

EDM

EUROPEAN DEFENCE MATTERS

Twenty Years Young

EDA looks back at its first two decades - and to the future



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Finland's Häkkinen on joining NATO and recommitting to EU defence

› EDA AT 20

Former Chief Executive Witney recalls the early days

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Twenty years on



It's an anniversary year – and not just for the European Defence Agency (EDA). NATO celebrates its 75th anniversary, and world leaders and veterans have marked D-Day's 80th anniversary in France, remembering the largest multinational amphibious landing and operational military airdrop in history.

As EDA revisits its past, the future seems particularly unpredictable. Russia's armed forces are relentlessly seeking the upper hand in Ukraine and Kyiv has little time to lose, as it waits more weapons deliveries from its allies.

While NATO will remain the cornerstone of Europe's collective defence, EDA's work on 155mm ammunition procurement in support of Ukraine, as well as its role in marshalling collaborative defence projects, illustrate how EDA is helping to make the European Union a security provider.

EDA has proved its worth since its birth on 12 July 2004 – and continues to do so. EDA's Head of Agency, High Representative Josep Borrell, and EDA's Chief Executive, Jiří Šedivý, explain why the European Union needs to continue to develop its common defence policy. EDA's initiatives in autonomous systems, outlined in this edition, reveal much about warfare of the future.

Finland's Minister of Defence Antti Häkkinen sets out his key tasks for EU defence, as well as what it means to be part of NATO. We also hear from a Swedish think-tanker at the Atlantic Council, Anna Wieslander, on what Sweden's new membership of the alliance means for Europe.

EDA was born in a time of optimism about the European project. Today, with the return of a major war to Europe, those advocating a disengagement from EU integration are more vocal than ever. They benefit from citizens' desperation at a seemingly never-ending stream of crises, notably the eurozone crisis, Brexit, the COVID-19 pandemic and Russia's unjustified and unprovoked invasion of Ukraine.

So the once seemingly straightforward task of maintaining European and American support for Ukraine is becoming harder. In this edition of *European Defence Matters*, we talk to NATO's Assistant Secretary General for Public Diplomacy, Marie-Doha Besancenot, on the work that goes on to remind citizens of how we must both honour the successes of the past and continue to work to secure our future security.

The accession of 10 new states to the European Union on 1 May 2004 is a symbol of the peaceful unity of the continent. If we want to protect that peace, together we need to enhance our ability to anticipate threats, invest more in better capabilities and technologies and by doing so, protect EU citizens. EDA will be an integral part of that.

Happy anniversary!

Robin Emmott
Editor-in-Chief

Lionel Sola
EDA Head of Media & Communication





**High Representative
and Head of Agency
Josep Borrell**



The Head of the European Defence Agency (EDA) and High Representative/Commission Vice-President, **Josep Borrell**, takes stock of European defence collaboration, at a time when Europe is in danger and needs to boost its capacities, notably because of Russia's war of aggression against Ukraine.



Building a common European defence policy in troubled times

Ukrainian soldiers train in Wędrzyn, Poland on 7 December 2023.

Twenty years ago this July, EDA was set up to help Member States develop their military capabilities. Since then, EDA has established itself as the main coordination platform available to European armies. Today, this is needed more than ever. Power politics are reshaping the world. 'Classical' high intensity wars are back in our immediate neighbourhood and at the same time new hybrid ones are developing, targeting us directly. Europe is in danger and we must boost European defence. And we need EDA to succeed.

The war of aggression against Ukraine has shown how much Europe's defence and the European defence industry have been weakened by thirty years of 'silent

disarmament' after the fall of the Berlin wall. With the Strategic Compass, adopted two years ago, we have a roadmap for catching up and EU Member States have already spent significantly more on defence recently, with a 40% increase in defence budgets over the last 10 years and a €50 billion jump between 2022 and 2023.

Nevertheless, the €290 billion EU defence budget in 2023 represents only 1.7% of our GDP, below the 2% NATO benchmark that should, in the current geopolitical context, be seen as a minimum requirement. Also, we are still investing too little together, with only 18% of EU Member States' defence procurement done in a collaborative manner. At the same time, our defence industry still lacks capacity, both



Operation Atalanta's warships are deployed off the coast of Somalia to deter piracy in the Indian Ocean and Gulf of Aden.

quantitatively and qualitatively: since the beginning of the war against Ukraine nearly 80% of our military equipment has been bought outside Europe.

We have still a long way to go to make up for these shortfalls and we have to cover it in a very short time. However, boosting European defence does not mean building a European army. Defence is, and will remain for the foreseeable future, an exclusive competence of EU Member States. European defence policy is about a much closer cooperation between EU Member States. This endeavour has not been without difficulties over the past decades. We have had regularly heated debates about 'strategic autonomy' and the link between EU defence policy and NATO.

But these debates are now behind us. Since the war of aggression against Ukraine, everyone in Europe recognises that NATO remains more essential than ever to ensure the continent's security, particularly after Sweden and Finland joined the organisation. At the same time, however, all Europeans are now also fully aware that America's commitment to Europe's security could become more uncertain for the future, and that it is absolutely essential to build a strong European pillar within NATO. The time has come for us to ultimately take our 'strategic responsibility' for Europe's security.

We need, in particular, to cooperate much more closely on armaments. To use our defence resources in an efficient way, we need to fill gaps in our capacities, avoid duplications and increase interoperability. As I have already said on many occasions, we

need to spend more but above all better. And better means together. We also need to spend more together as Europeans and boost our defence industry's capacity.

"We need to spend more but above all better, and better means together"

We have already developed some joint initiatives previously, with the Franco-Italian multi-purpose frigates, the Eurofighter combat aircraft, the NH90 and Tiger helicopters and the A400M transport aircraft. But we need many more of these common projects. EDA's role could be crucial to succeed in this endeavour. With almost 200 expert staff managing nearly 100 capability development and research projects, EDA is already a powerful catalyst to promote collaboration among Member States.

EDA has already helped develop the national naval surveillance network

MARSUR, multinational helicopter training, the EU Satellite Communications Market, the safe emergency landings of drones, and aided the development of a European strategic tanker capability. It is also helping boost cross-border research and innovation through the Hub for Defence Innovation (HEDI). To help deliver more ammunition to Ukraine, the Agency in Brussels also organised common purchasing of shells.

Last May, we presented Member States with a list of new possible collaborative projects and we have reinforced the Agency's mandate in agreement with the 27 EU Defence Ministers. (see EDM pages 30-31). We urgently need to move beyond national silos to boost Europe's defence and provide our citizens with the security they deserve. I am convinced that EDA will play an essential part in this endeavour in coming years. ◀



High Representative Borrell visits a drone manufacturing facility in Ukraine, February 2024.



Antti Häkkinen became Finland's Minister of Defence in June 2023. A lawyer by training who also holds the military rank of lieutenant, he has served as his country's justice minister and is a member of the Finnish unicameral parliament, the Eduskunta. He talks to *European Defence Matters* about Finland's new membership of NATO, EDA's contribution to cooperative defence efforts and the future of the multinational Common Armoured Vehicle System.

Newly in NATO, Finland recommits to EU defence, and to double ammunition production

Having a 1,340-kilometre border with a country that launched a full-scale invasion of another neighbour can sharpen the mind.

So, Antti Häkkinen, Finland's Minister of Defence, was a step ahead when he said publicly in December 2023 that Russia's unprovoked war in Ukraine was no "short-term problem". Weeks later came warnings from NATO's military committee and Germany that a Russian attack on a NATO country was possible within the next two decades.

For Finland, which stayed neutral through the Cold War, the situation since February 2022 has been grave enough to forge a national consensus in favour of NATO membership. Helsinki became NATO's 31st member in April 2024, now covered by NATO's Article Five mutual-defence clause. "Joining the Alliance was a historic moment for Finland," Häkkinen says. It is not only a significant shift in Finland's national security and defence policy, but also more broadly for Euro-Atlantic security, he asserts.

"Finland brings to NATO very capable defence forces and a nation with a strong willingness to defend our land and the alliance as a whole."

While Russian President Vladimir Putin has sought to portray Finland's – and Sweden's – new membership of NATO as a "meaningless step", it is in fact considered to be one of his biggest miscalculations in

"The government is committed to spending at least 2% of Finland's GDP on defence"

launching his full-scale invasion of Ukraine. If any proof were needed, large-scale NATO manoeuvres were held in Finland for the first time in early 2024, called Nordic Response, with 20,000 soldiers from 13 different countries. Nordic Response was a crucial first step in implementing NATO's regional plans for defending northern Europe. A hostile Russian border is not Finland's only worry. Possible Russian sabotage of





underwater infrastructure in the Baltic Sea, including gas pipelines and communications cables are also a concern.

Finland has not, however, lost sight of its European Union focus. Häkkinen has been a leading voice in both calling for European countries to increase their defence budgets and to develop their defence industries. "The Finnish government is committed to

spending at least two per cent of Finland's GDP on defence expenditure during its term, in accordance with NATO's guideline," he adds.

Finland has also sent more than 20 military aid packages to Ukraine since the start of the war, the latest with equipment worth €200 million. "It is obvious that we need to do more together to ramp up the

defence production in the EU," he says. "In addition to immediate steps that have been taken, such as investing in new production lines, we need a new level of long-term commitment to defence production, ensuring industrial capacity for decades to come."

Money is also needed for innovation and for ammunition. "The EU has an important role to play in enabling the strengthening of Europe's defence industrial base," he says, noting that a stronger EU means a stronger NATO. "We also need to have a longer-term plan on how to improve our defence readiness. The current security climate demands it," Häkkinen says.

Häkkinen also urges more European defence collaboration, not just because of Russia's war of aggression in Ukraine but because of "the uncertain outlook of global security." He shares the view that there can be no wholesale reliance on the United States. "The EU must play its key part in the building of capabilities for Europe. This requires the immediate strengthening of →



Finnish Minister of Defence Häkkinen at NATO in October 2023.



Italian Marines with the Italian Navy's San Marco Brigade trudge through the snow during a live-fire training near Harstad, Norway, as part of Exercise Nordic Response, March 2024.

our industrial capabilities and procurement, as is being done, as well as maintaining and strengthening our cutting-edge technologies for the long term." For Finland, those should include secure connectivity, quantum computing, and new space capabilities.

Might Finland one day be forced to fight a contemporary version of its 1939-40 Winter War with the Soviet Union? Beyond taking advantage of its wooded and swampy border with Russia, Finland could once again rely on its army's mobility, drawing any invader into tough terrain and defending with well-equipped small infantry

units, supported by armoured vehicles. "Finland has made significant investments in some key areas which we have decided to prioritise," Häkkänen said, citing the multinational Common Armoured Vehicle System (CAVS) programme, which aims to develop and field a modern 6x6 vehicle platform. Led by Finland, Germany has now joined Latvia and Sweden in the endeavour. The Finnish Defence Forces have so far ordered some 130 CAVS 6x6 vehicles from Finnish-Norwegian defence company Patria, and deliveries are underway.

"The most significant challenge lies in our mindset, in our collective ability to prioritise defence as a vital part of securing our democratic societies"

"Within the programme, we are looking to create a cross-border supply chain of spare parts, production facilities and maintenance know-how for the vehicles," he says. Once again, Häkkänen points to the benefit for industry from such an approach. "This will strengthen the supply chain and help to keep down the life-cycle costs while strengthening the European defence industrial base."

