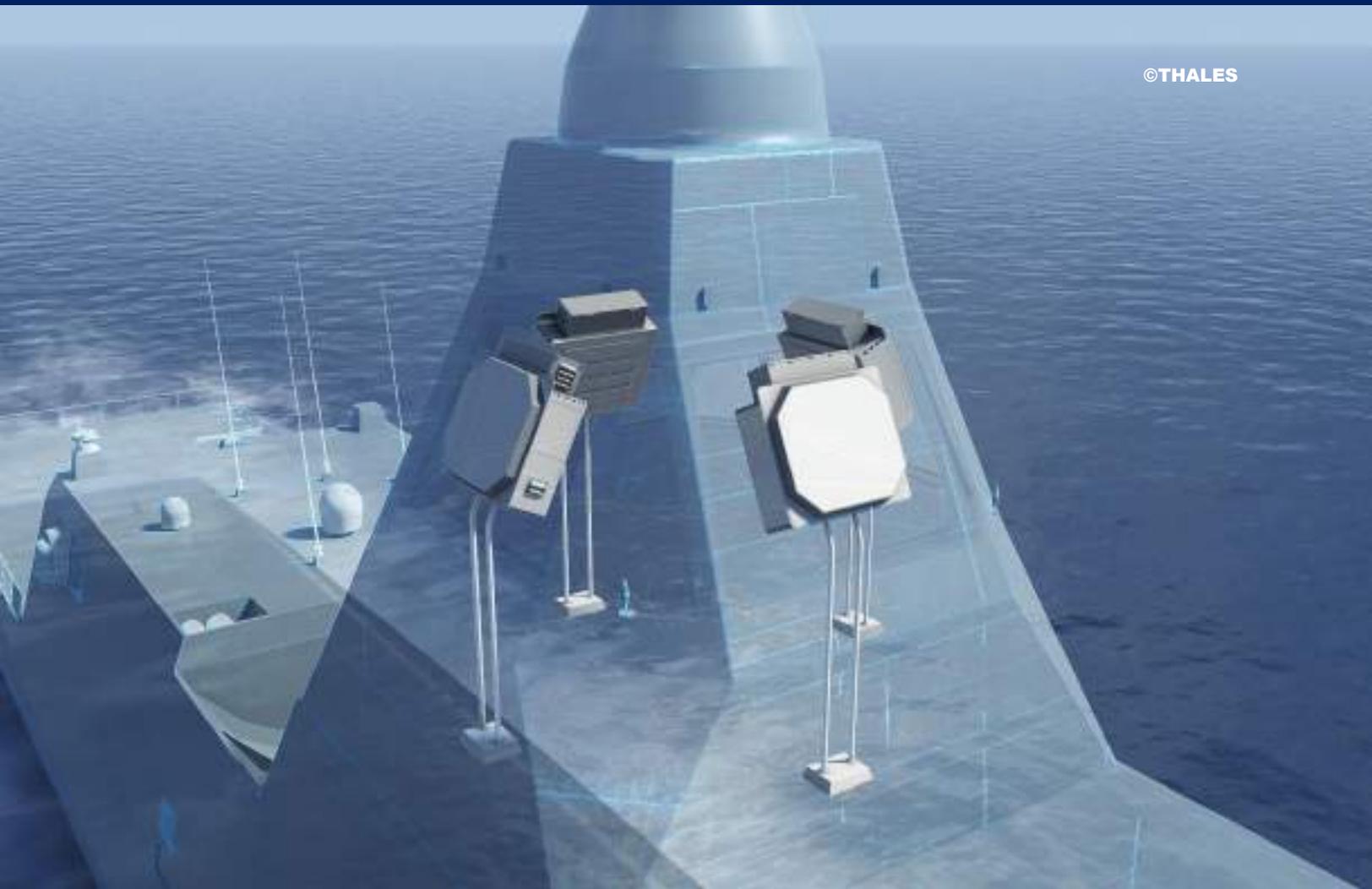
Launched in 2014, the first of the five Sea Fire AESA digital radars for French Navy’s future Frégate de Défense et d’Intervention (FDI) arrived at the Lorient shipyard on 27 April 2021, for integration on the first vessel.

Sea Fire is the solution of choice for commanders responsible for ensuring vessel survivability in the face of a rapidly expanding array of threats. With its fully solid-state four-panel AESA antenna, Sea Fire can search for air and surface targets simultaneously, scanning an area of several hundred square kilometres with 360° coverage in azimuth, 90° in elevation and an unmatched refresh rate.

This digital radar is at the forefront of technological innovation and benefits from all Thales’s Big Data and cybersecurity expertise. Subsequent software developments will further improve the product’s performance and operational availability throughout its lifecycle. The huge volumes of data generated by each panel — in the order of one terabit per second — can be processed using advanced algorithms to optimize the radar’s performance in its specific operating environment. This new AESA fixed-array radar offers twice the operational availability of earlier-generation radar systems with mechanically scanned antennas.

Manufactured in Limours, south of Paris, with the involvement of a French network of small medium-sized companies, the Sea Fire started production in May 2018 and successfully passed initial qualification tests late 2020. Despite difficulties caused by the Covid-19 crisis, Thales aligned with the initial schedule planned, delivering the first of five Sea Fire radars on time to the Lorient shipyard for integration.

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**Raytheon UK to bring counter-drone high-energy laser technology to UK Ministry of Defence**

Raytheon UK has been awarded a demonstrator contract to provide a High-Energy Laser Weapon System, or HELWS, to the UK Ministry of Defence. Raytheon UK will deliver the MOD's high-energy laser demonstrator to show the application of directed energy weapons technology to help protect the UK armed forces from unmanned aerial vehicles (UAVs) in today's battlefield.

High-energy lasers are moving from the laboratory to the field," said Alex Rose-Parfitt, engineering director, Raytheon UK. "We are partnering with the MOD to accelerate this developing technology and make it available to the UK military. This demonstrator programme will show how the use of high-energy laser weapons could help protect soldiers against UAVs."

A high-energy laser demonstrator will be installed by the Raytheon UK team on one of the MOD's Wolfhound land vehicles for a period of comprehensive user experimentation. The experimentation provides an opportunity to see how HELWS could enhance UK capabilities and understanding in high-energy laser weapons, supporting UK's ambitions to remain an as innovative leader science and technology.

HELWS, a modular counter-UAV system, uses an electro-optical/infrared sensor that prosecutes highly maneuverable threats with precision and relative ease. The system can be installed on a variety of platforms and has been fielded in several real-world environments; it can also be integrated with many modern air defence systems, offering a robust layered defence capability as needed.

"We are investing £6.6 billion in research and development across Defence over the next four years, reaffirming our commitment to provide the Armed Forces with truly advanced capabilities," said Minister for Defence Procurement, Jeremy Quin. "Directed Energy Weapons are a key element of our future equipment programmes and we intend to become a world-leader in the research, manufacture and implementation of this next-generation technology." As the programme evolves, Raytheon UK will encourage new capabilities and expertise in the UK supply chain and place the country at the forefront of this emerging technology. The Raytheon UK team is collaborating with other British companies on the demonstrator including Frazer Nash, NP Aerospace, and Lumoptica across the UK, to bring high-energy laser technology to the British Army. The contract is part of a wider framework by the UK Ministry of Defence to sustain strategic advantage through science and technology.



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