Then, of course, there is artillery ammunition production. Finland, which has one of the largest artillery inventories in Europe, has already increased its domestic artillery ammunition production fivefold compared to levels before the Ukraine war. "We have decided to make investments that will more than double our current production capacity by 2027," he said.

Häkkänen's key tasks for EU defence:

- › Wise investments to bolster defence capabilities
- › Enhanced defence readiness and preparedness across Europe
- › Deepening cooperation with NATO initiatives
- › Integrating new technological innovators to bring cutting-edge solutions to defence
- › Exploring and using new sources of financing to support EU initiatives

Finland's ties to the European Defence Agency (EDA) have been strong from the start. EDA's first-ever research and technology contract in 2005 was awarded to a consortium led by Patria for a study on remotely piloted air systems and technologies, known as RPAS. Finland is part of one of EDA's longest-running projects, MARSUR, that gives EU navies a clearer overview of activity on the seas. Finland was also part of EDA's long-running helicopter training programme, which the Agency handed over to Portugal at the end of 2023.

It has also benefited from the EU Satellite Communications (SatCom) market, set up by EDA, not to mention taking part in EDA's live-fire cyber exercises to improve European cooperation between Member States' national, military Computer Emergency Response Teams (CERTs). Patria is also part of EDA's biggest research and technology project to date, to develop highly autonomous combat unmanned ground systems – the Combat Unmanned Ground Systems (CUGS) project.

"EDA's work on enablers, such as military airworthiness, has been of direct benefit to our national work in the area," Häkkänen said. EDA's work in identifying areas for capability development are also welcome. "It is in this architecture of arranging European cooperation that EDA has had a key role and I wish to see this role further increase," he adds. "EDA, with its ability to aggregate Member States' requirements and to offer cooperative solutions based on a European overview, is a key asset."

A fundamental question still needs to be addressed, however. Are Europeans willing to support a genuine European Defence and Technological Industrial Base (EDTIB), with high force readiness and sustained investment? "I believe the most significant challenge lies in our mindset, in our collective ability to prioritise defence as a vital part of securing our democratic societies," Häkkänen says. "It is now our key task to prepare wise investments and ensure our ability to maintain a new level of defence readiness in Europe, in a deepened cooperative approach with NATO. With this innovation and commitment that we have begun to build in Europe, I believe we will be stronger and more effective in our defence, together." 



The Finnish flag is raised at NATO for the country's accession to the alliance on 4 April 2023.



Finnish troops on the march at Lappeenranta Finland, near the Russian border, December 1939.



Versatile, inventive, committed: EDA helps transform EU defence

Tucked away on a residential street in Brussels, a relatively small European Union agency with a limited but highly effective budget celebrates two decades of operation. In the fog of war – Ukraine's war is our war too – it is easy to lose sight of what has been achieved. The European Defence Agency has a fraction of the staff of a single country's defence ministry, owns neither troops nor weapons, and is certainly not a kind of mini NATO.

From launching maritime surveillance technology among European navies in 2006 to procuring 155mm ammunition on behalf of Member States in support of Ukraine in 2023. We have been active in research and development from the outset. Our joint investment programme on force protection, also launched in 2006, remains one of the most significant so far, with the involvement of 16 Member States and Norway.

From helicopter training to coordinating our EU approach on hybrid threats, and from supporting innovative tech start-ups to helping to develop an Airbus A330 Multi Role Tanker Transport (MRTT) fleet, EDA's civilian and military experts have done their utmost to help our armed forces, train together and anticipate tomorrow's defence needs.

For many years, there had been two differing groups on EU defence: those that felt huge progress had been made, and those who were impatient to see new European capabilities jointly developed and operated by Member States. With Russia's unprovoked and unjustified war against Ukraine, almost everyone has joined the second group. And rightly so.

The European Union is focused on helping Ukraine and the European continent defend itself, and determined to support the Ukrainian military by providing crucial supplies like ammunition and missiles, as well as training and financing.

Now's the time

Europe's failure in the former Yugoslavia in the 1990s contributed to the launch of the 1998 Saint-Malo Declaration. The goal was to allow us Europeans to act when the United States was busy elsewhere, stating that: "The Union must have the capacity for autonomous action, backed up by credible military forces, the means to decide to use them, and a readiness to do so." Twenty-six years later, fulfilment of the declaration remains elusive.

"Defence will remain a top priority for the EU in the coming years as we live in a more hostile world"

While political support for defence in the EU has ebbed and flowed, over the past 20 years EDA has never relented in pursuing European cooperation, often without fanfare. EDA has been supporting its Member States, coherent with NATO. Our growth and success can be traced back to the establishment of the Agency.

Our clear mission, outlined in the Treaty on European Union distinguishes us as the only EU agency with this legal basis. While we have transitioned from primarily ad hoc projects to supporting ongoing initiatives like Permanent Structured Cooperation (PESCO), we've remained adaptable. Our focus now extends beyond capability development to also supporting EU operations, and of course Ukraine.

What Europeans want

It is a collective effort. We now support the European Defence Fund, which co-finances multinational defence projects using money from the EU's long-term budget. There, EDA helps manage projects. We have new European Commission-led initiatives, such as the Act in Support of



Chief Executive Jiří Šedivý has been at the helm of the European Defence Agency (EDA) since May 2020. A former Minister of Defence for Czechia and a former NATO Assistant Secretary General for Defence Policy and Planning, he reflects on the Agency's two decades, its milestones, the obstacles it has faced, and where it goes next.

Ammunition Production (ASAP), also using the EU budget to help ramp up defence production capacity and to incentivise cooperation between Member States in defence procurement. Other new initiatives in defence are under discussion.

After all, it is what Europeans want. Fully 77% of EU citizens are in favour of a common defence and security policy among countries, while 71% agree that the EU needs to reinforce its capacity to produce military equipment, according to the latest Eurobarometer poll published in May.

I often caution that our efforts are not a sprint but a marathon, and when we speak of cooperative capability development one could even compare it to a long-distance Ironman Triathlon. We cannot lose our focus and we must be patient.

An agency fit for the future

We must not rest on our laurels either. EU Ministers of Defence have updated the Agency's mandate to address the worsening security situation, as well as the Agency's evolving role. For the second time in EDA's history, our strategic guidance, known as the Long-Term Review, has been fortified and now outlines how we can better help Member States throughout the cycle of developing the capabilities we need. We can also help with off-the-shelf purchases of weapons, ammunition and equipment if countries so choose.



EDA has been instrumental in securing supplies of 155mm ammunition for Ukraine and Member States.

Why does this Long-Term Review matter? In short, it puts us in a stronger position to aid Ministries of Defence in the EU. It means that current and future EU defence initiatives, policies, and legislation will build off each other, not in parallel or in competition. We will also work more closely with NATO.

At our Steering Board in May, Ministers of Defence laid the basis for a more ambitious EDA. It is a strong signal that the Agency is integral to cooperative efforts to strengthen capabilities at this crucial time.

Yet we are not in the business of producing high-level documents for their own sake.

Last year, we helped identify the priorities for EU capability development in the 2023 Capability Development Plan. We are now moving to suggest promising

collaborative opportunities in the short and medium term. Taking into account what Ukraine needs, such areas of development could involve air defence, countering unmanned aerial systems (UAS), loitering munitions and a focus on electronic warfare systems. Of course, some things will take more time, and we need to work together on underwater and seabed protection, the next generation of fighting vessels and possibly a multipurpose helicopter, not to mention the Main Battle Tank.

Defence will remain a top priority for the EU in the coming years as we live in a more hostile world. Europe must be able to defend its interests. We must forge a European defence industry and market. The European Defence Agency, versatile and inventive, remains at the ready.

Here's to 20 more years – at least! ◀



EDA Chief Executive Jiří Šedivý sits in the cockpit of an A400M during a visit to the Melsbroek air base in Belgium, 9 April 2024.



"Let there be an agency": EDA's birth and the 'irresistible logic' of defence cooperation



The decision to create EDA was taken



Nick Witney was the European Defence Agency's (EDA) first Chief Executive, responsible for setting up the Agency in 2004. A former British Ministry of Defence official and now a senior policy fellow at the European Council on Foreign Relations, he talks to *European Defence Matters* about the heady optimism of the early 2000s and whether there can be a truly European armaments market.

In London in the spring of 2004, Nick Witney's suitcase was packed, ready for an extended stay in Brussels. Having already worked on the concept of a European Union 'back office' to follow through on the EU's political ambitions for defence, Witney, then Director-General for International Security Policy at Britain's Ministry of Defence, was well-placed to lead a new agency. There was just one snag. In Paris, a senior French defence official was also waiting for the all-clear to take up the same post.

"I was sitting on a packed suitcase, waiting for the then EU High Representative Javier Solana to decide between myself and a French candidate who was also sitting on a packed suitcase," he recalls.

His rival was just as well qualified, Witney adds, and Solana was reluctant to choose, hoping France and Britain could agree between them. "It was one of those things where two governments lock horns over which of them should have this honour and privilege," he says. Eventually, France stepped back. "I got summoned," Witney says.

It was a heady time to be in Brussels for those in favour of European integration. "It's almost impossible to realise now the sense of optimism and ambition which was felt within the European Union at the start of the millennium," he asserts. And not only because of agreement on a first-ever European Security and Defence Policy, following the Saint-Malo Declaration of 1998. The euro had just been introduced, the

Union was taking on 10 new Member States following the fall of communist regimes across central and eastern Europe, and EU governments were eager to join the new Battlegroups initiative. "Everyone was desperate to get on board."

There was a less glamorous side to setting up EDA. "We had a lot of tedious stuff to do," Witney says. A free hand in deciding EDA's exact role was a blessing and a curse. The EU summit in 2003 in Thessaloniki, Greece, had called for an 'agency in the field of defence capabilities development, research, acquisition and armaments'. "After it was said 'let there be an agency', the design was up to us," Witney says.

"While the broader European defence project may have fallen short of its early ambitions, EDA stands as a testament to what can be achieved through cooperation and dedication"

On 12 July 2004, the day Member States formally adopted the Council Joint Action 2004/551/CFSP on the establishment of the Agency, Witney was putting together his embryonic staff. The EDA's Steering Board, made up of Ministers of Defence from each Member State, met for the first time in autumn 2004. By the end of 2004, the Agency was up and running in temporary offices before moving to its own building in 2005.



© European Council

...n at the Thessaloniki European Council in June 2003.

Euro-optimism to financial crisis

Crucially, EDA was to be an 'intergovernmental' agency, directly funded and controlled by the EU Member States who joined. (Following Denmark's decision to join EDA in 2023, all EU countries are in.) "We began a process of projects, which were signed up to with a lot of enthusiasm," remembers Witney.

For instance, the groundwork began for what later became the EU Satellite Communications (SatCom) market. "We began thinking about gaps in air-to-air refuelling, which later became the multi-role tanker transport MRTT fleet. In 2006, the joint investment programme on force protection began."

Well before the European Commission 2024 proposals for a European Defence Industrial Strategy (EDIS), Witney says EDA set out a strategy to promote a defence industry functioning on a continental scale, no longer spending in protected national silos. "While the broader European defence project may have fallen short of its early ambitions, EDA stands as a testament to what can be achieved through cooperation and dedication... I feel like a proud parent."

Tougher times were to come, however, most notably the global financial crisis from 2007 and the ensuing euro zone crisis of 2009, when EU governments were forced to dramatically slash defence budgets. That essentially led to the renationalisation of European defence, even if EDA's work continued, pushing ahead with maritime surveillance MARSUR, the EU SatCom market and joint

procurement of Carl-Gustav ammunition, to name just a few projects.

Unfinished symphony

Witney's team of directors and staff also helped lay the ground for EDA's overarching vision today: pooling efforts and resources; harmonising project requirements to meet military needs; developing research and technology; and providing publicly available defence spending data and priorities for capability development that serve to guide Member States.

What was true then is still true today about EU defence, Witney says. He talks of an "irresistible force of logic" for EU countries' militaries, industries and governments cooperating. While defence is and will remain a national responsibility of the EU's 27 countries, EDA was created to help its members buy, develop and operate new assets together, helping to save money, allowing militaries to work closely together and reinforcing NATO.

But standardising equipment is not easy. Industrial interests are always at play. Member States prefer to buy nationally. So, for Witney, that irresistible force of logic often meets with what he describes as the "immovable object of vested national interests". "I do have a sense of disappointment that, over the past 20 years, Member States who agreed so clearly and fulsomely at ministerial level that pooling and sharing were essential – and linked to how the technological and industrial base develops – have not held true to those truths which I think they still subscribe to," he says.

European defence cooperation is gaining momentum again, Witney says. "The European Defence Fund has been a success. It's not huge, but it is a way of encouraging more cooperation amongst Member States, even if there is some irony in that the Commission nudges the states with their own money, as the fund's money comes out of the EU budget."

Safe from harm?

Depending on how the war in Ukraine progresses and, of course, which U.S. president is in the White House in January of 2025, change will come. "If the United States follows through on its often-expressed intention to scale back, Europeans will be panicked into realising that they need to be more proactive about their own defence," Witney says. "Europeans, who already spend massively more on defence, could make themselves more secure if they cooperate and save more."

Could this spark a realisation that the short-term needs demonstrated by the Ukraine war, such as building defence and industrial capacity rapidly, must be addressed collectively and urgently? EDA is seeking to play a central role in this process, especially with ammunition (*see EDM page 27*).

"Ultimately, EDA depends on the decisions made by national capitals," Witney says. "It is only when capitals do more than just talk about collaboration that EDA can forge ahead."

To listen to a podcast with Jiří Šedivý and Nick Witney, go to: <https://eda.europa.eu/news-and-events/podcast>



© Frédéric de la Mure/French Ministry of Foreign Affairs

French President Jacques Chirac and British Prime Minister Tony Blair in Saint-Malo in December 1998.

The Saint-Malo Declaration: a catalyst for today's EU defence cooperation and the birth of the European Defence Agency (EDA)

The Saint-Malo Declaration of 4 December 1998

"The Union must have the capacity for autonomous action, backed up by credible military forces, the means to decide to use them and a readiness to do so, in order to respond to international crises."

- At the Franco-British Summit in Saint-Malo on December 3-4, 1998, the leaders of France and the United Kingdom agreed that the European Union should be able to act militarily in international crises when NATO is not involved
- The agreement is often considered the catalyst for today's European defence collaboration
- Earlier in 1998, the British and French governments determined that enhancing European defence would only work within the framework of the EU
- Saint-Malo was a response to the failure of the Europeans to act in the Balkan wars of the 1990s
- In 1999, the EU created its European Security and Defence Policy, later renamed the Common Security and Defence Policy (CSDP) and in 2004, EDA was established

EDA projects over the years

Promoting a culture of cooperation in defence:

- We help our armed forces spend better
- We help our militaries work together
- We anticipate tomorrow's defence needs
- We train together



AIR-TO-AIR REFUELLING

MRTT is one of the most successful cooperation programmes involving OCCAR and NSPA



AMMUNITION PROCUREMENT

Instrumental in securing 155mm ammunition for Ukraine and Member States



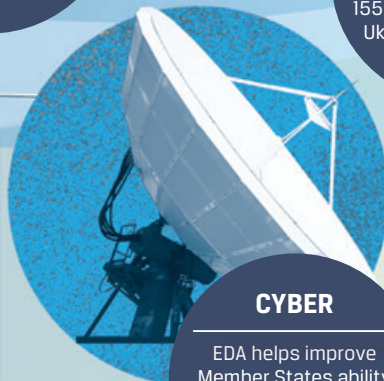
MARSUR

Joins together navies for the exchange of maritime surveillance information



AIRMEDEVAC

An efficient and cost-effective commercial option for aeromedical evacuation



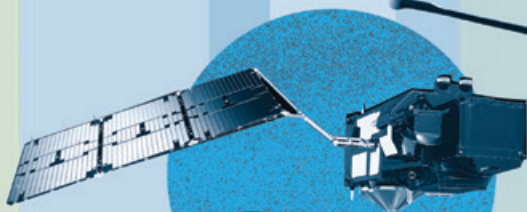
CYBER

EDA helps improve Member States ability to detect, withstand and recover from cyber attacks



C-IED

Supporting the largest multinational exercise in Europe to help train technical skills



SATCOM

Sources commercially available SatCom and CIS services for Member States



HELICOPTER TRAINING

Managing multinational helicopter programmes focusing on education, training and exercises



EUROPEAN DEFENCE AGENCY: 20 YEARS PROMOTING EUROPEAN DEFENCE COOPERATION



EDA launches **maritime surveillance** project MARSUR

EDA establishes the **Joint Investment Programme on Force Protection**

EDA signs Administrative Arrangement to allow closer cooperation with **Norway** 🇳🇴



EDA produces first EU priorities for capability development.

The **Capability Development Plan (CDP)** is approved by Ministers of Defence (MoDs)

EDA presents the **European defence research and technology strategy**

EDA launches the **European Air Transport Fleet (ETAF)** programme

EDA delivers the first harmonised **European Military Airworthiness Requirements**

EDA starts R&T programme on European **Unmanned Maritime Systems**



EDA starts assisting EU's Ministries of Defence to move towards **green, resilient, and efficient energy models**

Croatia 🇪🇪 joins EDA

EDA signs Administrative Arrangement with **Serbia** 🇷🇸

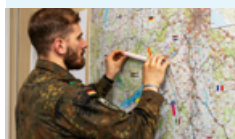
2004 2006 2007 2008 2009 2011 2012 2013 2014

EDA **begins operations** in Brussels

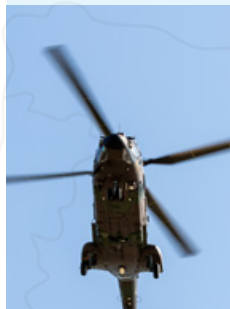


Bulgaria 🇧🇬 and **Romania** 🇷🇴 join EDA

EDA launches its Project Team **Personnel Recovery** to protect deployed armed forces



EDA holds its first multinational **helicopter training exercise**, in France



EDA signs an Administrative Arrangement with **Switzerland** 🇨🇭

EDA's **EU SatCom Market** begins with first contract to source commercially available satellite communication services for Member States



EDA aids the European Union Force in Bosnia-Herzegovina, **Operation ALTHEA**, by contracting air-to-ground surveillance services





EDA starts promoting MoDs' common interests in the framework of **Single European Sky**

EDA lays the basis for the development of the Airbus A330 multi-role aircraft fleet, including **air-to-air refuelling** capability, which in 2023 is cleared for operations worldwide

EDA signs an Administrative Arrangement with **Ukraine**

EDA procures **Carl-Gustaf ammunition** on behalf of Member States



Creation of **PESCO**: EDA sets up the PESCO secretariat together with EEAS & EUMS

Ministers of Defence approve the **Long-Term Review** of EDA, re-enforcing the Agency's role

EDA transfers its **European Air Transport** training to a new centre in Spain

EDA initiates the **aeromedical evacuation** (AIRMEDEVAC) services project worldwide



EDA produces the first overview of Member States' defence plans and programmes - the **Coordinated Annual Review on Defence (CARD)** - as a basis for joint projects

Denmark joins EDA

EDA signs an Administrative Arrangement with the **United States Department of Defense**

EDA transfers its **multinational helicopter programme** to the multinational helicopter training centre (MHTC) in Sintra, Portugal

EDA presents **22 EU capabilities development priorities** as the baseline for EU defence planning



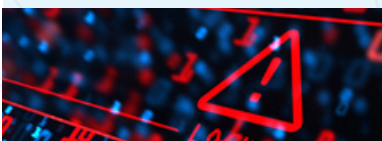
2015 2016 2017 2018 2020 2022 2023 2024



EDA establishes the **Overarching Strategic Research Agenda**

EDA's helicopter exercise '**Cold Blade**' takes place in the Arctic

EDA aids coordinated European approach to **hybrid threats**, hosts its first table-top exercises



EDA revises EU priorities for capability development with **2018 Capability Development Plan**

EDA awards its first **prizes for defence innovation** in support of emerging technology



EDA begins managing projects of the **European Defence Fund**, which co-finances multinational defence projects using money from the EU's long-term budget

Ministers of Defence establish the **Hub for EU Defence Innovation (HEDI)** within EDA



EDA celebrates 20th anniversary with **second Long-Term Review**, as Member States cement the Agency at the centre of EU defence collaboration, multinational training, and capability development

EDA delivers on its commitment to procure **155mm ammunition** on behalf of Member States and in support of Ukraine





SatCom in operation during an EU mission in Niger.

"Life is not an IKEA catalogue", goes the joke in parody videos online as a large dog urinates on the carpet of an immaculate bedroom. But the catalogue of the popular Swedish furniture maker is an excellent way of understanding how EDA's EU SatCom Market project works.

EU governments, militaries and other users can browse and select from a variety of SatCom services and equipment to obtain what they need in support of a specific task, be it operations in the Sahel or secure communications during a high-level summit meeting, says Heinrich Krispler.

"Whether it's a centralised phone system, satellite terminals, or a subscription for broadband internet, the process is designed to be user-friendly, fast, cost-effective and efficient," he asserts. "If a desired item is not listed in our service and price catalogue, EDA conducts market research and feasibility studies to provide exactly what the customer requires."

EU SatCom Market: A **one-stop shop** for effective satellite and communication ser



Currently the largest project by the European Defence Agency (EDA), it helps provide commercially available satellite communications (SatCom) and communications and information systems (CIS). Its customer base includes national defence ministries, as well as EU civilian, training and military missions, and the EU's strategic headquarters in Brussels.

EDA, in support of its Member States, has become one of the largest satellite customers in Europe thanks to this project, build up gradually since 2009. And appetite is still growing. After processing orders under the previous four-year contract, which had a ceiling of €77.5 million, a new contract was set up in early 2024, allowing a higher ceiling of €250 million.

Heinrich Krispler, EDA's Project Officer responsible for EU SatCom, explains.

Customers can choose from a plethora of services, such as raw bandwidth in various frequency bands (L, C, Ku and Ka), satellite phones, and many more. Each service is detailed with service features, terms and conditions and a price tag, ensuring transparency and ease of selection. This approach not only streamlines procurement but also ensures competitive pricing by regularly updating the catalogue and maintaining a thorough market overview.

Since its inception in 2009, the EU SatCom Market project has grown significantly, now involving 36 contributing members. It supports various missions and operations, including those in Ukraine and other Common Security and Defence Policy (CSDP) missions and operations. "For example, broadband communications and a restricted CIS infrastructure between Brussels and EU training missions are facilitated through this framework," Krispler explains.

'We lower prices where we can'

One of the reasons for the success of EDA's project is the high demand for reliable SatCom services in areas where terrestrial

networks are unavailable or unreliable. Satellite communication has proven to be a vital alternative, offering consistent service worldwide, including in remote and challenging environments.

It is also cheaper to work through EDA and shows one of the classic benefits of EU defence cooperation. "We are one of the largest satellite customers in Europe, so we can obtain the best prices for Member States. They would not get that by contracting on their own directly," Krispler says. "Perhaps like IKEA, we are hard to beat on price," he says.

"We allow commanders in the field to make quick decisions based on real-time data," Krispler says. "To give you an idea, drones connected via satellites can provide immediate surveillance results, which are then integrated into the common operational picture and lead to information and decision superiority. That's the kind of rapid information exchange that really makes a difference in the effectiveness of military operations," he adds.



Sentinel-3.

acceptance by the project members. "What's more, EDA tracks major issues, communicates with Member States, and provides regular updates on the service and price catalogue," Krispler says.

New constellations

One of the significant achievements of the project is the standardisation and centralisation of SatCom services, which were previously fragmented and often costly. By offering a one-stop shop for various SatCom and CIS services, EDA has streamlined the process.

EDA is focused on constantly expanding and improving the EU SatCom market project. This includes preparing for new tenders, updating procurement arrangements, and improving the service and price catalogues.

"We are always looking to provide even more reliable and advanced SatCom services to support EU missions and operations, ensuring that communication is seamless,

secure, and always available," Krispler says.

Recent advancements in satellite technology, particularly the development of Low Earth Orbit (LEO) constellations like Starlink and OneWeb, have revolutionised the availability and quality of SatCom services. These new constellations provide high-speed internet and support real-time communication, even in the most remote parts of the world. Medium Earth Orbit (MEO) constellations, as well as LEO, are crucial for military operations, where commanders need instant access to information and communication.

Ukraine is also seeking EU SatCom Market services, which Member States could sponsor and be partly refunded through the European Peace Facility.

The project not only meets the diverse needs of EU customers and users, but also sets a benchmark in procurement and service delivery. "As the project continues to evolve, the EU SatCom Market project promises to play an increasingly vital role in supporting EU missions and operations worldwide," Krispler says. **K**

Essential and cost-effective services across Europe

So, what is EDA's role exactly?

EDA acts as the project manager for the EU SatCom Market, coordinating through the contractors Telespazio France, Thales and Airbus and ensuring the smooth delivery of services. Krispler holds regular meetings with providers, manages the tender process, and ensures compliance with EU procurement laws. EDA also advises project members on the best services to meet their needs, conducting meetings to define requirements.

An EDA web-based platform that Krispler and his team manage supports the entire lifecycle of an order, from request to delivery and payment of the services. Customers log into the platform and submit their orders. They are then validated and forwarded to the contractor. The system generates detailed order requests, feasibility studies, and pre-orders, ensuring that all services are listed with precise costs and specifications.

Once an order for satellite services is placed, EDA manages the allocation of funds, invoice management, and payment processing. This approach means that services are always pre-paid-per-use, and payments are made promptly upon invoice

EU SATCOM Market at a glance:

- > Reliable and secure satellite technology for Europe's capitals and EU institutions
- > Services for military missions, intelligence, communication, and internet in the field
- > More than 800 SatCom orders handled
- > Project has 36 contributing members
- > New contract has a higher ceiling of €250 million
- > Telespazio was selected in 2024 to be the main contractor for SatCom services
- > In addition, Thales and Airbus ensure the delivery of all kinds of CIS services
- > Could be made available to Ukraine, with Member States as sponsors



The Bundeswehr Technical Center for Protective and Special Technologies in Oberjettenberg, Germany, carries out a blasting test on a Vehicle Borne Improvised Explosive Device (VBIED).

The development of Test and Evaluation centres for defence systems was one of the European Defence Agency's (EDA) priorities at its inception in 2004. A network connects the centres today, making T&E – as it is known in the jargon – one of EDA's longest-running endeavours. **Bruno Serrano** and **Emiliano Cappello**, experts in the field at the Agency's Industry, Synergies and Enablers Directorate, explain why this function is so important.

Testing, one, two, three: How EDA built a **Test and Evaluation** network

Two decades ago, the document 'Towards a European Research and Technology and Testing and Evaluation Strategy' gave vital advice to a young European Defence Agency. As EDA absorbed the Western European Armaments Group (WEAG), it showed that the way forward should not only be Research & Technology (R&T) but also Test and Evaluation (T&E). Dated 13 September 2004, the document reads: "To summarise, the availability of a test and evaluation capability for defence systems is strategically essential for European defence."

That statement is found mid-way through the 44-page document. It reflects the discreet profile that Test and Evaluation has maintained over the years – and its gradual, yet significant, transformation. Shifting from a focus on national capabilities to harmonised tests and networks of test centres, the change underscores the importance of collaboration among Member States' armed forces, industry and government. All now realise that operational, technological, environmental

and financial risks are reduced through testing and evaluation.

From handbook to digital database

"In 2004, EU defence cooperation was only just getting going," says Emiliano Cappello, EDA's Project Officer Test and Evaluation. "It was unclear if the network of test centres would take root," he adds. In fact, prior to EDA's efforts, each nation focused on building its own infrastructure. Efforts to collaborate on weapons testing often faced challenges related to a lack of a trust-based environment.

"The EDA Defence Test and Evaluation network provides an engineering function that supports Member States in both capability and technology development. It also enables interoperability"

It all started with a paper handbook, with one of the principal aims being to avoid overlapping capabilities among Member States. "In the beginning, we produced a

handbook of test centres. Now EDA, together with Member States test centres, has built up a network database of testing centres from Portugal to Finland, all across Europe," says Bruno Serrano, currently Project Officer Airworthiness at EDA.

With more than 300 organisations and entities contributing data, the database allows Member States' representatives to share their capabilities and infrastructure. It also goes beyond being a database. It is a strategic programme for the creation of a European network of defence centres that can support both technology and capability development. "Connecting civilian test centres and supporting the technology and capability development of new systems is now a particular focus," says Cappello.

The Defence Test and Evaluation Plenary Group meets three times a year. Thanks to EDA's work, the 'Defence Test and Evaluation Base' (DTEB) is now part of the technological foundation of EU defence, which is addressed in a revised strategy for 2025-2035. This new strategy aims to enhance the role of the DTEB, "which is particularly important nowadays in an evolving geopolitical environment where jointly developing and testing new

technology and capabilities is needed more than ever," says Serrano.

Towards harmonisation

Testing and evaluation are essential because they provide the ability to demonstrate, measure and analyse the required performance of defence systems, so that any operational deficiencies and risks are understood. They allow possible mitigating actions to be identified. The sheer complexity of defence systems means procedures and tools check compliance with technical and operational requirements. That comes mainly in the procurement stage but also, where necessary, throughout the entire life cycle of the product until decommissioning starts.

Budget pressures are a reality, so European T&E makes sense. However, one of the key initiatives needing traction is harmonising ammunition testing requirements among Member States. "This has become especially crucial with the increased demand for ammunition during Russia's war of aggression in Ukraine," says Cappello.

The qualification of munitions in Europe is carried out by applying comparable standards at the level of Member States. In practice, different interpretations, and application of the standards, can often lead to different procedures in the qualification process. However, these differences lead to relying exclusively on national testing laboratories. "It is something that should be reconsidered as a factor in the future harmonisation of ammunition qualification requirements," Serrano says.

The lack of synthesis is a questionable burden for ammunition producers. Each European manufacturer must apply slightly different qualification procedures for each Member State. "This can result in considerable associated costs," says Cappello. "Imperfect harmonisation also has a negative impact on interoperability, reducing the chances of ammunition exchange between Member States," he says.

EDA is now working with Member States towards harmonisation of requirements on ammunition safety. This could enable intergovernmental recognition of qualification procedures, within the scope of respective national responsibilities, potentially leading to a reduction of the financial burden for Member State authorities. [K](#)



The Centauro II vehicle undergoes electromagnetic compatibility tests ensuring performance and safety at the Army Multifunctional Experimentation Centre in Cepolispe, Italy.



The Bundeswehr Technical Center for Land-Based Vehicle Systems, Engineer and General Field Equipment in Trier, Germany, tests the MOWAG EAGLE V armored vehicle on the roller bench.

T&E's goals:

- > Connect test centres in Europe
- > Discuss testing needs, procedures and Test and Evaluation gaps
- > Identify areas of cooperation between test centres
- > Update the database as Member States develop testing facilities and competencies
- > Better integrate test and evaluation expertise into projects
- > Revise the test and evaluation strategy for the next decade
- > Harmonise ammunition-testing requirements among Member States
- > Allow personnel exchanges between test centres in different countries

**Anna Wieslander,
Director for Northern
Europe, Atlantic
Council**



Swedish Navy CB-90 fast assault boats prepare to enter the USS Gunston Hall, a US Navy amphibious assault ship, prior to Exercise Nordic Response 24, on 28 February 2024.



Anna Wieslander is the Director for Northern Europe at the Atlantic Council and Chairwoman of the Institute for Security and Development Policy in Stockholm. Wieslander, who is also the Secretary General of the Swedish Defence Association, talks to *European Defence Matters* about Sweden's new NATO membership, Russia's war economy and whether there can be a credible European pillar in the alliance.

"A target of spending 3% on defence is more realistic"

EDM: The war in Ukraine has prompted Europe to break taboos. But it has also exposed years of neglect. How do you rate progress so far?

We must remember that our urgency to help Ukraine is not only altruistic. In the new strategic documents of the European Union and NATO that date from 2022, Russia's war of aggression is defined as a threat to European security. So it's in our interests to keep helping Ukraine. Ukraine is fighting our fight.

Of course, there has been a deepening of the understanding that European defence cannot exclusively be directed towards crisis management missions outside of the European territory, as it was in the past. For NATO, since Russia's illegal annexation of Crimea from Ukraine in 2014, deterrence and collective defence have been coming back at the core. So too for the EU, the calibration has become much more realistic.

We have seen how in the EU there are also a range of new initiatives that are

targeted at both helping Ukraine and developing deterrents, which was not really the case before 2022. EU instruments are particularly effective, not least the European Peace Facility, with more than €11 billion lined up to help Ukraine, and also we see now how the Act in Support of Ammunition Production is starting to kick in. That is something to build upon.

"Europe is in a low intensity war with Russia, as Russia is targeting our society day in and day out in various ways"

EDM: Europe's defence industrial base was neglected for many years. Now there is talk of moving to a 'war economy'. Does that make sense?

If you look at our adversary, Russia, it has entered into a war economy. It is dedicating a third of their budget this year to the military. In Europe, that's not the case. But the conceptual idea is useful to

understand that we are also at war, even if we're not directly conducting the war. So if we cannot handle it, or if we do not engage financially and step up, then Ukraine will fail. It is that simple.

Everyone should know that Russia has entered into a war economy. We are also facing massive hybrid threats from Russia. So in a sense, Europe is in a low intensity war with Russia, as Russia is targeting our society day in and day out in various ways, although not militarily.

Twenty-three out of 32 allies will meet the target of spending 2% of gross domestic product (GDP) on defence. You can say that's good, and in 2014 it was only a handful. But there are still several countries that will not reach the pledge that was made a decade ago.

It's more realistic to move up towards a target of spending 3% on defence, and I would like to see that as a NATO pledge for 2030. Look at Sweden: before the outbreak of the Second World War, we were spending 1.6% of GDP on defence, and then it increased to 10-12% in the years 1941 to 1944. Awareness now will help us deter Russia, but we need to do it now. It cannot wait.

EDM: Now that Sweden, and Finland, are in NATO, do you think this idea of a European pillar in the alliance might finally gain traction?

It's a very old concept but it never took flight until now, when everyone is talking about it. I think the hesitation in NATO has been that there cannot be a European Union caucus within NATO. That's an absolute no-no, because NATO is led by a non-EU state that is the United States, and then you have the United Kingdom now as a non-EU ally.

But you can still have a European pillar in NATO if you go beyond the EU definition of Europe. A European pillar in NATO would need to encompass all European assets, including Norway, Britain, and even Turkey, countries ready and willing to act, perhaps as first responders if the United States is strained elsewhere, such as in the Indo-Pacific theatre. The United States no longer has the ability to conduct two regional wars in parallel, as it did during the Cold War.

When it comes to strategic transport, command-and-control, air-to-air refuelling, missile defence, long-range strike weapons

and so on, the Americans provide between 70-90% of the enablers that the NATO defence planning process requires. This is not acceptable. It does not meet the rules that no country should have to provide more than 50%. But the Europeans are not living up to this ambition.

European allies and Canada need to pitch in to collectively provide at least 50% of all designated capabilities in NATO's defence planning process by 2030. Then you would have a European pillar in NATO.

EDM: Sweden has joined NATO. How has joining NATO changed your outlook on defence in Europe? What has it meant for you, personally, as a Swedish national and expert in the field?

My ambition has always been to secure Northern Europe collectively. I've strived for this, especially when Sweden and Finland didn't have ambitions to join. I believe Sweden's membership of the alliance facilitates the possibility of securing Northern Europe and creating what I've written about: a deterrence of denial across this area. I believe we have an opportunity to achieve that by being agile, forward-leaning, and signalling to Russia that we possess substantial assets, now that we're within one alliance. This makes any hostile action on our territory highly costly and risky for them.



Sweden joined NATO on 7 March, 2024.

So, we're on our way to creating an efficient deterrence against Russia's own anti-access area denial strategy. In my view, if we continue along this path in Northern Europe, it will benefit the entire alliance by strengthening European defence. We need the political determination to make this work. I think that's the most critical aspect. Despite the warnings, there's still a reluctance to take them seriously enough and feel the urgency.

EDM: Do you think that EU defence integration can deepen much further? If so, in what way?

It comes back to how much can we put within the European Union and its institutions, and how much can we do as European allies. As long as you have a reluctance among Member States, we will never move forward. Germany and the Nordics, for instance, are reluctant about deeper integration because their defence industry tends to be seen as a national instrument that is part of national security.

I believe the EU can play a role to get things going as an enabler, particularly when you see this discrepancy between what the industry wants when it comes to long-term commitments, and what states are ready to spend. Companies would like to have 10-year commitments, but governments do not like to make such long-term decisions. There the EU could step in with guarantees, much like a first-loss bank guarantee, for industrial orders.

Obviously, there's nothing wrong with Member State initiatives, and I think this is an important distinction. It will always be important to have capitals involved. Look at the German initiative, the European Sky Shield, where they have a group of countries coming together to provide stronger missile defence. You can also do more in groups like the Joint Expeditionary Force led by Britain, where you have a group of countries coming together to increase deterrence in Northern

Europe by being active on the operational side.

What we really need to have is interoperability. That's so important. Our software needs to be interoperable, all our tanks should be able to use artillery of a certain kind. We can't have countries seeking a national benefit by only serving a single market with a certain product. Work on respecting NATO standards is also critical across the EU. [K](#)

Marie-Doha Besancenot, NATO's Assistant Secretary General for Public Diplomacy

War fatigue? The power of communication to keep Western unity alive



NATO Secretary General Jens Stoltenberg participating in a video recording.

Around the turn of the third millennium, two thousand years after the first Christian evangelists, a new term popped up in the English language: 'technical evangelist'. 'Developer evangelist' soon followed, as technology executives sought to generate credibility for a specific product or service in the industry amid the rapid technological advancement of the early 21st century.

Against the return of full-scale war to Europe and the reach of Russian disinformation, has the age now come for a 'collective defence evangelist'?

Marie-Doha Besancenot, NATO's new Assistant Secretary General for Public Diplomacy, says that there is a lot of honest talking to do in favour of protecting the Atlantic alliance and Ukraine. The merits of democracy, collective defence and helping Ukraine with military, financial and humanitarian aid are all up for discussion – and are often contested, polls show.

Besancenot can speak first-hand of this. At the NATO Youth Forum that took place simultaneously in Miami and Stockholm in May – in an effort to reach audiences beyond Washington and Brussels – the event involved those not already engaged in defence topics.

"The main message that I got from young people was that 'we are a sceptical generation' in the sense that they don't take values for granted," she says of her trip for the event with 1,000 in-person and 15,000 online participants. There, they could hear from NATO Secretary General Jens Stoltenberg, as well as other experts and leaders, about what NATO is doing right now, why and how.

"We can't just show up and talk about democracy. We must explain why we believe in democracy, why is it beneficial"

"Young people use the word 'sceptical' in a proud way, which is new to me and my generation," adds Besancenot, who began her career in 2005. "That means that we can't just show up and talk about democracy. We must explain why we believe in democracy, why is it beneficial to them as young citizens and let them decide."

Winning the argument

Getting the message to stick is harder, polls show. In Europe, the European Commission's DG COMM Public Opinion



Marie-Doha Besancenot, NATO's Assistant Secretary General for Public Diplomacy, talks to *European Defence Matters* about how the EU and NATO can make the best case to maintain public support for Ukraine, and about defence of Europe at a time of much upheaval worldwide.



Stoltenberg participates virtually in NATO's 2024 Youth Summit, which took place in Stockholm, and Miami, and online, in May 2024.

Monitoring Unit analysed a range of recent surveys from across the EU and beyond. The key findings showed that support for the European Union's overall response to the invasion, while still very strong, decreased when compared to 2022. If humanitarian aid actions are supported by almost 90% of EU citizens, and support for sanctions on Russia remains very high, numbers have slipped since the Russian war of aggression began. Humanitarian aid maintained the

highest approval, dropping by only three percentage points. Support for financial and military aid have decreased by nine and eight percentage points, respectively, according to a trend analysis of Eurobarometer surveys.

In the United States, a study by the Pew Research Center published in May found that shortly after the invasion, 42% of Americans said the country was not providing enough support to Ukraine. This

share has since decreased by nearly 20 percentage points. Meanwhile, the share of those saying that Washington is providing too much support to Ukraine has grown from 7% in March 2022 to 31% in April 2024.

Public communication may not be the first weapon that comes to mind when thinking about defence, but it can play a powerful role in keeping citizens engaged and supportive of their governments' actions in solidarity with Ukraine and →



Left to right: Delphine Houba, Alderwoman of Culture for the city of Brussels, Belgian Foreign Minister Hadja Lahbib, NATO's Marie-Doha Besancenot and Belgium's Ambassador to NATO Ariadne Petridis celebrate NATO's 75th anniversary in Brussels on 3 April 2024.



NATO ASG Besancenot visits Lviv, Ukraine in May, 2024.

each other. That is noteworthy when considering Russian disinformation campaigns, notably in Czechia, Estonia, Germany, Latvia, Lithuania, Poland and the United Kingdom. NATO's North Atlantic Council denounced the malign Russian efforts in a formal statement in May.

Being conscious of the audience that NATO and allied governments are trying to reach is also crucial. "Women and girls are disproportionately impacted by wars and conflicts, so it is NATO's business to care about this. In my field, which is communication and disinformation, it's also a valid point. It is NATO's business to focus on women as audiences too, and make sure they are well informed," she added.

'Not charity'

Communication is also a way to ensure citizens of allied countries understand and support NATO as a values-based alliance, whose final goal is to maintain peace. Besancenot, sitting down at the European Defence Agency's offices in Brussels, lays out the work done with campaigns, events and grants, which are currently framed by NATO's 75th anniversary. It is also an electoral year in many countries, amid the rise of populism and the far right.

President Vladimir Putin seems to be banking on a sense of war fatigue in the West to help achieve a Russian victory in Ukraine. "Ukraine is not charity. Support to Ukraine is an investment in our own security, and our leaders often make that case," says Besancenot, a graduate of France's École Normale Supérieure and who spent a year at

the French War College in 2021-2022. She took up her NATO post in September 2023.

From Miami to Lviv


If getting the word out among the young in Miami was intellectually complex, Besancenot's outreach to people in Ukraine, also in May, presented a different series of challenges. For starters, the Lviv Media Forum, supported by NATO, was partly held in a bomb shelter. The second largest of its kind in Europe, the event emphasised the power of storytelling to combat information fatigue.

Gone are the days when shooting a photo of what is happening at the front is enough to raise awareness. Now, international and national journalists in Ukraine – the latter group formed only by women as men are on the frontlines – must spend much more time in war zones to find personal stories and make sure that their coverage resonates with people at home.

"Reporters have had to turn to that kind of in-depth, very human storytelling to make sure that the interest is still there", says Besancenot.

The freedom and democratic spirit in which Ukrainian media continue working even when the country is under martial law is striking, Besancenot says, as reporters continue to freely question their leaders, cover developments, and often have honest exchanges with soldiers who were, until recently, also civilians. "They have managed to keep that space for Ukrainian independent media to ask those questions. The intention is to ensure that the country has the best tactics and prevents casualties," she says.

Besancenot can rely on a diverse team to fine-tune NATO's communications efforts. After a decade in the private sector, she was convinced that as a woman and a civilian, she had a lot to bring to the defence realm. "It is such an obvious fact that if you have diverse teams that reflect the whole society instead of having very similar profiles, you can just simply make better decisions that are profitable in the long run. It is very clear. I believe in that very deeply," she says.

And so, the evangelising for collective defence, for Ukraine, and for democracy goes on. 

NATO's four main communications objectives:

- > Deterring adversaries
- > Reassuring allied audiences
- > Showcasing allied unity
- > Maintaining trust in what NATO is and does



As many as 10 European Union Member States are now placing orders for ammunition under the European Defence Agency's (EDA) landmark procurement scheme to send urgently-needed 155mm artillery shells to Ukraine and replenish depleted Western stocks. With the first rounds bought under the scheme now being delivered to Poland, EDA's Deputy Chief Executive **André Denk** (pictured left), Head of Procurement **Gianluca Serra**, and Project and Contract Officer **Gian Casillo**, provide *European Defence Matters* with an update.

More EU countries order ammunition under EDA's scheme to aid Ukraine

L launched in March 2023 with an EDA project arrangement for the joint procurement of ammunition, the Agency created a pan-European facility for Member States – in record time.

Signed by all EU Member States and Norway, the project arrangement has led to orders by 10 Member States for the ammunition used in the self-propelled howitzers that European Member States have sent to Ukraine. The 155mm ammunition can be fired by Germany's Panzerhaubitze 2000, France's Caesar, Poland's Krab and Slovakia's Zuzana.

With firm orders by eight Member States so far worth €350 million, EDA has also ensured that industry provides the certification of compatibility required for all firing systems, so that the ammunition produced can be used effectively and safely. Of the orders placed, €250 million were before the end of September 2023, within the European Peace Facility (EPF) deadline for reimbursement to Member States for support to Ukraine.

"This demonstrates the strong confidence in EDA," says Deputy Chief Executive André Denk. "Joint procurement is the optimal way to support Member States in acquiring ammunition tailored to their national needs or for Ukraine. It also sends a powerful message to the industry, highlighting EDA's 20 years of dedication to the European defence technological and industrial base."

With a delivery time of 12-24 months, depending on the components ordered, the ammunition is now being produced by major European armament companies including KNDS, Nammo and Rheinmetall. The first deliveries were made to a military base in Poland in May. More are expected. "We

estimate a remaining delivery capacity of around €1 billion, so Member States can still place more orders," says Corporate Services Deputy Director and Head of Procurement Gianluca Serra.

"I encourage them to do so," adds Denk.

A different calibre

EDA has created a mechanism that is open for orders over several years, not just the coming months. This allows it to meet the needs of Member States to replenish national stocks and support Ukraine until mid-2027. EU heads of state and governments could decide to extend the life of the facility. The long-term success of the EDA initiative is linked to Member States' willingness to place orders via EDA. Member States have other options, including joining a lead nation to place orders or relying on their own national procurement schemes, or NATO's NSPA.

Now that EU countries have formally adopted a plan to use windfall profits from Russian central bank assets frozen in the EU for Ukraine's defence, putting 90% of the proceeds into the EPF, EDA's initiative is one possible way for Member States to support Kyiv. "Our instrument is open for Member States to place orders through EDA," says Procurement and Contract Officer Gian Casillo, who was instrumental in setting up the facility.

In the meantime, EDA is already looking into joint procurement

of 84mm anti-tank ammunition, both for replenishment of national stocks and to support Ukraine. The basis for this procurement is there. The 84mm ammunition is part of the same project arrangement signed in March 2023 for the 155mm procurement. [K](#)





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ASD Europe



INSIDE STORY: EU DEFENCE, THE NEXT 20 YEARS



The European Defence Agency (EDA) continues to evolve, playing a role in shaping the EU's defence policies, boosting capabilities, and encouraging collaboration among Member States.

To stay ahead, EDA is also helping EU armed forces keep an eye on new innovations and adopt them quickly, including digital and autonomous technologies. In the following pages, we discuss EDA's new core tasks, its action plan for autonomous systems, the importance of digitalisation and how artificial intelligence could give European forces the edge.

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In May, the European Union's 27 Ministers of Defence approved the European Defence Agency's 2024 Long-Term Review (LTR). A binding policy document for EDA, the LTR lays out responsibilities for the Agency, with a stronger focus on supporting Member States through the full development cycle of military capabilities. EDA now has five core tasks, rising from the three outlined in the previous, 2017 LTR. This time, aggregating demand towards joint procurement and defence innovation come into greater focus.



Etienne de Durand, Head of the Chief Executive's Policy Office at EDA, talks to *European Defence Matters* about how the Agency has strengthened its status as the intergovernmental defence nexus at EU level.

EDA steps up as intergovernmental nexus of defence at EU level

When writing a mission statement, one starting point for inspiration might be U.S. professor Michael Porter's quote: "The essence of strategy is choosing what not to do". For EDA, however, that was taken care of during its establishment almost 20 years ago, and in its legal basis, the 'Council Decision' of October 2015. EDA is neither an intelligence-gathering agency nor does it conduct military operations. It is far from being a kind of EU Ministry of Defence.

For years, it was enough to have the three tasks of being: 1) the main intergovernmental tool at EU level for deciding capability priorities; 2) the preferred defence cooperation forum, giving management support at EU level; 3) the bridge between Member States and wider EU policies.

"The LTR is both a mission statement and an identity statement"

But a new impetus in defence collaboration since 2017 with the Permanent Structured Cooperation (PESCO) and the European Defence Fund (EDF), as well as other initiatives, already meant EDA was playing a greater role than in the past, with its advice sought by EU institutions and taking on more project management both as part of the PESCO secretariat and in the EDF.

"Russia's war of aggression in Ukraine accelerated that dynamic," says Etienne de Durand, who is EDA's de-facto chief of staff and led the LTR reform negotiations with Member States. "We were being asked to be even more ambitious in our work, given the geopolitical context," de Durand says. "But it was also important for EDA to set out what we can, and cannot do, even with the broader mandate we have now. The LTR is both a mission statement and an identity statement," he explains.

With a letter sent to Member States in December 2023 from EDA's Head of Agency Josep Borrell, so began the intense process

of steering the review by de Durand and his team, the Chief Executive's Policy Office. This time, EDA did not have the luxury of taking a year to consider its path forward by circulating long, thoughtful papers, as it did in 2016 for the previous LTR.

'No brainer'

However, Member States were ready to reinforce the Agency. EDA had recently shown its worth by penning the 2023 revision of the EU Capability Development Priorities, agreed by Member States, to reflect the full spectrum of military potential and to serve as a key reference for EU initiatives. The success of setting up a 155mm ammunition procurement scheme in record time was in the Agency's favour, not to mention the new Hub for European Defence Innovation (HEDI).

"Building on the Agency's recent achievements, one of the questions we asked Member States was: what future role do you envisage for EDA in the aggregation of demand and joint procurement, as well as in defence innovation?" de Durand says.

Innovation, he asserts, was a clear marker for the new LTR. "We were struck by the fact that there is a lot of research and development going across EDA and the European Commission, with some real successes, and somehow that was not fully reflected in the 2017 LTR," he adds. So LTR 2024 core task number two was added: 'Enabling collaborative defence research, technology, and innovation'. "It was, frankly speaking, a no brainer," de Durand says.

Core task number four, 'Aggregating demand towards joint procurement', was less straightforward because some Member States were keen for EDA to become a full-blown procurement agency, while others were less so. "Again, we tried to be realistic about what we can and cannot do," de Durand says. "We've arrived at a good compromise. We signal that we can handle procurement tasks, though not all the time, as we are not primarily a

mental el

procurement agency. We can aggregate demand more effectively from Member States so that industry is not dealing with multiple, competing orders for equipment," de Durand says.

Clarity and visibility in EDA's anniversary year


The 2024 Long-Term Review makes clear too that EDA will need, now more than ever, to act as a facilitator, voicing national defence ministries' joint positions in EU civilian and defence policies. In effect, defence expertise is always needed to inform civilian policies that impact defence, from the Single European Sky initiative to the

regulation of chemicals, known as REACH. Given the flurry of EU security and defence initiatives in the past 6 years or so, it is now essential to ensure, through EDA, a strong intergovernmental voice is reflected here as well.

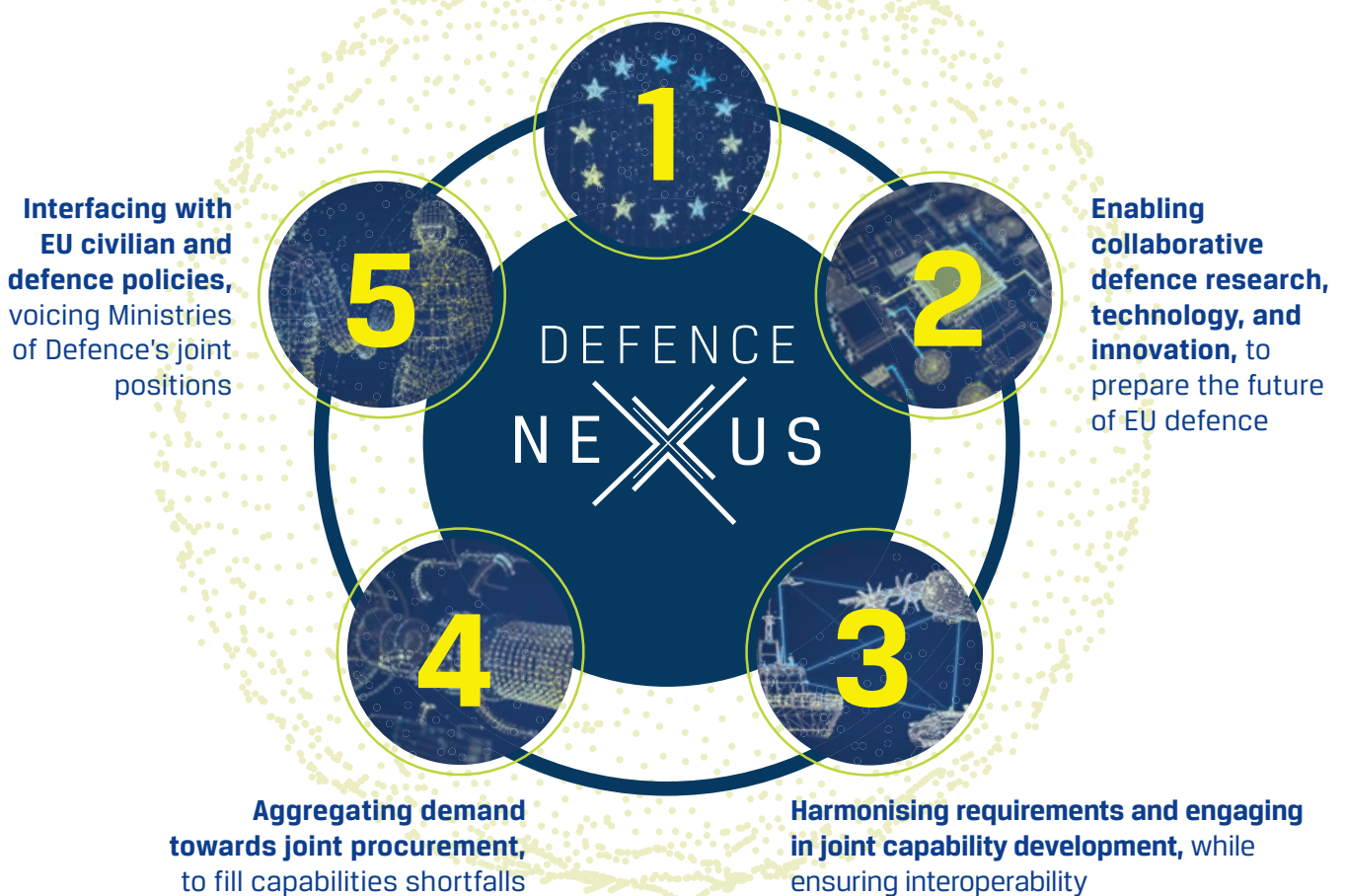
Coordination with NATO has also been newly stressed.

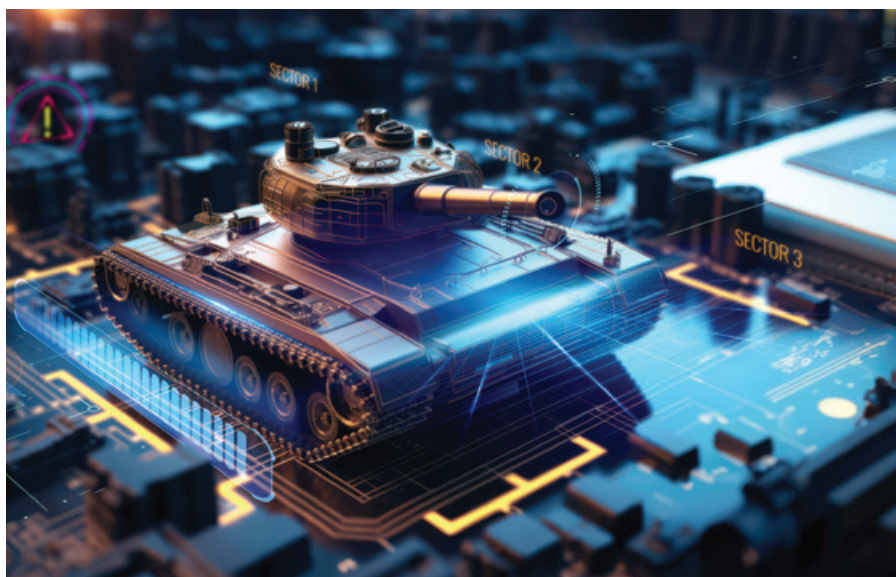
For de Durand and his team, in EDA's 20th anniversary year, the Long-Term Review sets out not just the higher level of ambition of the Agency but gives greater clarity and visibility to what the agency does, including the specifics. After all, EDA is uniquely placed in the EU institutional landscape, working for

and financed by Member States yet deeply embedded in the Brussels ecosystem. EDA is involved, for example, in all dimensions of developing the military capabilities that EU governments need. Being small, the Agency also knows where it can be most useful.

"We are not claiming at EDA that we can do the whole cycle of defence capability development, from ideation to procurement," de Durand says. "We are not saying: 'here's a new fighter plane or here's a tank'. We are saying to Member States that we are agile, eager to help launch your concrete capability projects, and that we are here to support you every step of the way." 

Identifying shared needs and priorities at EU level to ensure that EU Member States' armed forces have the capabilities they actually require





With an acceleration in military robotics, artificial intelligence (AI), advanced computing and microelectronics, daunting problems arise. They include ethical, legal and practical ones. Member States tasked the European Defence Agency (EDA) to develop an action plan on autonomous systems. The plan was approved in January 2024. A public version of the plan is expected soon. Here's a brief overview.

Man and machine in war: EDA writes an **action plan**

In the crowded lexicon of defence acronyms, there is plenty of competition for the most confusing. C-MANPADS have, in fact, nothing to do with male sanitary needs, but refer to man-portable air defence systems. Another, CODFISH, is not a culinary delight but instead hints at the highly sophisticated field of optical devices. Advanced military technology now brings us MUM-T, which describes manned and unmanned assets acting in concert, not an abbreviation for spending time with family.

Mix the complex vocabulary of defence with advances in AI and autonomous machines and things become even harder. The topic of autonomous systems is also vast, and EU armed forces need a coherent and integrated approach, EDA believes.

European Union Member States have turned to EDA to produce a strategic document, that – although legally

non-binding – is designed to accelerate the development of sophisticated, efficient, effective and reliable autonomous systems. The EDA Action Plan on Autonomous Systems (APAS) includes operations within the domains of land, air, and sea, and across them. Poised to take over traditional military roles and/or support soldiers to execute them, autonomous systems will mark a significant shift in operational capabilities.

Working in the 'dull, dirty, dangerous and dear'

The action plan's objective is to make autonomous systems work better, enabling them to sense, decide, move, act on their own or in a team, as well as protecting themselves and self-monitoring. Deploying lots of systems simultaneously, known as swarming, needs high levels of coordination. The plan should be the guide for the next

15 years, in close alignment with the EU's Capability Development Plan, so that collaboration projects in the field can be launched by Member States.

"Autonomous systems are here to stay," says Mario Martinho, EDA Project Officer Land Systems Technologies. "It's impossible to think about future battlefields and future wars without having autonomous systems," adds Martinho, who heads the Agency's Capability Technology group known as CapTech Land and coordinates the APAS. "They will allow missions in what we call the four D's - 'dull, dirty, dangerous and dear' environments that would otherwise be very long in duration, impossible or simply unaffordable."

No robot arms race

There has, of course, been a gradual integration of autonomous features into military technology since the acoustic torpedoes introduced in the Second World War, when systems could follow the sound of enemy ships' propellers. Air-to-ground missiles were developed in the 1970s to track and engage targets after launch using infrared or electro-optical guidance.

EDA and EU armed forces are not developing fully autonomous lethal systems,

The plan's three objectives:

- > Improve the performance of individual unmanned systems
- > Develop and enhance autonomous systems to work together
- > Enable a mix of manned and unmanned teaming in, and across, domains



even if that is a choice made by adversaries. Under the action plan guidelines, systems that are developed should perform most tasks autonomously, but with a human operator able to intervene at any time, such as to abort a sensitive mission.

Aligning efforts to international humanitarian law, including any potential development or use of lethal autonomous systems, is paramount. That involves prohibition or restrictions on any system deemed to have an excessively dangerous or indiscriminate impact.

"This action plan does not proceed along any path towards killer robots," says Martinho. "We are not developing fully autonomous systems with lethal capabilities."

Autonomous aeromedical evacuation

Today's autonomous technologies are still nascent. But tomorrow's battlefield could see extensive use of autonomous systems for targeting and cross-platform target allocation. "We will have numerous autonomous systems for logistics and resupplying on the frontline, for example, as well as for ISR operations," says Martinho, noting maritime situational awareness and anti-submarine warfare also as important applications.

Advanced swarms of loitering munitions, autonomous medical evacuation aircraft and evacuation of casualties will likely develop, conducted by autonomous systems that a human can initiate by simply inputting the geographical coordinates of the wounded, allowing the systems to retrieve them and transport them back to base.

"Our ultimate goal is for all these systems to perform cross-domain operations, involving heterogeneous swarms"

"Currently, we are quite far from achieving this because unmanned ground systems are still quite immature. Therefore, we need to improve their capacity for mobility and navigation, as well as enhance their ability to interact and coordinate with manned platforms and dismounted soldiers," Martinho says.

Rigorous testing

Today's Global Hawk drones, for instance, give NATO 24-hour, near-real-time surveillance of land and sea, and provide greater visibility than satellites. But technology could go further. "What

we also foresee are large swarms, especially aerial swarms, for persistent and continuous intelligence, surveillance, and reconnaissance," Martinho says. "Our ultimate goal is for all these systems to perform cross-domain operations, involving heterogeneous swarms."

For this, there is a concerted effort to improve critical technologies that drive the systems, such as artificial intelligence and network infrastructure for data transmission and storage. But the action plan recognises that technology

alone will not address all the issues. Rigorous testing, validation and verification processes, alongside certification protocols of emerging technologies, are just as important. Adhering to regulations and upholding ethical standards are vital. Standardisation will also be part of autonomous system development. EDA will also work with EU programmes and entities, such as the Directorate-General for Defence Industry and Space (DEFIS) of the European Commission.

"We have a duty to keep our citizens secure," Martinho says. "We must keep our technological edge." [▶](#)

Stephanie Lingemann, Senior Director, Programmes and Partnerships at Helsing



Stephanie Lingemann is Senior Director, Programmes and Partnerships, at Helsing. Helsing is a new type of defence company developing artificial intelligence (AI)-based capabilities. Founded as a pan-European company in 2021, Helsing already boasts the Eurofighter and the Future Combat Air System (FCAS) among its clients. Lingemann talks to *European Defence Matters* about building up a 'deep tech' company in defence, why European collaboration must work, and why the company will not sell to dictatorships.



An operator seated in front of Helsing software.

Helsing's software serves Europe's democracies

Imagine you are watching the battlefield from your military command-and-control (C2) centre, but that there are no incoming phone calls from the field, no need for paper maps on walls and no peering into green-and-yellow radar screens. Instead, you watch two large screens showing a mysterious speck moving towards your forces. Zooming in, you see this is neither a bird nor a weather system. The speck on your screen transforms to red, as an enemy unmanned aerial vehicle (UAV) approaches. You can decide to shoot it down, thanks to the granular target identification provided.

What might have taken humans many minutes to decipher has taken seconds with new software developed by European artificial intelligence defence company Helsing, allowing 'cognitive electronic warfare'. Its algorithms turn the whole data-processing chain – generated by electro-optical, infrared, and sound wave sensors, as well as from radar by fixed- and rotary-wing aircraft – into a real-time battlefield on screens. A human closes the loop with the final decision in reaction.

And detecting drones is just one of its applications.

Mapping the electromagnetic spectrum in which machines communicate – as Helsing's software does – can facilitate disruption of sensor-communication networks, denying, degrading or misdirecting enemy signals such as localisation and targeting. In June, Helsing unveiled its 'Project Centaur' to develop autonomous air combat capabilities for both existing weapon systems and future ones.

My heart belongs to... Europe

That a European company is at the forefront of the search for the 'information edge' might seem surprising. After all, the European Union has yet to translate innovation into the kind of large tech companies seen in the United States and China. No problem!

"Helsing was founded on the conviction that AI software will be one of the defining defence technologies in the decades to come," says Stephanie Lingemann, Senior Director, Programmes and Partnerships.



© Helsing



© Eurofighter

The future Eurofighter-Typhoon.

"What the founders who set up the company in 2021 realised was that in Europe, there wasn't a company specifically dedicated to this. And I think what we're seeing now, with the Russian aggression in Ukraine is that having these key capabilities is more important than ever," she says.

The company founders, Gundbert Scherf, a former adviser to Germany's Ministry of Defence, and Torsten Reil, who had a background in gaming, teamed up with an AI specialist Niklas Kohler, who is now Chief Product Officer, who had used machine learning in the medical sector. Lingemann, who was an associate partner at McKinsey in the aerospace, defence and semiconductors sectors, was offered the opportunity to help build up the 'deep tech' company. "I couldn't say no," she says.

Helsing's visibility and innovative edge has allowed it to attract substantial external investment. In 2021, the investment company Prima Materia set up by Daniel Ek, the co-founder and CEO of Swedish music streaming giant Spotify, invested €100 million. In September 2023, Swedish defence and aerospace company Saab

joined a funding round as a strategic investor. Helsing now numbers 270 staff.

"I think it serves us well that we have chosen a multi-domestic setup so that we're in Germany, and France and the United Kingdom. We can draw on commonalities, we can draw on scale, we can draw on comparative advantages," Lingemann says when asked about the obstacles to funding in Europe's fragmented capital markets. "We've not had any problems raising funds because it is so clear that ours are fundamental capabilities needed in Europe."

Work has been coming in too. In June 2023, the German government selected Helsing, along with the company's partner Saab, to provide the new AI-enabled electronic warfare capabilities for the upcoming update of the swing-role combat aircraft, the Eurofighter, also known as the Typhoon. In August 2023, a consortium of Helsing and Schönhofer, won the contract to provide the AI backbone for the Future Combat Air System (FCAS) programme, being developed by France, Germany and Spain (known as SCAF by its French initials). "It's something we do in partnership," Lingemann says.

The update for the Eurofighter is set to be finalised by 2028, she adds. With the FCAS, it is "a very different timeline," she says of the sixth-generation fighter plane.

No clients in North Korea

What if the Chinese government wanted to buy Helsing's software?

"That would be off limits," Lingemann says. Helsing serves democracies to protect the values of openness that come with that, she asserts. "That's a binding commitment and so we have standards, and committees

— and sometimes we will need the advice of our democratic governments because these are not always black-and-white decisions," she says. "We want to leverage our technology to defend our democracies."

Another aspect to the company's principles is to make clear that humans, not machines, will take the final decisions on, say, shooting down an enemy drone. Connecting Helsing's systems to autonomous weapons is not company policy. "Someone, a human, has to be responsible." That is in line with the European Defence Agency's action plan on unmanned systems. (See EDM pages 32-33).

"AI software will be one of the defining defence technologies in the decades to come"

Beyond Helsing's focus on its software, Lingemann also believes in genuine European defence cooperation, with its involvement not only in big European air combat programmes but also in the European Defence Fund. And from the ground up. "Now that we have all those advantages of software and AI, making sure that our European back-end systems be available for ground-based air defence systems — that these are connected — is so important."

While Lingemann regrets Britain's departure from the EU, Helsing has offices in London and its involvement in the Eurofighter Typhoon upgrade is testament to its European commitment. "The European defence industrial base across the individual countries is complementary. I think everyone agrees that it is a necessity that we work together." 



Cecilia Bonefeld-Dahl is the Director-General of DigitalEurope, a non-profit industry association. With many years of experience as a business leader in computing and communications, Bonefeld-Dahl has advised NATO and the Danish government, as well as the European Commission. She talks to *European Defence Matters* about developing European markets at scale, Ukraine's focus on tech skills and the digital standards for defence.



Bonefeld-Dahl meets Ukraine's Deputy Prime Minister and Minister for Digitalisation Mykhailo Fedorov, September 2023.

Why digitalisation of defence is vital

After Russia began its war of aggression in February 2022, first aid kits, clothing and disinfectant were the obvious emergency supplies that European Union governments began rushing out to Ukraine. But little focus was put on another kind of essential item: devices to help people stay informed and connected during a major crisis.

"Ukraine reached out to the industry for help. They needed radios, satellite antennas, components and devices," recalls DigitalEurope's Director-General Cecilia Bonefeld-Dahl. "We gathered around 15,000 devices for Ukraine and sent them to schools and hospitals."

That is surely one lesson from the war in Ukraine: technology and security go hand in hand. "We have learned from Ukraine that infrastructure, telecoms and devices for connectivity are crucial both for fighting back the enemy and for protecting civil society," she says from her office desk in Brussels, where she displays the Ukraine Peace Prize that the association was awarded in 2023, as well as a photo with Ukrainian Deputy Prime Minister, Mykhailo Fedorov.

Being prepared is vital. The fact that Ukraine was already a hub for software companies when Russia launched its unprovoked and unjustified invasion provided it with experts that Bonefeld-Dahl

defines as "a second army" to protect against cyber attacks, disinformation and to shield the country at large.

At the same time, digital tools at the disposal of citizens that were developed for peacetime use, such as government digital gateways for driving licence applications, passports and other documents, became a civil protection mechanism because they allowed citizens to report on the Russian movements. Ukraine had cloud solutions to prepare for cyber attacks, so that when the Russians targeted data centres, Kyiv moved government critical data out to servers in other countries.

"Ukraine's focus on tech skills since the fall of the Soviet Union has paid off," Bonefeld-Dahl says.

Modernisation through digitalisation

Bonefeld-Dahl is well-placed to bridge the two worlds of defence and civilian technology. Since 2017, she has led DigitalEurope, representing 109 corporations and 41 national trade associations among its members. She is also a member of the principal stakeholder group at the European Union Agency for Cybersecurity, and from July 2020 to July 2022 was a member of the advisory group to the Secretary General of NATO on Emerging and Disruptive Technologies (EDTs).

Digitalisation is not a choice, but a necessity for defence, she asserts. Modernisation through the digitalisation of European armed forces has been a central issue since 2019, when the European Union Military Committee (EUMC) took it up and in 2021 endorsed a 'Strategic Implementation Plan' for the digitalisation of the EU's armed forces. The European Defence Agency (EDA) and the European Commission are actively working on digitalisation projects, often through the European Defence Fund (EDF) and other EU-level instruments.

DigitalEurope published its first paper focused on the digitalisation of defence on 12 June.

While 'digital risk' – the unexpected consequences that result from digital transformation – is ever present, digital transformation initiatives in NATO and the EU are having a positive impact as European governments pursue a path of incremental optimisation of digital capabilities.

But that does not mean the way ahead will be easy.

"Being the best in the world in AI, in cyber defence, is critical"

The 2030s: a new digital dawn?

Bonefeld-Dahl says that one of the challenges in the EU today is that digital development needs scale but, as is repeated ad nauseam in Brussels today, the EU's defence market is fragmented and held back by Member States' justified concerns around sovereignty. Successful European defence companies such as Terma in Denmark, Saab in Sweden, Leonardo in Italy and Thales in France cannot easily claim access to a continental



Laptops are stored in a warehouse in Slovakia, awaiting shipment to Ukraine, March 2024.

market, even if there are many examples of cross-border projects.

"If you have a market such as Sweden, Denmark, or even Germany, it is very small, and you will never reach the critical scale to become a world-leading technology company," she says. "That goes for defence applications too."

Opening markets to the leading companies from around the EU could help offset the disparities in defence investment in digital capabilities among countries, as some Member States adopt the digital transformation in defence faster than others.

"What if we actually incorporate some of these defence companies, whether they are French, Danish, or from other nations, and allow them to scale up into countries where investment is lower through some common European procurement programmes," proposes Bonefeld-Dahl.

"I've seen the European Defence Agency primarily focusing on research and development collaboration projects, but maybe there could be a move into procurement similar to DARPA in the United States, with serious cross-border procurement projects that scale technologies," she says of the Defense Advanced Research Projects Agency,

which makes investments in breakthrough technologies for U.S. national security.


Preparedness in artificial intelligence (AI) cannot be overlooked, either. "If we look at cyber attacks, what we see now is that AI is really an integrated technology in cyber attacks, and it's making it much more difficult to protect ourselves," Bonefeld-Dahl says. "This means that being the best in the world in AI, in cyber defence, is critical. It's not just a nice-to-have; soldiers need to know about AI." (See EDM pages 32-33).

Giant steps

To be sure, digital transformation is understood as more than the simple translation of analogue data into ones and zeros, but as a comprehensive process that includes human and organisational changes that go hand-in-hand with technological ones.

Experts point out that the ongoing efforts by NATO and the EU to be completed in the 2030s, will only be the first milestone. Defence digital transformation projects in European countries have decade-long timelines due to dated procurement processes and inflexible budgets.

A digitally-transformed European defence sector would respond to threats much faster but achieving that will also require common standards and interoperability across Europe. Bonefeld-Dahl advocates for defining those critical digital standards as a member of the European Commission's Industrial Forum and High-Level Forum on European Standardisation.

"We must define the digital standards that are crucial for defence, these are linked to connectivity, data, cloud and interoperability, quantum computing, and cyber security", she says. "It's something that we need to start in the new Commission, not just as a defence project but as a European critical project," she says, referring to the next term of the EU executive from the end of 2024, following EU elections. 



DigitalEurope's standards to aim for in defence.

Until recently, private investing in defence contractors was seen as taboo. What's more, before Russia's war of aggression in Ukraine, the European Defence Technological and Industrial Base (EDTIB) was running in peacetime mode following the end of the Cold War.

Jan Pie is Secretary-General of ASD, the Aerospace, Security and Defence Industries Association of Europe, representing over 4,000 companies from 21 countries.

Carl-Johan Lind, Policy Officer Industry Engagement and EU Policies at the European Defence Agency (EDA), leads some of EDA's activities aimed at facilitating the EDTIB's access to finance.

Financing European defence: is it sustainable?

The European Defence Agency has been part of efforts to ensure EU-level policies facilitate access to finance. EU leaders have called on private and public financial institutions to stop discriminating against the EDTIB. They have also urged the European Investment Bank to change its policy to make it possible to fund more defence projects.

EDM: What are the key arguments against investing in defence in Europe?

Jan Pie: The primary argument of some against investing in defence is that it is not seen as a socially sustainable activity. This perspective is unfortunately supported by financial market actors, banks refusing loans and guarantees, investors avoiding defence portfolios, and commercial technologies being withheld from defence companies.

Carl-Johan Lind: Following the Cold War, Europeans stopped seeing the larger societal benefits of defence. Investment practices are an extension of societies' view on this subject. So yes, there is an underlying argument that defence is not socially, nor even environmentally, sustainable. But, when confronted with this issue on a case-by-case basis, we encounter several lines of argument against investing in the defence sector, many of which are largely technical in nature.

EDM: How does this discrimination affect defence companies in Europe?

JP: I would say that it makes capital for defence innovation more expensive,

limiting access to commercial technologies, increasing insurance premiums, and in fact leads to a reluctance among young people to join the sector.

CJL: I would also mention that discrimination affects different types of companies in different ways. Larger primes and even midcaps will experience discrimination differently from, say, a startup looking for venture capital to bring their idea to market. For larger European primes, you might see equity investments mainly coming from non-European institutional investors, which might present certain issues down the line. For the small innovative European startup looking for venture capital or private equity, it might instead end up packing its bag full of groundbreaking technologies and potential IPRs and trying their luck elsewhere – which in 90% of cases means the United States.

EDM: What is the general public opinion in Europe regarding the capability to defend itself?

JP: Generally, I'd say that the public in Europe believes that the continent should have the capability to defend itself, with properly equipped armed forces. That's something that comes out in polls regularly. However, they often do not take into account the need for a domestic defence industrial base to ensure autonomy and security of supply. There's a need for that realisation.

CJL: When EDA started working on this topic, one of the main issues identified was the lack of support for the defence sector among Europeans and how this by





extension affected the industry's ability to access finance on capital markets. Although we can probably detect certain progress in how Europeans view the need to defend themselves by military means, we need to make the effort to connect that with having a strong and competitive EDTIB.

“Generally, I'd say that the public in Europe believes that the continent should have the capability to defend itself, with properly equipped armed forces”

EDM: Is it accurate to say that defence is not sustainable?

JP: No, this belief is false. Security, open societies, democracies and legal systems are considered essential for sustainable development and need to be defended. So I would argue that defence is really a key enabler of our security and the sustainability of our way of life.

CJL: We see that European defence companies are committed to implementing green activities and that they want to contribute towards a more sustainable future. Within EDA-led activities such as the Incubation Forum on Circular Economy in Defence (IF CEED), the Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS) or in the CapTech Energy & Environment, we also see a huge interest and participation from industry.

EDM: What are the views of European politicians on defence investments?

JP: With Russia's war of aggression against Ukraine, we have seen how European politicians have shown much greater awareness and willingness to support defence investments, especially in the context of supporting Ukraine and replenishing their own military stocks.

CJL: The mindset as well as public attitude towards defence has dramatically changed since February 2022. Last year's Joint Statement on strengthening the EDTIB's access to finance by Ministers of Defence, was a good example of the commitment from the political establishment on this issue. On Member State level, you see a much more proactive and public stance on this issue as well.

EDM: Are current defence investment levels in Europe sufficient?

JP: No, current defence investment levels are not sufficient, even if they are now rising. I'm sorry to say that commitments towards NATO, such as the 2% of GDP pledge of 2014, and other defence cooperation initiatives are not always met, or not by all, with many Member States falling short of the required investments in equipment and R&D. But the trend is improving.

EDM: What is the stance of the European Investment Bank (EIB) on lending to the defence sector?

JP: It is well-known that the EIB has a policy that excludes lending for pure

defence activities – against weapons, equipment or infrastructure dedicated to military use, although it does support dual-use technologies. I must say, this exclusion is counterproductive given political statements about the importance of defence investments. We are pushing for change.

CJL: The EIB has updated its dual-use project definition in order to facilitate financing for SMEs in the security and defence industry. To that effect, the bank has also dedicated €6 billion in funding available under their different initiatives. It has also created a dedicated Security and Defence Office to better accommodate the financing needs of the European defence sector.

EDM: How does the exclusion of defence from EIB lending policies affect the broader financial community?

JP: My view is that the EIB's exclusion of defence from its lending policies sends a signal to national banks and the broader financial community that they too can exclude defence companies from their portfolios, perpetuating the reluctance to invest in the defence sector. Against this background, it would be very important that the EIB changes its lending policy and lifts the exclusion of investment in defence projects.

To listen to an EDA podcast with ASD's Jan Pie, go to: <https://eda.europa.eu/news-and-events/podcast>



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